

# **Draft Sea Level Rise Policy Statement**



**New South Wales  
Government**

## Submissions invited

Please send your submissions by email to [andrew.baron@environment.nsw.gov.au](mailto:andrew.baron@environment.nsw.gov.au) or posted to:

Draft Sea Level Rise Policy Consultation  
Urban and Coastal Water Reform Branch  
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### Closing date for submissions

Submissions must be received by the Department of Environment and Climate Change by **5 pm, Friday 3 April 2009**.

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## Introduction

The NSW Government acknowledges that increased sea levels will have significant medium- to long-term social, economic and environmental impacts. As an integral part of the state's response to climate change, the Government is committed to supporting coastal communities in adapting to sea level rise. While sea level rise is a global problem, it will have local impacts on the NSW coastline that will require action by communities, the Government and local councils.

This policy statement outlines the Government's objectives and commitments to sea level rise. It outlines the support that the Government will provide to coastal communities and local councils to prepare and adapt to rising sea levels.

## The impacts of rising sea levels

Over the 20th century, global sea levels have risen by 17 cm and are continuing to rise. The current global average rate is approximately three times higher than the historical average<sup>1</sup>.

Sea level rise is a gradual process and will have medium- to long-term impacts. The best national and international projections of sea level rise along the NSW coast are for a rise relative to 1990 mean sea levels of up to 40 cm by 2050 and 90 cm by 2100<sup>1</sup>. There is no scientific evidence to suggest that sea levels will stop rising beyond 2100 or that the current trends will be reversed.

Increasing sea levels have two broad and related impacts. These are:

- a permanent increase in sea levels relative to current sea levels
- increased coastal hazards (particularly beach erosion) and flooding risks during major storms.

The tidal cycle changes sea levels continually throughout the day. Sea level rise will increase average sea levels, as well as raising high and low tide levels. This will impact on coastal land and foreshore land around estuaries, bays and harbours, increasing the tidal inundation of foreshore land and structures, and reducing the ability to effectively drain low-lying coastal areas.

Currently, coastal land can be affected by coastal hazards, including coastal erosion and tidal inundation. These natural processes have been altering the shape of parts of the coastline for thousands of years. Sea level rise is projected to increase the hazards arising from these well-known processes, including increasing beach erosion. This may affect coastal properties, buildings and infrastructure, recreational facilities, social amenity and coastal access. In addition, sea level rise is projected to increase flood levels in areas that are subject to tidal influence, increasing the area of low-lying coastal land affected by flooding.

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<sup>1</sup> Refer to the Department of Environment and Climate Change *Technical Note: Scientific Basis of the 2009 Sea Level Rise Benchmark* for further details

## Related NSW Government initiatives

The NSW Government currently has in place policies, programs and legislation to reduce the risks to life and property from coastal hazards and flooding. These are also relevant to managing projected increased risks from sea level rise.

The [NSW Coastal Policy 1997](#) aims to facilitate the development of the coastal zone in a way that protects and conserves its values. In relation to climate change, the policy recommends an approach to minimise risks based on ecologically sustainable development principles. One of the policy's goals is to recognise and accommodate coastal processes and hazards, including a related objective to recognise and consider the potential effects of climate change in the planning and management of coastal development.

The NSW Coastal Policy is given statutory effect through *State Environmental Planning Policy 71 – Coastal Protection* and through a Ministerial Direction to local councils under section 117 of the *Environmental Planning and Assessment Act 1979*.

The Sea Level Rise Policy Statement supersedes the 1988 *NSW Coastline Hazard Policy*. Most of objectives from that policy have been included in the NSW Coastal Policy 1997, which remains current. Other objectives from the 1988 *NSW Coastline Hazard Policy* are updated by this Policy.

The *NSW Flood Prone Land Policy* has a primary objective to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property, and to reduce private and public losses resulting from floods.

These policies are supported by the Government's Coastal, Estuary and Floodplain Management programs, which provide technical policy support and grants to councils to identify and manage coastal hazards and flooding risks.

## Sea level rise policy principles

The primary objective of this Sea Level Rise Policy Statement is to minimise the social disruption, economic costs and environmental impacts resulting from long-term sea level rise. To achieve these objectives, the NSW Government will:

1. promote an adaptive risk-based approach to managing sea level rise impacts
2. provide guidance to local councils to support their sea level rise adaptation planning
3. encourage appropriate development on land projected to be at risk from sea level rise
4. continue to provide emergency management support to coastal communities during times of floods and storms
5. continue to provide updated information to the public about sea level rise and its impacts.

Further details of these policy principles are provided below.

### 1. Promoting adaptive risk-based management

The NSW Government will promote an adaptive, risk-based approach to managing the impacts of sea level rise. This approach recognises that projections of sea level rise are being continually refined, based on updated information, and this continuous improvement in

the accuracy of the projections is expected to continue. The adaptive risk-based approach recognises that there are potentially significant risks from sea level rise and that the accuracy of sea level rise projections will improve over time.

Planning and investment decisions should therefore consider the range of sea level rise projections over the life of an asset to decide on how the asset can be located or designed to avoid or minimise any associated impacts. This early consideration will minimise the initial costs of considering sea level rise and the future costs of adapting to sea level rise (e.g. through relocation of affected buildings or infrastructure).

To support this adaptive risk-based approach, the NSW Government has adopted a sea level rise planning benchmark. This benchmark will enable consistent consideration of sea level rise within this adaptive risk-based management approach. There is no regulatory or statutory requirement for development to comply with this benchmark. The benchmark's primary purpose is to provide guidance to support consistent consideration of sea level rise impacts, within applicable decision-making frameworks. This will include strategic planning and development assessment under the *Environmental Planning and Assessment Act 1979* and infrastructure planning and renewal.

The NSW sea level rise planning benchmark is an increase above 1990 mean sea levels of 40 cm by 2050 and 90 cm by 2100. This was established by considering the most credible national and international projections of sea level rise<sup>2</sup> and takes into consideration the uncertainty associated with sea level rise projections. The Government will periodically review this planning benchmark, based on updated information, such as the release of future Intergovernmental Panel on Climate Change assessment reports.

The sea level rise planning benchmark can be used for purposes such as:

- incorporating the projected impacts of sea level rise on predicted flood risks and coastal hazards
- the designing and upgrading of public assets in low-lying coastal areas where appropriate, taking into account the design life of the asset and the projected sea level rise over this period
- assessing the influence of sea level rise on new development (see below for further details)
- considering the impact of sea level rise on coastal and estuarine habitats, such as salt marshes, and identifying valuable habitats at most risk from sea level rise
- assessing the impact of changed salinity levels in estuaries, including implications for access to fresh water.

## **2. Supporting local councils**

The NSW Government will continue to provide funding assistance to councils to prepare studies to identify areas at risk from coastal flooding and coastal hazards. Priority will be given to areas where properties are at greatest current and future risk from flooding and coastal hazards. These studies will provide information on the influence of sea level rise on

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<sup>2</sup> Refer to the Department of Environment and Climate Change *Technical Note: Scientific Basis of the 2009 Sea Level Rise Benchmark* for further details

coastal hazards and flood risk, which can be considered in the development of land-use planning instruments.

The Government will also continue to provide guidance and assistance to local councils to reduce the risks to private and public property from coastal hazards. The risks from coastal hazards are significant and are projected to increase with sea level rise. Government financial assistance to councils is unlikely to extend to protecting or purchasing all properties at risk from coastal hazards and sea level rise.

When allocating funding assistance to councils for coastal protection works, the Government will give priority to public safety and protecting valuable publicly-owned assets, and then to private land. The criteria that the Government will use to allocate any funds to councils to protect or voluntarily purchase private property will include the:

- magnitude of current and future hazards
- cost-effectiveness of management actions
- contribution to the project's costs from the local council and benefiting landowners, taking into consideration genuine hardship for affected coastal residents
- effectiveness of the proposed arrangements for maintaining any proposed works
- ability of the project to accommodate sea level rise.

Where assistance is provided to reduce the impacts of coastal hazards, the Government does not assume any responsibility for these hazards. The Government will continue to provide funding assistance to councils for coastal hazard studies and management planning.

This principle will not affect the NSW Coastal Lands Protection Scheme, where the criteria for land purchase does not include coastal hazard reduction.

### **3. Supporting appropriate coastal development**

Provisions under the *Environmental Planning and Assessment Act 1979* require consent authorities to consider coastal and flooding hazards in their planning and development approval decisions. The NSW Coastal Policy and coastal regional strategies also require consideration of sea level rise, as does the Standard Instrument or template for Local Environmental Plans where relevant.

The sea level rise planning benchmark will support consistent consideration of the influence of sea level rise on any coastal hazards and flooding risks that may influence a development or redevelopment site. The benchmark is not intended to be used to preclude development of land projected to be affected by sea level rise. The goal is to ensure that such development recognises and can appropriately accommodate the projected impacts of sea level rise on coastal hazards and flooding over time, through appropriate site planning and design.

The Department of Planning will be preparing guidelines on how sea level rise should be considered in land use planning and development approval decisions by councils. This will also provide guidance to landowners, infrastructure providers and developers.

Coastal hazards and flooding are natural processes and the Government considers that the risks to properties from these processes appropriately rest with the property owners, whether they be public or private. This will continue where these risks are increased by sea level rise. Under both statute and common law, the Government does not have nor does it accept

specific future obligations to reduce the impacts of coastal hazards and flooding caused by sea level rise on private property.

Landowners affected by current and future coastal hazards may seek approval from their local council to construct works on their land to protect their property. These works may be approved under the *Environmental Planning and Assessment Act 1979* where they do not cause adverse impacts on coastal processes beyond the property boundary or on public amenity or the environment. Landowners will not normally be permitted to construct works on State-owned land to protect their property. All required approvals must be obtained before any works commence and unauthorised works may be removed at the landowner's cost.

#### **4. Community support during emergencies**

The Government currently provides emergency management support to coastal communities during and following floods and major storms. This support is normally coordinated by the State Emergency Service, operating under the *State Emergency and Rescue Management Act 1989*. The Government will continue to provide this support to coastal communities likely to be affected by sea level rise.

The Government's direct community support will be focused on emergency management. The Government currently does not provide compensation to the owners or potential developers of land affected by coastal hazards or flood risks, except for some compensation and other payments that may be made in relation to an emergency. This arrangement will continue and will include land where these hazards or risks are increased by sea level rise. Compensation will also not be provided for any impact on property titles due to erosion or sea level rise.

#### **5. Information availability**

The Government has provided information to the community on sea level rise projections and the likely impacts of sea level rise on low-lying coastal areas. The Government will continue to provide updated information on sea level rise and its impacts, and will continue to work with councils to provide information on the impacts of sea level rise on local flooding and coastal hazards.

Continuing public access to current and credible information on sea level rise is important for various reasons, including:

- supporting community adaptation to sea level rise
- supporting the community and the private sector to make appropriate investment decisions in coastal areas
- assisting the insurance industry to price risks from sea level rise in their insurance policies.