

# Coastal zone management planning

Gosford City Council has a strong tradition of planning for hazards such as coastal erosion and flooding.

Gosford City Council takes its responsibilities for planning seriously and has sought to bring together experts, planners and the community to deal with the complex issues. Those issues are neither certain nor does planning ensure perfect outcomes.

Our coastal management plans, estuary management plans and floodplain risk management plans have provided our community with information and guidance regarding local flooding and coastal erosion risks.

The primary purpose of coastal management planning is to describe what can be done, and by whom, to address management issues in the coastal zone including managing risks to public safety and built assets, pressures on coastal ecosystems, and community uses of the

coastal zone. A quality Coastal Zone Management Plan will depend largely on the knowledge, involvement and support of the local community. Accordingly, community consultation and participation is an integral element of the process.

Council is updating the existing Open Coast Beaches (1995) and Broken Bay Beaches (1999) Coastal Management Plans to improve management of our coastal risks whilst providing opportunities for development. Community engagement will be undertaken through the entire coastal zone management planning process to enable alignment with community objectives and concerns. A revised Coastal Zone Management Plan will combine both the Open Coast and Broken Bay beaches plans and is being prepared in the following series of steps:



Council's assessment, which was completed in 2014, examines the coastal processes and hazards that impact the coastline between Patonga and Forrester's Beach.



The committee comprises of Council staff, NSW Government officers and community representatives who oversee and advise the coastal zone management planning process



The planning process comprehensively assesses the social, economic, aesthetic, recreational and ecological issues associated with land use along the coastline.





This stage involves identifying coastal management issues and setting goals and objectives to address the issues.



1

### Form management committee (June 2013)

The Catchments and Coasts Committee has been established to enable stakeholder input and provides advice to Council during plan preparation. This committee comprises of Council staff, NSW Government officers and community representatives who oversee and advise the entire coastal zone management planning process



2

### Identify issues and set goals

Frame the vision, goals and objectives for planning and review existing data. This stage also involves identifying coastal management issues and setting goals and objectives to address the issues. Many of the goals and objectives are already established through State Government guidelines and policies, however there is still an opportunity to incorporate local objectives into the planning process.

3

### Undertake Coastal Risk Assessment (February 2014)

A Coastal Risk Assessment describes the coastal hazards that impact our beaches and makes an assessment of the risks to life and property posed by these hazards.

The risk assessment forms the initial phase of the planning process and applies the latest information (including Council's adopted sea level rise scenarios), modelling and engineering methodologies, to provide an understanding of the coastal processes that operate within the study area. The NSW Government requires that risks need to be assessed with consideration of current and future conditions (2050 and 2100) to include the natural processes that occur on our beaches and the impacts of projected climate changes. Council's assessment, which was completed in 2014, examines the coastal processes and hazards that impact the coastline between Patonga and Forrester's Beach. These include:

#### Coastal processes

- Waves
- Storms
- Elevated Water Levels
- Currents
- Sediment Transport
- Dunes
- Coastal Entrances
- Climate Change

#### Coastal hazards

- Beach erosion
- Shoreline recession
- Coastal entrance instability
- Sand drift
- Coastal inundation
- Coastal cliff or slope instability
- Stormwater erosion
- Climate Change

3

### Undertake Coastal Zone Management Study (current focus)

Having defined the type, nature and significance of coastline hazards, a Coastline Zone Management Study is the next step to be undertaken to identify options relevant to the environmental planning and management of the area. The management study will consider all feasible management options.

Council is currently undertaking a Coastal Zone Management Study which is expected to be completed by mid-2014. The study comprehensively assesses the social, economic, aesthetic, recreational and ecological issues associated with land use along the coastline, in addition to coastline hazards, including climate change. Assessment of management options will consider, the complexities of:

- implications of existing land ownership, future development and planning controls,
- the local economy, including the local employment market,
- the preservation of areas of aesthetic or ecological significance,
- the protection or enhancement of recreational amenity,
- the opportunity for and management of tourism.



A range of management options are identified including, emergency responses such as emergency warnings, evacuation, emergency protection works and barricading dangerous areas to more longer term management options including, environmental planning, development control conditions, dune management, beach nourishment and the construction of protective works.

As part of the assessment of management options, the likely advantages, disadvantages, potential environmental, social and economic impacts and indicative costs are considered. Estimates of capital and maintenance costs for protection works are also prepared.

The 'do nothing' option is also considered to assist in undertaking a damages assessment. This will be based on the value of coastal property and indicative costs for public infrastructure that would be lost or damaged if management strategies were not adopted. The final Coastal Zone Management Study will assist Council in developing appropriate planning provisions and in applying the criteria for proposed development.





## 5

### Prepare Coastal Zone Management Plan (mid-2014)

The next stage in the process is to develop a Coastal Zone Management Plan. The primary purpose of coastal management planning is to describe proposed actions to be implemented by council, other public authorities and potentially by the private sector to address priority management issues in the coastal zone over a defined implementation period. These issues include:

- equitably managing risks to public safety and built assets
- pressures on coastal ecosystems, and
- community uses of the coastal zone.

**The planning process aims to ensure an appropriate long term balance in the utilisation and conservation of the coastline. This will facilitate a compatibility of uses with hazards by reducing private and public losses from hazard damage and protect the recreational amenity of beaches. Plans may include:**

- a description of the objectives of the plan;
- a discussion of issues, problems, special features and values specific to the area of the plan;
- a schedule of specific management measures aimed at achieving the objectives; and
- a description of the means and timing of implementation of these measures.
- The development of the Coastal Zone Management Plan requires that a number of considerations be taken into account, including:
  - implications of coastal planning policy and guidelines;
  - the type and nature of coastline hazards, including risk and potential damage to coastal developments and amenity;
  - aesthetic, recreational and ecological values of Gosford's coastline;
  - social factors, including the needs and desires of the community, the social disruption and other intangible costs of potential damage, and the physical and psychological effects of damage;
  - long term considerations of climate change; and
  - an economic analysis of proposed or existing development, including expected costs and benefits to both the public and private sectors, based on options to develop, redevelop or leave undeveloped an area of the coast.

Council expects this plan to be completed by mid-2014.

## 6

### Implement Coastal Zone Management Plan (over a 10-15 yr period)

Once a Coastal Zone Management Plan has been adopted, the next step is to implement the management measures listed within the plan. Certain measures can be implemented quickly, such as development and building controls, hazard education, public awareness and dune management programs. However, it is unlikely that any management plan could be implemented immediately in its entirety. For example, availability of funding will determine when certain options can be implemented (e.g. structural measures, voluntary purchase of property). Consequently, a strategy needs to be developed to implement the plan over time. The strategy should include the staging of measures that are dependent on availability of funds, the adoption of interim measures, protection priorities, etc.

Relevant time periods will include the long-term planning horizon (e.g. 50 to 100 years to set strategic directions for coastal hazard areas), the period for implementing proposed management actions (e.g. 5 to 10 years) and the period for reviewing the CZMP (e.g. towards the end of the implementation period).



Find out more about Gosford City Council's coastal management planning from our website

[www.gosford.nsw.gov.au](http://www.gosford.nsw.gov.au)

Prepared in consultation with Councils Catchments and Coast Committee.

