



Government of **Western Australia**
Department of **Transport**

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Maritime Coastal Hazard Management Role Statement and Frequently Asked Questions

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Definitions

The following definitions are adopted for the purposes of this statement.

Coast: the coastal zone where interaction of the sea and land processes occurs. It is highly dynamic. It shifts its position in seasons, years and decades.

Coastal management: The direction of day-to-day activities, occurring on coastal land and nearshore waters that have the potential to modify the physical or biological condition of the coast.

Coastal engineering: The applied science of assessing and addressing the reaction of different coastal features to the forces of ocean and tidal waters.

Coastal hazard: Consequences of coastal processes that affect the environment and safety of people. Potential coastal hazards include erosion, accretion and inundation (WAPC, 2013).

Adaptation: An adjustment in natural or human systems in response to actual or expected stimuli or their effects, which moderates harm or exploits beneficial opportunities. Adaptation is the means for maximising the gains and minimising the losses associated with coastal hazards over the planning timeframe.

Coastal protection works: Any permanent or periodic work undertaken primarily to alter physical coastal processes and/or manage the effects of coastal hazards.

Local coastal manager: Organisation with tenure/ownership or vested management authority and responsibility of coastal land, as foreshore reserves, and coastal assets (whether natural or built).

Ownership: Ownership (of structures) implies responsibility for ongoing use, care, control and maintenance, rather than simple proprietorship of land.



Version No.	Date	Prepared by	Revision or issue description	Issued to
1	18/03/2015	Coastal Management	Draft for consultation	Various
A	01/12/2016	Coastal Management	Draft following stakeholder review	CMAG
B	07/07/2023	CEM	Minor updates	DoT

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Introduction

The purpose of this document is to articulate the role of the Department of Transport (DoT) in regard to data, advice and funding for coastal hazard management in WA. This document replaces the 2006 Coastal Protection Policy for WA.

DoT's role applies primarily to the coastline immediately adjacent to the oceans of WA. Estuarine shorelines are included as an area of secondary focus.

Assistance and authority for expenditure provided by DoT is by Ministerial direction under Section 5(1)(k) of the *Marine and Harbours Act 1981*, ("perform such other duties relating to marine affairs within the State, not being inconsistent with this Act").

1.1 Context

Most future coastal development in WA will have a coastal foreshore reserve accommodating a range of functions and values, including allowance to absorb the likely impacts of coastal hazards with minimal management. However, coastal management activities may still be required in many locations where:

- a. existing assets and values are under threat;
- b. existing management strategies require ongoing attention;
- c. older coastal protection structures (deemed essential) are deteriorating;
- d. future development requires a coastal location (e.g. ports and harbours, surf clubs etc.); and
- e. extreme cyclones and storms can cause damage.

There is no Commonwealth legislation for coastal management in Australia, and no national agency with a mandate to monitor and manage the coastal zone.

There is no specific statute for coastal hazard management in WA. Instead, since the early 1970s the State Government has involved itself in coastal hazard management through the functions of its agencies using a 'networked' approach, as described in *Coasts WA: Better Integration* (DPI, 2003).

The Western Australian Planning Commission's (WAPC) *State Planning Policy No.2.6 - State Coastal Planning Policy* (gazetted in 2013) provides statutory guidance and informs matters related to sustainable coastal land use and development.

The *State Coastal Planning Policy* requires coastal planning to adhere to the principles of coastal hazard risk management and adaptation planning (CHRMAP). CHRMAP is the practice of systematically identifying and understanding coastal hazard risks and putting in place controls to manage them. The Department supports the use of CHRMAP principles for coastal erosion and inundation management and recognises they can be applied at different time and space scales.

For information on CHRMAP please refer to:

- WAPC's *State Planning Policy No.2.6 State Coastal Planning Policy 2013*
- WAPC's *State Planning Policy No.2.6 State Coastal Planning Policy Guidelines 2013*
- WAPC's *Coastal Hazard Risk Management and Adaptation Planning Guidelines 2014*

The Department provides advice and assistance in relation to coastal hazard management recognising that:

- i. Many local coastal managers cannot maintain expertise in coastal engineering and science or collect and maintain the necessary data to make informed decisions.
- ii. In many cases built coastal assets are at risk to coastal hazards. This is often due to limited knowledge, information or understanding of coastal hazards at the time of past decision making.
- iii. Coastal erosion and inundation management is an ongoing complex, and expensive, task and the Department is willing to share coastal data and support local coastal managers with its technical expertise.

1.2 Coastal management responsibility

The management of coastal lands and assets (whether natural or built) on public land is the responsibility of the organisation with management authority, vesting or tenure of the area, known as the local coastal manager. Management activities to address coastal erosion and inundation risks on public land will be undertaken by the local coastal manager.

Most local coastal managers are local government authorities that have designated management responsibility (through land tenure or vesting) for large tracts of coastal land as foreshore reserves. They have an active role in the planning and development of their coastal land. However, in some instances the local coastal manager is an organisation, other than a local government authority, which has management authority over a section of the coastal foreshore, e.g. Port Authorities, Aboriginal land councils, State agencies and authorities, and other corporate bodies directly involved in coastal management.

2. The Department's role

Under the *Marine and Harbours Act 1981* the Department is charged with providing management, engineering, and scientific services for the planning of its land and water based maritime facilities. To provide these services the acquisition, analysis, management and presentation of information and data measuring the physical characteristics of the coast is required. The same coastal information, data, and expertise are useful to other State agencies and local coastal managers in decision-making for the WA coast.

2.1.1 Provision of information, data and technical advice

On account of the clear public benefit to WA the Department shares coastal information and data with local coastal managers where requested and available. The Department provides specialist scientific and engineering advice for coastal hazard risk assessment and management when and where resources permit.

2.1.2 Provision of funding assistance

Where appropriate the Department provides funding assistance to local coastal managers through a competitive coastal grants scheme to undertake projects which manage coastal hazards for the public benefit. These are known as Coastal Adaptation and Protection (CAP) Grants.

2.1.3 Temporary coastal erosion management measures

Temporary management measures are often required when local coastal managers consider there to be imminent threat to local values and assets, or there is an emergency where human life is at risk. Effective temporary management allows time for long-term sustainable management approaches to be developed and implemented, without limiting future management options.

The Department recommends temporary works only when the value of the public assets is greater than the cost of the works. Local coastal managers are responsible for initiating and managing temporary works. The Department will provide technical advice and assistance when and where resources permit.



Frequently Asked Questions

1. Why was the policy reviewed and changed to a role statement?

A review process was undertaken in 2014 and 2015 to assess, update and revise the 2006 Coastal Protection Policy (CPP), a DoT operational policy. It was acknowledged that the CPP (2006) was no longer consistent with best practice approaches to Coastal Management and the principles of *State Coastal Planning Policy (SPP 2.6)*. The CPP (2006) did not effectively describe Department of Transport (DoT) core business function in the planning and development of WA's land and water based maritime infrastructure in addition to administering the Coastal Adaptation and Protection (CAP) grants and the provision of technical advice and assistance. The aim of the review was to develop a document that aligned with the principles of SPP 2.6 and described the role of the Department of Transport (DoT) with regard to Coastal Management in Western Australia.

A 'Draft Coastal Adaptation and Protection Policy' was released for stakeholder comment and feedback in April 2015 for a two month consultation period. Following detailed review by various levels of DoT of all comments and feedback received, it was concluded that the policy was inadequate to stand as a whole of government policy for Coastal Management in WA and it was not supported by any State Legislation. The document was more suited to describing DoT's role in coastal management in Western Australia, consequently the policy was revised to a Role Statement. For more information relating to various State Government agencies involvement in Coastal Management the draft document, *WA Coastal Zone Strategy 2021, prepared for the Western Australian Planning Commission* is available at www.wa.gov.au/government/publications/wa-coastal-zone-strategy

2. What is the involvement of the three levels of government in Coastal Management in Western Australia?

Coastal Management is delegated from the Commonwealth Government to each individual State Government and respective local governments within each Australian state. The Commonwealth has an important role in coastal planning and management through its indirect financial and funding powers, and by leading national policy-making in a range of related areas. The Commonwealth has a direct role in managing coastal lands and waters of defence establishments and is a regulator of marine safety. The Commonwealth is also an initiator of research throughout the coastal zone. As well as funding significant national data services (Harvey & Caton, 2010).

The various states around Australia have differing responsibilities for resource management, including management of the coast, and there are a range of agencies that regulate the use of the coastal zone. For Western Australia the most relevant document available that sets out the State Governments strategy towards coastal planning, management and protection is the *WA Coastal Zone Strategy 2021*. The SPP2.6 provides statutory guidance and informs matters related to sustainable coastal land use and development.

Generally in Western Australia the management of coastal lands and assets (whether natural or built) on public land is the responsibility of the organisation with management authority, vesting or tenure of the area known as the local coastal manager. Most local coastal managers are local government authorities that have designated management responsibility (through land tenure or vesting) for large tracts of coastal land as foreshore reserves.

3. What are the major responsibilities of DoT's Maritime?

The Maritime Directorate comprises seven branches, Maritime Planning, Coastal Information, Coastal Facilities Management, Project Delivery, Waterways Safety Management, MEER and Ports, and Business Services. Each branch plays a key role in the delivery of the Directorate's outcomes.

Maritime Planning researches and prepares strategic plans and detailed designs for the development and enhancement of land and water based maritime infrastructure. Maritime Planning uses scientific information from the Coastal Information branch and works closely with the Project Delivery branch that has responsibility for the construction phase. Guidance on the delivery of maritime facilities and coastal engineering solutions is provided to both the Government and private sector in Western Australia. Maritime Planning has a particular focus on the development of small craft facilities and in providing expert advice on coastal management issues.

Coastal Engineering and Management is a subgroup of Maritime Planning which undertakes and provide specialist advice on coastal engineering, sustainable approaches to coastal management and scientific investigations for Maritime facility development, maintenance, as well as other local and State government projects. Coastal Management also manages and administers the CAP and HCAP Grants program.

4. What are the Coastal Adaptation and Protection (CAP) and Hotspot Coastal Adaptation and Protection (HCAP) Grant schemes? Aside from DoT's Grants what funding sources are available for coastal management?

Generally local coastal managers are responsible for the day-to-day management of their coast and assets and allocation of funding within their management budget. DoT assists local coastal managers through the AP and HCAP Grant programs.

The CAP Grant scheme provides up to 50% assistance funding through a competitive process for local coastal managers to undertake projects associated with identifying and adapting to coastal hazards. Coastal Adaptation and Protection Grants are available for monitoring, adaptation planning, asset management, adaptation and maintenance projects. Visit www.transport.wa.gov.au/inline/coastal-adaptation-and-protection-cap-grants.asp for further information.

The HCAP Major Project Fund assists in the design and implementation of coastal adaptation works at WA's coastal erosion hotspots as identified in the Assessment of Coastal Erosion Hotspots in Western Australia: www.transport.wa.gov.au/mediaFiles/marine/MAC_P_CoastalErosionHotspotsReportAppendixA-C.pdf.

HCAP Major Projects funding percentage is variable as the Projects are evaluated through a competitive process where percentage of funding contribution by the local coastal manager is one of four evaluation criteria.

The Western Australian Planning Commission through Department of Planning, Lands and Heritage (DPLH) provides funding via the Coastal Management Plan Assistance Program. The grants support coastal land managers to develop coastal hazard risk management adaptation plans (CHRMAs) strategies and management plans for coastal areas that are, or are predicted to become, under pressure from a range of challenges. For further information visit www.wa.gov.au/government/document-collections/coastwa#coastal-management-plan-assistance-program-cmpap

The Western Australian Planning Commission also provides Coastwest Grants administered by DPLH. Coastwest grants support eligible land managers and community organisations to undertake projects that manage and enhance Western Australia's coast through rehabilitation, restoration and preventative actions. www.wa.gov.au/government/document-collections/coastwa#coastwest-grants

Royalties for Regions may also be able to fund projects. Royalties for regions provides investment for regionally beneficial projects through State Government agencies and the States nine Regional Development Commissions. For further information please visit www.wa.gov.au/organisation/departments-of-primary-industries-and-regional-development/royalties-regions

5. What projects does DoT fund through its CAP and HCAP grants?

CAP grants are available for the coastline immediately adjacent to the Oceans of Western Australia. Estuarine shorelines are included as an area of secondary focus. Eligible CAP project types include:

Monitoring: Development and implementation of monitoring programs to collect data including beach and hydrographic surveys, wave and water level recordings, aerial photography and photogrammetry.

Investigation: Appropriate investigations/studies to determine the cause of existing coastal hazards and the likely impacts of climate change, hazard assessments, vulnerability assessments, and the development of adaptation/management solutions.

Asset Management: Condition inspections of existing coastal protection infrastructure (e.g. groynes, seawall) and development of asset management/maintenance programs.

Adaptation: Design and implementation of managed retreat, construction of coastal protection structures (e.g. groynes, seawalls) or beach nourishment. This can include the preparation of tender documents and construction supervision.

Maintenance: The maintenance of existing coastal protection structures HCAP Grants are primarily utilised for Adaptation focussed projects with higher project value.

6. When are temporary coastal erosion management measures suitable?

Temporary coastal management measures are often required when local coastal managers consider there to be imminent threat to local values and assets, or there is an emergency where human life is at risk. Effective temporary management allows time for long term sustainable management approaches to be developed and implemented, without limiting future management options.

Temporary works are only advised when the value of the public assets (economic, social and/ or environmental values) is greater than the cost of the works. Local coastal managers are responsible for initiating and managing the temporary works. DoT provides technical advice and assistance when and where resources permit.

Sacrificial sand nourishment is often a suitable temporary erosion measure when required to act immediately however it should be considered in combination with other potential temporary erosion measures. The nature of the hazard being experienced and the site specific conditions require consideration to determine and implement a suitable temporary erosion measure.

7. Our public coastal assets are at imminent threat of being affected or have been recently affected by a coastal hazard what can we do?

The Department provides technical advice and assistance when and where resources permit. Please contact the DoT by emailing: coastalmanagement@transport.wa.gov.au to discuss your situation further.

DoT also maintains a list of useful references and resources that could assist. For further information about specific queries related to coastal hazards and coastal management contact DoT.

References

Harvey, N. & Caton, B (2010) Coastal Management in Australia. University of Adelaide Press.



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