HOBSONS BAY CITY COUNCIL

31 January 2017

Ms Stacey Rees
Land Use Planning Team
Melbourne Water
PO Box 4342
Melbourne VIC 3001

Ask for: Kathleen McClusky
Phone: 9932 1000
Our Ref: A2553830

Dear Stacey,

**Draft Planning for Sea Level Rise Guidelines**

Thank you for the opportunity to provide a late submission to the draft planning for Sea Level Rise guidelines. Hobsons Bay is one of two municipalities most at risk from sea level rise within metropolitan Melbourne according to the Australian Government's 2009 Climate Change Risks to Australian Coast - a first pass national assessment. As such Hobsons Bay City Council welcomes the opportunity to contribute to the development of the Planning for Sea Level Rise Guidelines.

Effectively managing the risk of sea level rise to people and settlements within the legislative framework for land use planning is an important priority for all agencies that have responsibilities under this legislation. Council has identified sea level rise as a key climate change risk in our Climate Change Adaptation Plan 2013-18. By taking a risk-based approach, Council seeks to reduce or avoid the negative impacts of climate change, specifically damage to coastal assets from increased flooding due to sea level rise, coastal erosion and storms.

We welcome any additional opportunities for feedback on the draft Guidelines. Should you wish to discuss the submission further please contact Kathleen McClusky, Director, Strategic Development on 9932 1004 or email kmcclusky@hobsonsbay.vic.gov.au.

Yours sincerely

**Tammi Rose**
**Acting Chief Executive Officer**

# Hobsons Bay City Council Submission to the draft Planning for Sea Level Rise Guidelines

Hobsons Bay is one of two municipalities most at risk from sea level rise within metropolitan Melbourne according to the Australian Government's 2009 Climate Change Risks to Australia's Coast – a first pass national assessment. As such, effective planning and collaboration between agencies to manage the risk of sea level rise to people and settlements is a high priority for Council. Council's commitment to managing the risk of sea level rise to people and settlements is outlined in Council's Climate Change Adaptation Plan 2013-18.

Council notes that the emphasis of the guidelines is on changes to the Westernport Bay without changes to the guidelines affecting Port Phillip Bay. Therefore, the comments provided in our submission are of a more general nature.

**Access and flood impacted areas**

The draft guidelines consider the amount of damage that a flood can generate if it exceeds the floor level of a given property and creates a set of minimum floor levels to manage this risk. The draft guidelines do not currently consider any other risk or management action to reduce this risk. The guidelines would be strengthened considerably by taking a more holistic approach to managing flood risk in both new and established developments.

Flooding can create a number of risks including the isolation of individuals from services. For example, if an aged care facility were to be located on a property where the road access surrounding that property are subject to flooding then this can block and restrict access to ambulance and other health and emergency services.

Similarly, a resident may live in a high rise building with a ground floor lobby and car park. Regardless of whether the high rise has a reduced floor level or a floor level 600mm above the 2100 one per cent Annual Exceedance Probability (AEP), residents in the high rise building may still be cut off from services if access in and out of the building is impeded due to sea level rise and storm surges.

As recognised in Melbourne Water's Flood Management Strategy for Port Phillip and Westernport 2015, Melbourne Water has an important role to play in assisting in the role of emergency management planning and preparedness and the management of flood risk. Having a clear approach to managing the risk from flooding of a lack of access to and from developments at the planning application stage is an important component of reducing demand on emergency management services and reducing the impact on people.

The proposed guidelines should enable a holistic approach to the management of developments. This should include:

- the long term management of access to properties that are likely to be permanently inundated by sea level rise
- consideration of the suitability of the design of the development to manage this risk

**Planning for the life of a development**

When determining the appropriate level of protection for a development, be it residential, commercial or industrial, it is important to consider and plan for the expected life of the development.

When planning for the management of the permanent inundation of sea level rise it is important to consider the life of the asset in decision making. The year 2040 is only 23 years away and much of the housing stock, in existing urban areas along the coast, has an expected life well in excess of 20 years. It is therefore strongly recommended that targets to manage the impact of sea level rise and storm surges are appropriately aligned with the expected life of a development.

A conservative approach to managing this risk would be to ensure that all new developments in established areas meet the minimum target of 600mm freeboard above the 2100 one per cent AEP floor level as identified elsewhere in the draft guidelines. An alternative, but less conservative, approach would be to set minimum floor levels in established areas at 600 mm above the 2070 one per cent AEP in line with the Victorian Coastal Inundation Dataset.

**Minimum levels for car parks**

The draft guidelines allow for underground car parks provided that any entrance or exit ramp has an apex that is 600 mm above the one per cent AEP flood level. It is noted that while the accompanying diagram on page nineteen shows this as being the 2100 flood level, the text does not state the year. For clarity it is recommended that the text be updated to show the year of the projected one per cent AEP that is being planned for.

There are several issues with the proposed option for managing this risk. These include:

- the guidelines are only enforceable if they are mandated in the planning scheme
- in low lying areas that may, for example, be only one metre above sea level rise, developments may need a ramp from the property entrance up 1.4 metres. This may be higher than the front fence. The ramp will then have to slope down into the basement or car park.
    - there may not be sufficient setback in these instances to enable the development to meet the required ramp grades in or out of the car park
    - in established areas there may not be sufficient room for head clearance at the entry or exit of the car park

To be effective, a state wide response is required to address potential sea level rise and clear direction provided in the planning system to ensure that developments are adequately protected from flood while still being functional.

**Melbourne Water and CSIRO flood levels**

It is understood that the CSIRO flood levels are based on "still water" levels while Melbourne Water flood levels used for development applications consider the peak wave height. This is due to the fact that property damage increases when floors become wet even if for a short time. The approach by Melbourne Water for managing risk to developments is supported.