



# Sydney Harbour Coastal Zone Management Plan Scoping Study

## SYDNEY COASTAL COUNCILS GROUP HAS COMPLETED A SCOPING STUDY TO INFORM THE FUTURE PREPARATION OF A COASTAL ZONE MANAGEMENT PLAN.

**Sydney Harbour is a vibrant, iconic waterway with cultural, geological and biological diversity and heritage. As pressures on the Harbour increase, a strategic and integrated coastal management approach is crucial to protect, enhance, maintain and restore this valuable asset. Current coastal management of the Harbour is complex and governed by multiple agencies and stakeholders.**

### OVERVIEW

To guide the future preparation of a Coastal Zone Management Plan (CZMP), the Sydney Coastal Councils Group engaged GHD to prepare a Scoping Study to identify the priority management issues for Sydney Harbour.

Within the Sydney Harbour catchment, there are 26 councils, including 13 with Harbour frontages. The Scoping Study area captures all those downstream of Clarke's Point, Birchgrove.

An integrated whole of Harbour CZMP, if prepared in the future, would aim to include all areas of the Harbour.

The SCCG, in partnership with the City of Sydney and Greater Sydney Local Land Services (formerly Hawkesbury-Nepean Catchment Management Authority) undertook a scoping study for the preparation of an Integrated CZMP for Sydney Harbour with a view to protect, enhance, maintain and restore this valuable asset. Grant funding was awarded under the Office of Environment and Heritage's Estuary Management Program.

### THE SCOPING STUDY INVOLVED THE FOLLOWING METHODS:

- A literature review related to management of the Harbour.
- Legislative and policy mapping.
- Consideration of the baseline conditions of the various Harbour processes and the interactions between them.
- Engaging councils, government agencies, researchers, practitioners, policymakers and other stakeholders through a survey and two workshops.
- Establishing an Advisory Committee, comprising academics, Federal, State and Local Government representatives, non-government organisations and industry, to inform and guide the project.

### LITERATURE REVIEW

The literature review provided an overview of the current management of Sydney Harbour and identified issues and gaps that have informed the Scoping Study's background.

The literature review confirmed a number of widely-held assumptions about the management of Sydney Harbour. It found that existing management is complex and governed by Federal, State and local governments. This is compounded by the unclear definition of a "coastal zone" and how it applies to Sydney Harbour. The management of coastal risks and hazards is also inconsistent throughout the study area, in particular risks related to projected sea level rise and extreme storm events. Coastal management planning varies between councils. Only five CZMPs have been completed and two councils have started preparing technical studies.

The literature review identified major factors that are impacting the Harbour. Faecal contamination and stormwater inputs are affecting the Harbour's water and sediment quality, while the loss of habitat and direct and indirect impacts from Harbour users continue to affect the ecological values of the Harbour.

Harbour users represent a broad section of the community, and have widely varying levels of influence. Key user values include access to the Harbour for active and passive recreation, views, and improvements to water quality. In addition to these values, a future CZMP for Sydney Harbour needs to consider how sensitive cultural heritage sites would be addressed.

### STAKEHOLDER SURVEY

The purpose of the stakeholder survey was to gain stakeholder views on the priorities that should be captured in a future CZMP for Sydney Harbour and source accurate and appropriate information to inform the project.

#### STAKEHOLDERS RANKED THEIR TOP MANAGEMENT ISSUES AS FOLLOWS:

- Protection, enhancement and restoration of natural flora and fauna.
- Water quality and contamination.
- Managing risks to public safety and built assets.

These reinforced the findings of the literature review in particular the need for a future CZMP for Sydney Harbour to protect the ecological values of the Harbour and manage coastal risks and hazards.



Sydney Harbour

## Coastal Zone Management Plan Scoping Study



### 2014 STAKEHOLDER WORKSHOP

The stakeholder workshop held in **April 2014** aimed to capture the knowledge and expertise of key stakeholders, including representatives from State and local government, educational institutions, representative bodies, private industry and State cultural institutions. The outcomes from this workshop were also used to inform and refine the issues and stakeholder views identified from the literature review and stakeholder survey.

#### KEY FINDINGS INCLUDED:

- A desired outcome for an integrated CZMP for Sydney Harbour to ensure the successful management of the Harbour in the future.
- Opportunity for an integrated management approach by involving all interested stakeholders through forums and networks, where key stakeholder issues can be collated and presented to State and local government.
- Involving the community in the future development of an integrated CZMP for Sydney.

#### PARTICIPANTS IDENTIFIED POTENTIAL BARRIERS TO A CZMP INCLUDING:

- Lack of funding.
- Complex governance arrangements.
- Land capacity limitations.
- Public versus private interest and ownership of assets.
- Balancing the needs of a diverse range of stakeholders.
- Gaining public support for the plan.

### IDENTIFICATION OF STAKEHOLDER VALUES

Based on the literature review and stakeholder engagement, the Scoping Study identified key values associated with Sydney Harbour.

#### KEY VALUES INCLUDED:

- Safe and healthy access to the Harbour.
- Maintenance or enhancement of Harbour views.
- High quality of outdoor experience.
- Maintenance and improvement of high water quality.
- Appreciation of low key/natural public areas.
- Preservation of natural areas and threatened species.
- Sustainable use and management of the Harbour.
- Preservation and appreciation of cultural heritage.

These stakeholder views also informed the prioritisation of key management issues in the Scoping Study.

### PRIORITY MANAGEMENT ISSUES

The management issues of key importance for Sydney Harbour were identified through the analysis of the key findings from the literature review, stakeholder survey and workshop. These were also prioritised based on stakeholder views. These were summarised in the Scoping Study under the following themes (in priority order):

- 1 Protection and Maintenance/Improvement of Estuarine and Riparian Terrestrial Habitats**  
Managing areas including coastal development, resources extraction, shipping and boating, pollution by invasive species and future impacts from projected climate change.
- 2 Maintenance/Improvement of Water/Sediment Quality**  
Management of water and sediment quality from faecal contamination and nature of the water infrastructure around the Harbour. Further investigation into nutrient and contamination pathways is recommended.
- 3 Foreshore Access**  
The provision of safe and equitable public access to the Harbour and foreshore.
- 4 Shoreline Stability**  
The establishment of flexible management approaches within the CZMP to deal with a variety of erosion scenarios is required.



## 5 Coastal Inundation

Opportunity for a CZMP to manage risks associated with coastal inundation consistently across the geographical plan area, and establish clear guidance on managing sea level rise benchmarks for surrounding areas. However there are major implementation concerns, including integration with other programs, and the funding and feasibility of determining inundation extents for the plan area.

## 6 Cultural and Heritage Protection

The inclusion of heritage sites in a CZMP will need to consider integration with existing management plans, statutory requirements and other programs.

## 7 Recreational Use and Amenity

Sydney Harbour has high value to a range of user groups, clubs, associations and individuals. Reconciling the diverse aspirations and values of these users is a challenge of preparing a CZMP for Sydney Harbour. User group and stakeholder consultation must form a key part of the future preparation of a CZMP.

## 2015 STAKEHOLDER WORKSHOP

In **June 2015**, stakeholders were presented with the Scoping Study findings and were asked to workshop three key points, around level of comfort with the findings, the most critical issues within the seven identified priority themes for inclusion in an integrated CZMP, and overall drivers, challenges and solution for an integrated CZMP.

The outcomes of the workshop would be used to inform and refine the process for developing an integrated CZMP.

### 1 Level of comfort with the findings and why.

- The stakeholders agreed that the Scoping Study's findings provided a high-level overview of Sydney Harbour's coastal management, and identified the following gaps:
- While the Scoping Study provides statements for the need to address specific management issues, it requires clear aims and objectives to justify the overall need for an integrated CZMP.
  - It defines an Integrated Coastal Zone Management as "a holistic dynamic, multidisciplinary and iterative process to promote sustainable management coastal zones". This is in line with stakeholder views for a holistic "whole of Harbour" and flexible approach.
  - It does not detail the key coastal processes (cause and effect).
  - It provides guidance on potential management actions and responsibilities. Stakeholders however stated there should be a greater focus on the actions through an action plan.

- It needs to further consider governance structures to deal with range of shareholders (e.g. levels of Government & private ownership).
- It has examined past plans and studies. Stakeholders identified a need to integrate new research.
- It does not include mapping of existing governance arrangements.

### 2 Which issues within the seven themes are most critical for inclusion in an integrated CZMP?

Stakeholders identified critical issues including:

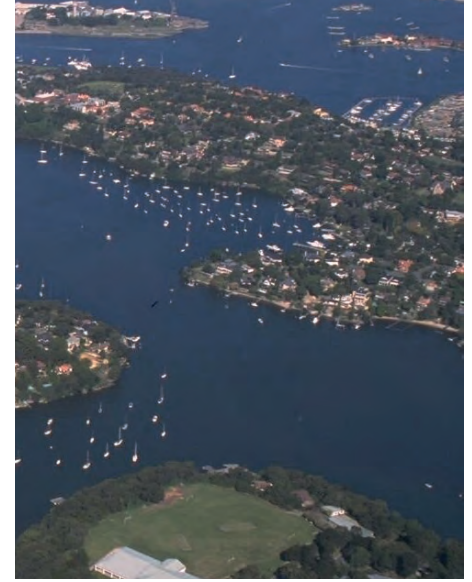
- A transparent process for prioritising management issues.
- Identify actions (e.g. advocacy).
- Clear governance roles ("Whole of Harbour" versus local).
- Identify funding requirements, timeframe, scale of prioritisation and stakeholder participation.
- The need to integrate a Coastal Inundation Emergency Management Plan.

### 3 Overall drivers, high-level challenges and solutions for an integrated CZMP.

Stakeholders identified the following drivers, challenges and solutions:

#### DRIVERS

- Sustainability, including improved water quality outcomes.
- A coordinated, consistent governance framework and approach.
- Public interest.
- Educating the community and increase public confidence around science knowledge and community values
- Financial efficiency by overcoming duplicated processes.



## CHALLENGES

- There is currently no over-arching governing body for coastal management.
- Funding sources and mechanisms.
- Population growth.
- Changes in Harbour uses, such as ferries.
- Climate change and implications for rainfall, temperature and sea level change.
- Mobilisation of contaminated sediment.
- Asset deterioration.
- Current physical and government boundaries.

## SOLUTIONS

- Set up a new or existing entity to implement the CZMP to provide leadership in implementing a Sydney Harbour CZMP.
- The Sydney Coastal Councils Group advocate for the need for governance and legislative changes to the NSW Government.
- Collaboration between agencies (e.g. Environment Protection Authority, Fisheries NSW) to identify clear targets for a future CZMP.
- A future CZMP which would identify responsibilities, commitments, timeframes, legal frameworks, coordination of roles and management of review processes.
- Define the governance boundaries (e.g. by catchment, tideline).
- Engage with stakeholders to develop the vision and ideas for a future CZMP.
- Funding could be sourced from tourism, and boating and other licences.
- Identify stakeholder representatives for a steering committee.

## NEXT STEPS

The development of an agreed governance structure and framework will be necessary to minimise the barriers to enabling the successful implementation of an integrated CZMP for Sydney Harbour in the future.

### KEY STEPS THAT SHOULD BE CONSIDERED ARE:

- Identification of the responsible agencies that would be involved in the development of a future integrated CZMP for Sydney Harbour.
- Identification and confirmation of an appropriate "champion" to push the development of an integrated CZMP for Sydney Harbour.
- Identification of partnerships that can be established (i.e. to conduct scientific research, data collection and sharing for input into development processes for a future CZMP for Sydney Harbour.
- Identification and confirmation of stakeholder representatives for a steering committee.
- Consideration of marine spatial planning as a management tool and implementation approach where marine spatial planning provides an extension of land-use planning.
- Consideration of ways for community involvement in the development of a future CZMP for Sydney Harbour.
- Consideration of the development of a common standard/design for foreshore infrastructure.
- Confirm the specific outcomes of a future CZMP for Sydney Harbour in particular how the CZMP would be applied.
- Determination of an agreed approach for the funding of the development of a future CZMP.

- Agreement on sea level rise planning benchmarks by all councils covered by a future CZMP.
- Agreement on whether to include or exclude culturally sensitive sites from a future CZMP.
- Agreement on a transparent process for determining and prioritising the goals and actions set in a future CZMP.

The above key steps and priority management issues from the Scoping Study would provide the guidance on the future preparation of a CZMP for Sydney Harbour to achieve an integrated coastal management approach for all areas of the Harbour.

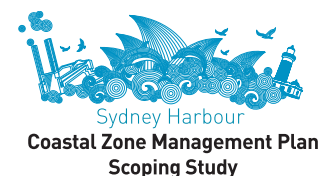


Image 1: Sydney Harbour Courtesy Tourism NSW

Image 2: Rushcutters Bay Courtesy City of Sydney

Image 3: Cityscape from Watsons SCCG

Image 4: Stakeholder workshop SCCG

Image 5: Stakeholder workshop SCCG

Image 6: Double Bay SCCG

Image 7 (this page): Sydney Harbour Courtesy NSW Estuary Management Program