



NSW Coastal Design Guidelines 2023

Promoting good coastal planning and
urban design for great coastal
communities

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Introduction to the guidelines

Updates to the Coastal Design Guidelines



The NSW Coastal Design Guidelines 2003 were originally published to ensure coastal development was sensitive to the natural and urban character of the coast.

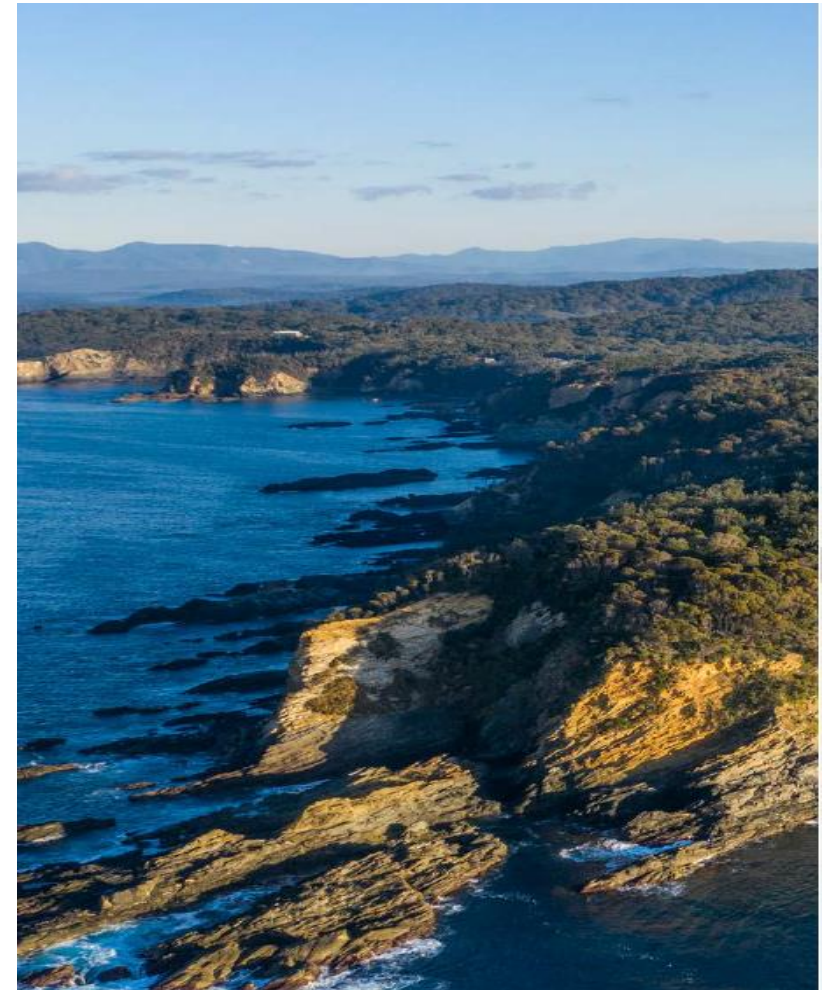
Our recent review was to ensure the guidelines were up to date, effective, and included:

- Integration with contemporary coastal management, Aboriginal cultural heritage, natural hazard management and place-based design
- Clear planning proposal requirements that are fit for purpose (i.e. land use planning or change decisions)
- Separate optional urban design guidance (i.e. development design and decisions)

Updated NSW Coastal Design Guidelines (released November 2023)

The purpose of the updated guideline is to improve the quality of planning and urban design on the NSW coast, specifically by:

- aligning contemporary coastal management and land use planning
- encouraging development and urban design that reflects and celebrates the local character of coastal communities
- ensuring development protects important coastal features and responds to coastal hazards
- promoting design that respects Country and Aboriginal cultural heritage
- making planning proposal requirements explicit
- retaining and updating coastal urban design principles to support high quality coastal development



Contents of the guidelines and when to use them

Legislative Context

Environmental Planning & Assessment Act 1979:

- Resilience and Hazards SEPP 2021
- s. 9.1 (2) Directions by the Minister
- Local Planning Direction 4.2 - Coastal Management
- Regional Plans
- Local Environmental Plans
- Local Strategic Planning Statements

Coastal Management Act 2016:

- Coastal Management Programs
- Coastal Management Manual and Toolkit

Marine Estate Management Act 2014:

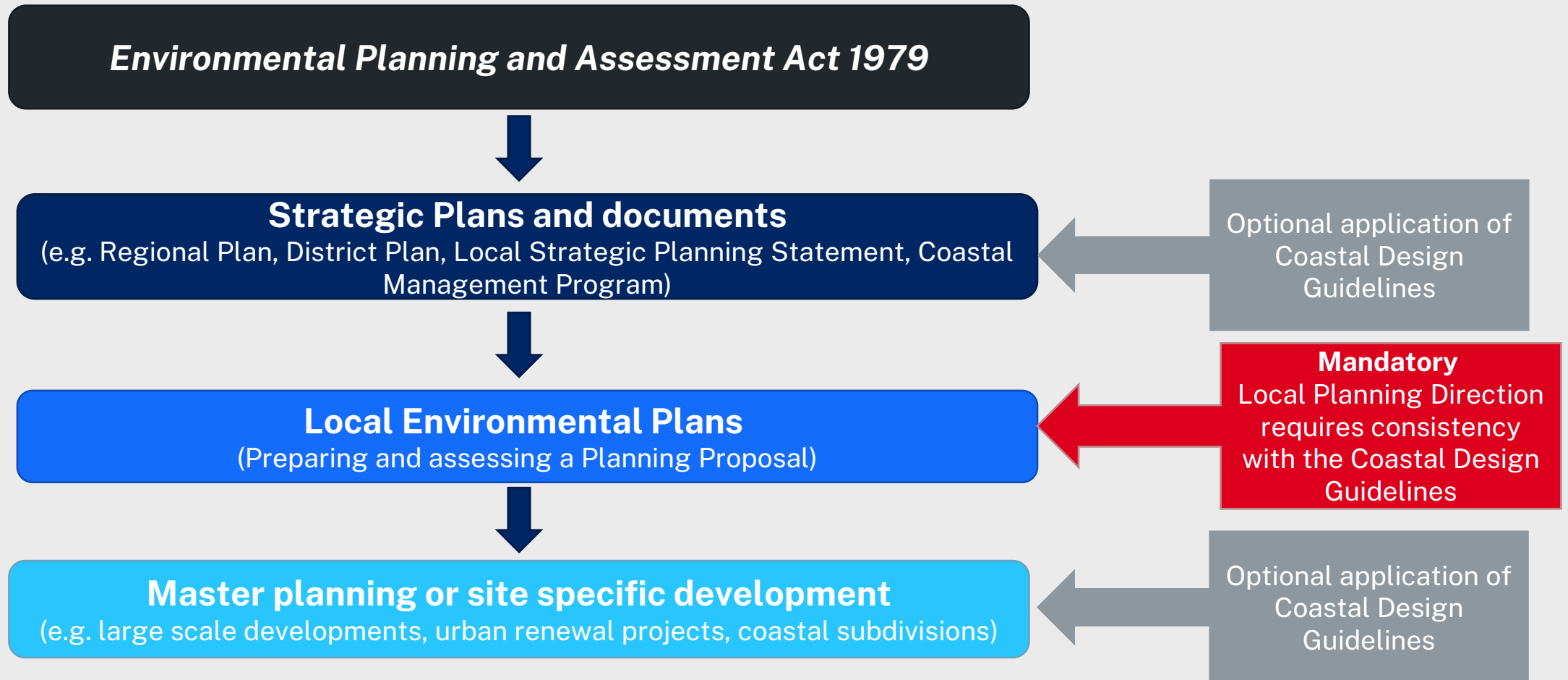
- Marine Estate Management Strategy

Chapter 1 Introduction

Photography: Silvan Bluett

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When to use the guidelines



Place-based planning

The guidelines contain advice on understanding coastal places, including:

- natural landforms and systems
- built form, spaces and connectivity
- social, economic and cultural influences
- common pressures on communities and opportunities.

A photograph of a coastal landscape. In the foreground, there are gnarled, light-colored tree trunks and branches. Behind them, a rocky coastline meets the ocean. The water is a deep blue, and the sky is bright. The overall scene is natural and scenic.

Chapter 2 Understanding coastal places

Photography: Destination NSW

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Understanding coastal places

2.1 Approach to place

All places have distinctive characteristics, services, infrastructure, employment and growth potential. These guidelines encourage approaching coastal places as inextricably connected to their surroundings.

Rather than seeing a place in isolation, consider:

- broader forces and pressures that shape a place, such as coastal processes and their interactions with development
- natural hazards that may interact with coastal processes and functioning, including sea level rise, severe storms, flooding, dune transgression, nuisance wind-blown (aeolian) sand, storm surges and east coast lows
- biodiversity, marine and estuarine ecosystems and water cycle impacts
- the visual connection between a place and its surroundings, such as how a building fits into a streetscape or is viewed from a nearby beach, foreshore or waterway
- the interdependencies between places, highlighting how property lot lines, settlement borders or administrative boundaries do not define or limit places.

A genuine understanding of place recognises how that place influences, and is influenced by, its context. This is particularly important for coastal places as the coastal environment is dynamic and constantly changing. For example, coastal processes can gradually or suddenly change the foreshore, while development pressures see change and renewal in the built environment.

By understanding this context and how it changes, we can ensure that designs are sensitive to natural and built coastal environments. In some cases, additional technical studies or environmental assessments may be necessary to understand certain aspects of place.

This chapter explores the common factors, features, pressures and opportunities of coastal places that inform a site analysis, which should take place in the early stages of every project. For advice on how to analyse a site, refer to place analysis guidance from the Government Architect NSW.

A place-based approach

A place-based approach involves a holistic understanding of context and the people who populate places to support the long-term needs of the wider community. It acknowledges a place's local knowledge and its unique history, culture, environment and economy.

Place-based approaches recognise the relationships between the built and natural environments, and the social and economic characteristics of communities that give places their unique character and value.

Good design identifies what is special about a place. It also acknowledges the constraints, pressures and challenges a project will need to address for its place, within the broader urban or regional context.

Place-based analysis approaches these challenges by considering how pre-existing factors and the relationships between those influence and create a place and its unique local character.

Analysing coastal places in the context of their surrounding environment allows us to understand them in a more holistic way, including the factors that create, define and sustain those places. It also allows us to consider more deeply the challenges and opportunities for each place.

Social and economic context

Social and economic factors are important influences on a place, and often go beyond what can be visually mapped. Factors shaping the social and economic context include:

- **productivity** – employment, industry and resources
- **society and culture** – demographics, community resilience, how people associate with each other, and how they feel about the place and its history
- **politics and governance** – systems of administration and participation that inform how to act and work within a place.

By analysing the significant factors shaping a place – the natural environment, the built environment and the social and economic context – and how they overlap and interact, we can describe the coastal place, its area of influence, and the processes or hazards that might affect it. This is an important step for understanding the characteristics, pressures and opportunities that a development proposal should address.

Section 2.3 of these guidelines explores the natural, built, social and economic factors in more detail. Identifying key features, characteristics, threats and hazards provides a starting point for the site analysis specific to coastal places.

Section 2.4 of these guidelines gives some examples of common pressures and opportunities in the coastal zone. These pressures and opportunities can affect and be affected by multiple factors and features of coastal places.

Connecting with Country

Connecting with Country is fundamental to place-based design and planning. It is integral to a well-designed built environment.

The Connecting with Country framework (PDF 11.1MB) gives guidance for understanding the value of Aboriginal knowledge in the design and planning of places. Connecting with Country is a response to Indigenous concepts of Country, taking a holistic and Country-led approach to the built environment that is guided by Aboriginal people. This approach encourages all of us to take up the challenge of thinking differently, working differently, and making decisions that prioritise Country.

The Connecting with Country framework considers how design and planning processes are related to natural systems and elements including the land, water, air, plants, animals and humans. It outlines opportunities for industry and government to connect and engage respectfully and appropriately with Country through relationships with Aboriginal communities.

The Connecting with Country framework aims to identify and create opportunities to value Aboriginal wisdom and knowledge in the design, planning and management of our open spaces and built environments.



Ocean pools at Bondi Beach – Waverley LGA / Gadigal Country

2.4 Common pressures and opportunities

When undertaking strategic planning or urban development, there are common pressures and opportunities that affect or are affected by the coastal context of the place. Consider how your proposal could respond to some of these, particularly for large-scale developments with significant impact.

Pressures

- Increasing population and development pressures along the coast can make it difficult to retain existing local character, protect surrounding environments and retain heritage values.
- Lack of infrastructure and services can put pressure on growing populations and changing demographics.
- Unsafe and/or degraded pedestrian environments and cycleways limit active movement within and between settlements.
- Privatisation of streets, open space, views and foreshores may disconnect or reduce public access, amenity and scenic values of the coast.
- Uncontrolled vehicular and pedestrian access can degrade sensitive environmental areas, including wetlands, waterways, foreshore vegetation and coastal dunes.
- Urban runoff can result in poor water quality in waterways and coastal lakes.
- Ribbon development and poorly designed urban release areas can reduce the landscape breaks (of both natural and rural lands) that separate and articulate settlements, affecting the scenic quality of the coast.
- Without adaptive management, buildings and infrastructure may be increasingly vulnerable to the effects of natural hazards made worse by climate change.
- Redundant, disused or failing legacy infrastructure may harm coastal environments and may limit public access to and amenity of areas such as coastal and estuary foreshores.



Figure 1. A coastal settlement in NSW displaying many of the common pressures (Nearmap)

The coastal settlement shown in Figure 1 has little open space for the population size, and the open spaces that do exist are disconnected. There is limited foreshore setback for public use, meaning the foreshore area has become privatised and highly developed. This makes access to the foreshore difficult and exposes residential buildings to coastal hazards.

Using Chapter 2 to understand places in the coastal zone

Chapter 2 outlines the recommended approach to understanding places in coastal zones.

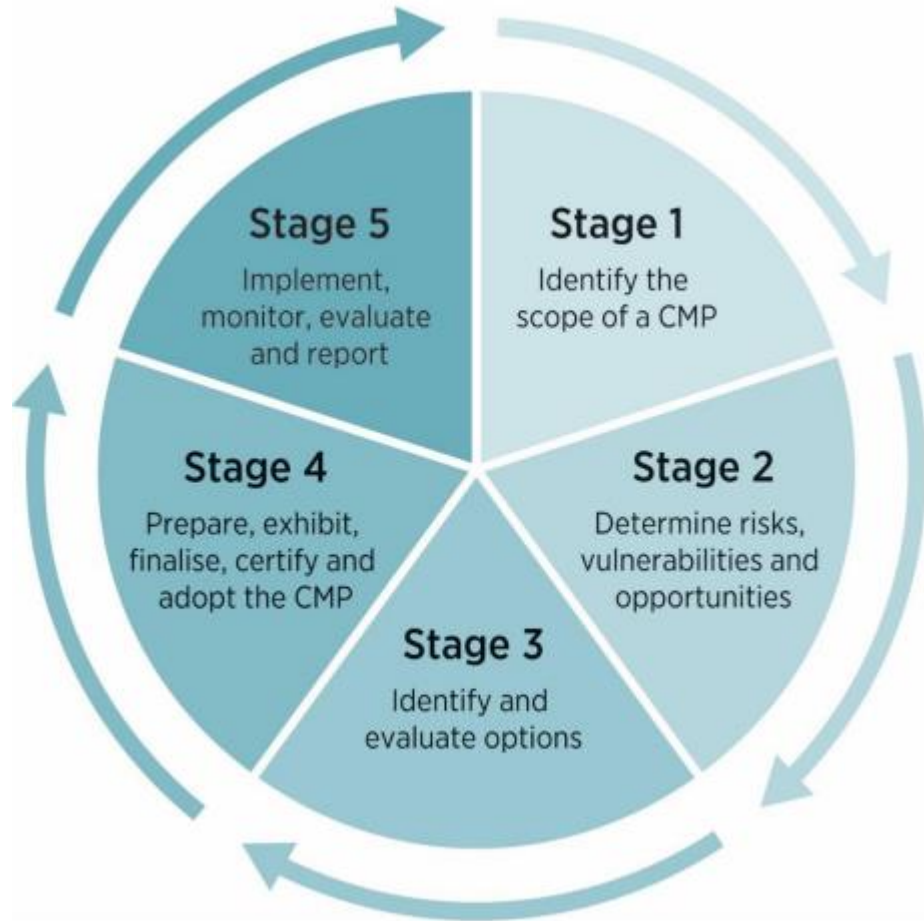
Use this chapter in the early stages of projects to ensure the design is sensitive to natural and built coastal zones.

This chapter can inform many planning uses, including:

- scoping studies for local strategic planning strategies, regional plans, master plans and planning proposals
- site analysis for large-scale developments such as coastal subdivisions, feasibility studies, business cases



Using Chapter 2 when developing coastal management programs (CMPs)




- *Stage 1 – Scoping*: use when identifying key management issues
- *Stage 2 – Determining risks, vulnerabilities and opportunities*: use when writing scopes for studies (e.g. socio-economic studies), to ensure relevant factors are considered
- *Stage 3 – Identify and evaluate options*: use to assist in identifying opportunities to reduce risks and enhance coastal values
- *Stage 4 – Prepare, exhibit, finalise, certify and adopt*: local context factors could inform the consultation approach

Planning proposal requirements

The guidelines contain outcomes for planning proposals in the coastal zone along 5 themes:

- Protecting environmental values
- Enhancing the built environment
- Reflecting social and cultural values
- Supporting sustainable coastal economies
- Responding to coastal hazards.



Chapter 3 Planning proposals in the coastal zone

Photography: Max Chew



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Example requirements for planning proposal -social and cultural values theme

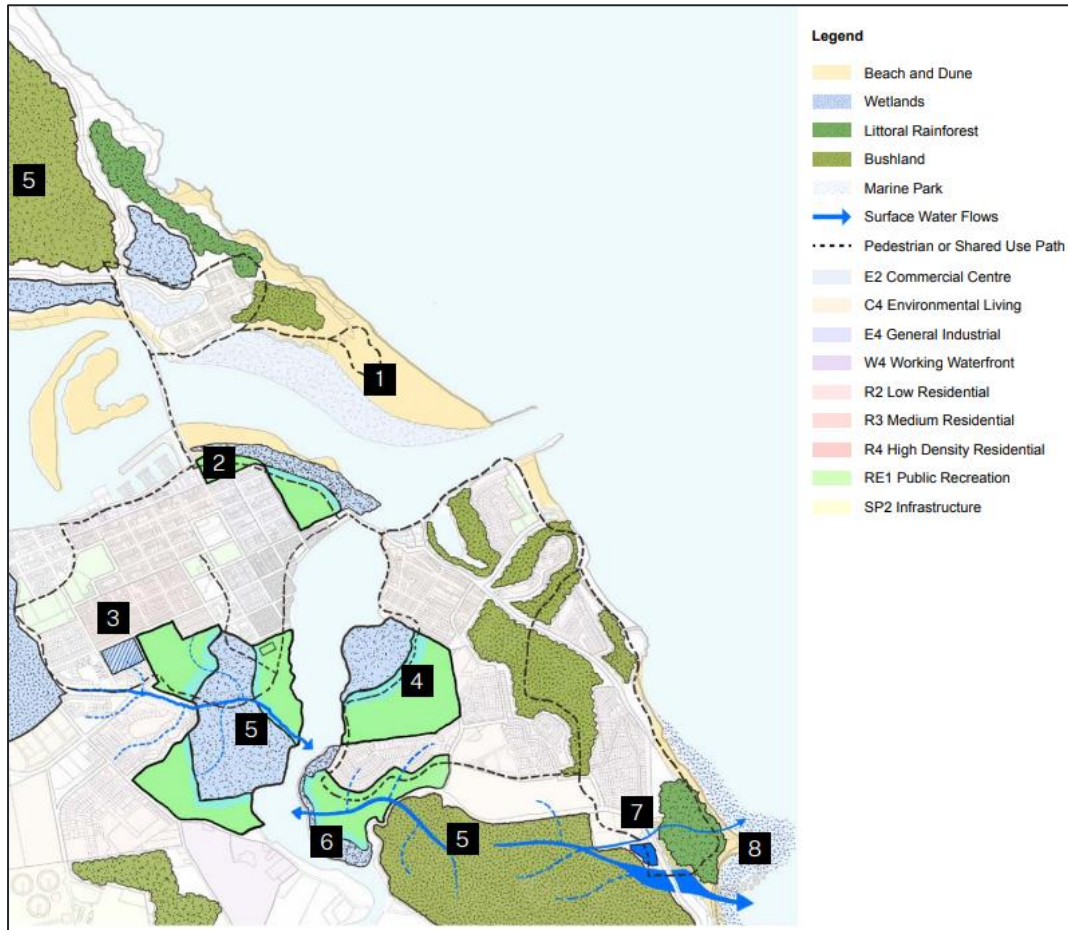


Example outcome: provide public access to significant coastal assets

Requirements

- a. Protect and, where practical, improve, public amenity, access to and use of beaches, foreshores, rock platforms, geoheritage sites and headlands, unless you must restrict access for public safety or for environmental or cultural protection. In doing so, consider both current and projected future coastal hazards.
- b. Identify opportunities to maintain and improve existing public access to beaches, foreshores, coastal waters and coastal lakes that support active and passive recreation activities, where this does not interfere with existing coastal industries.
- c. Consolidate access points and consider alternative access to protect sacred and significant Aboriginal cultural areas.
- d. Maintain and improve foreshore access and connections to existing or proposed networks of public open spaces. This includes waterways, riparian areas, bushland and parks for active and passive recreation.
- e. Consider opportunities to protect and improve habitat connectivity through settlements, such as those described in the *Greener Places Design Guide*.
- f. Avoid development on coastal dunes and foreshore reserves unless it is for essential public purposes, such as surf life-saving club buildings. Any building or structure located on dunes must be of lightweight construction and relocatable.
- g. Define the boundaries of development sites with a public edge – for example, a pedestrian pathway or public laneway.
- h. Prevent the privatisation of coastal open space by ensuring development next to foreshores is set back, maintains public access and accessibility, and provides links and connections to other public accessways.

Example desirable practices for coastal places



A. Protect and enhance coastal environmental values

- 1 Dune system and surrounds has been left undeveloped and zoned for conservation (A.1(a))
- 2 A rezoning to create commercial areas along the foreshore included the creation of green space to protect the neighbouring wetland (A.1(e)).
- 3 A planning proposal to consolidate density includes measures to manage stormwater runoff to the downstream wetland and estuary (A.2(b)).
- 4 Open green space acts as a buffer to sensitive wetlands and provides space for migration of wetlands in response to climate change (A.1(e), A.2(d))
- 5 Access and pathways through sensitive coastal ecosystems are limited; no access provided to highly sensitive areas (A.1(e))
- 6 Areas of vegetation should be of a sustainable width and gallery stands avoided. In this case, the coastal wetland has been historically cleared and the remaining area is being protected, with space for migration of wetlands provided (A.2(c), A.2(d)).
- 7 Stormwater runoff from residential area is actively managed so the quality of water leaving the site is better than pre-development quality, before flowing downstream into the waterways and marine park (A.2(b), A.3(b)).
- 8 Headland and surrounds maintained as undeveloped area (A.1(a)).

Using the assessment checklist for planning proposals

The assessment checklist outlines the relevant requirements of section 3.2 of the Coastal Design Guidelines. The checklist **must** be used to record how planning proposals in a coastal zone are consistent with the guidelines.

This will ensure the planning proposal is in line with Local Planning Direction 4.2, which specifies that planning proposals must give effect to the guidelines.

The assessment checklist:

- provides a tool to assist proponents to identify important coastal planning issues in their planning proposals
- prompts the proponent to address how they will account for any inconsistencies to the guideline
- will improve the quality and transparency of coastal urban land use planning decisions more broadly

The planning portal will also be updated to prompt proponents to include the checklist when they submit a planning proposal.

Coastal Design Guidelines

Appendix 1: Assessment checklist for planning proposals

Hierarchy of coastal management areas:

1. CWLRA = coastal wetlands and littoral rainforests area
2. CVA = coastal vulnerability area
3. CEA = coastal environment area
4. CUA = coastal use area

Outcome A. Protect and enhance coastal environmental values			
Requirement	Relevant coastal management area(s)	Applicable to planning proposal (Y/N)	Planning proposal is consistent with guidelines (Y/N) If 'No', justify this
Outcome A.1 Protect coastal ecosystems			
A.1a Avoid development on undeveloped headlands and significant coastal landforms.	CVA, CEA		
A.1b Do not increase development or intensify land uses where there is existing development on headlands and significant coastal landforms.	CVA, CEA		
A.1c Identify, protect and enhance sensitive coastal ecosystems including coastal wetlands, littoral rainforests and other coastal threatened ecological communities that may be affected by development.	CWLRA, CEA		
A.1d Maintain and protect the presence of beaches, rock platforms, coastal dunes, riparian vegetation and the natural features of foreshores, including along estuaries and coastal lakes.	CWLRA, CVA, CEA		
A.1e Use environmental buffers and limit the number of access points and pathways to protect coastal ecosystems. In some cases, it may not be appropriate to allow public access to areas with highly sensitive ecosystems or animal populations.	CWLR, CEA, CUA		

Using the assessment checklist for planning proposals

Steps for filling in the checklist:

1. Identify which coastal management area(s) your proposal falls into using the mapping within the ePlanning Spatial Viewer
2. Complete in column 3 **Applicable to planning proposal (Y/N)** based on whether the proposal is in a relevant coastal management area
3. If column 3 is 'Yes' - fill in column 4 **Planning proposal is consistent with guidelines (Y/N)**
 - if the requirement has been addressed: state 'Yes' and provide a brief explanation
 - if the requirement has not been addressed: state 'No' and provide justification for the inconsistency
 - if the requirement is not relevant to the proposal: state 'N/A' and provide a brief explanation

Coastal Design Guidelines

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Outcome A. Protect and enhance coastal environmental values			
Requirement	Relevant coastal management area(s)	Applicable to planning proposal (Y/N)	Planning proposal is consistent with guidelines (Y/N) If 'No', justify this
Outcome A.1 Protect coastal ecosystems			
A.1a Avoid development on undeveloped headlands and significant coastal landforms.	CVA, CEA		
A.1b Do not increase development or intensify land uses where there is existing development on headlands and significant coastal landforms.	CVA, CEA		
A.1c Identify, protect and enhance sensitive coastal ecosystems including coastal wetlands, littoral rainforests and other coastal threatened ecological communities that may be affected by development.	CWLRA, CEA		
A.1d Maintain and protect the presence of beaches, rock platforms, coastal dunes, riparian vegetation and the natural features of foreshores, including along estuaries and coastal lakes.	CWLRA, CVA, CEA		
A.1e Use environmental buffers and limit the number of access points and pathways to protect coastal ecosystems. In some cases, it may not be appropriate to allow public access to areas with highly sensitive ecosystems or animal populations.	CWLR, CEA, CUA		

Using the assessment checklist for planning proposals - example 1

Outcome A. Protect and enhance coastal environmental values			
Requirement	Relevant coastal management area(s)	Applicable to planning proposal (Y/N)	Planning proposal is consistent with guidelines (Y/N) If 'No', justify this
Outcome A.2 Protect coastal wetlands and littoral rainforests			
A.2a Identify coastal wetlands and littoral rainforests, including areas that could be rehabilitated or restored in the future, and do not increase development or intensify land uses in these areas.	CWLRA	No	N/A. Proposal is not in CWLRA.
A.2b Allow for the adaptive management of stormwater run-off so that the quality of water leaving the site is better than pre-development quality to lessen effects on coastal wetlands or other sensitive receiving environments.	CWLRA, CEA, CUA	Yes	YES. The proposal will not impact on the ability of the site to accommodate appropriate stormwater management measures (at the development application stage).
A.2c Provide environmental buffers and riparian corridors that enable the long-term management and protection of areas of biodiversity and ecosystem integrity.	CWLRA, CVA, CEA, CUA	Yes	N/A. The site is highly disturbed and does not contain natural environmental features. Therefore, there are no anticipated impacts on biodiversity or identified need to provide environmental buffers.

Proposal isn't in the relevant coastal management area, so column 3 is 'No' and column 4 is N/A

Proposal is in one or more relevant coastal management areas, so column 3 is 'Yes'. The proposal is consistent with the requirement, so column 4 is 'Yes' and provides a brief explanation.

Proposal is in one or more relevant coastal management areas, so column 3 is 'Yes'. However, the specific requirement isn't relevant so column 4 is 'N/A' and provides a brief explanation.

Using the assessment checklist for planning proposals - example 2

Outcome B. Ensure the built environment is appropriate for the coast and local context			
Requirement	Relevant coastal management area(s)	Applicable to planning proposal (Y/N)	Planning proposal is consistent with guidelines (Y/N) If 'No', justify this
Outcome B.1 Respond to and protect elements that make the place special			
B.1a Integrate development within the natural topography of the site and ensure land use, building scale and height respond sympathetically to coastal landforms.	CWLRA, CVA, CEA, CUA	Yes	<i>NO. The coastal landforms are generally low lying and flat in proximity to the site. Existing surrounding built form is generally one to two storeys, however this is significantly less than the future desired character reflected in LEP controls. The proposed building heights and floor space ratios will integrate with the future planned urban form for the area, with an increase on the site to provide a landmark status suitable to the area.</i>

Proposal is in the relevant coastal management areas, so column 3 is 'Yes'. The proposal is not consistent with the requirement, so column 4 is 'No' and a justification is given.

Using Chapter 3 when preparing planning proposals in a coastal zone

The requirements of Chapter 3 **must** be addressed in planning proposals by using the assessment checklist. Any inconsistencies must be suitably justified in accordance with Local Planning Direction 4.2.

Proponents (individual or council)

- Determine which coastal management areas the proposal is in
- Use the guidelines and checklist to ensure that the proposal meets the relevant requirements
- Fill in the checklist, document consistency with the requirements and justify any inconsistencies
- Lodge planning proposal through the planning portal, attaching checklist which summarises how proposal meets Guidelines

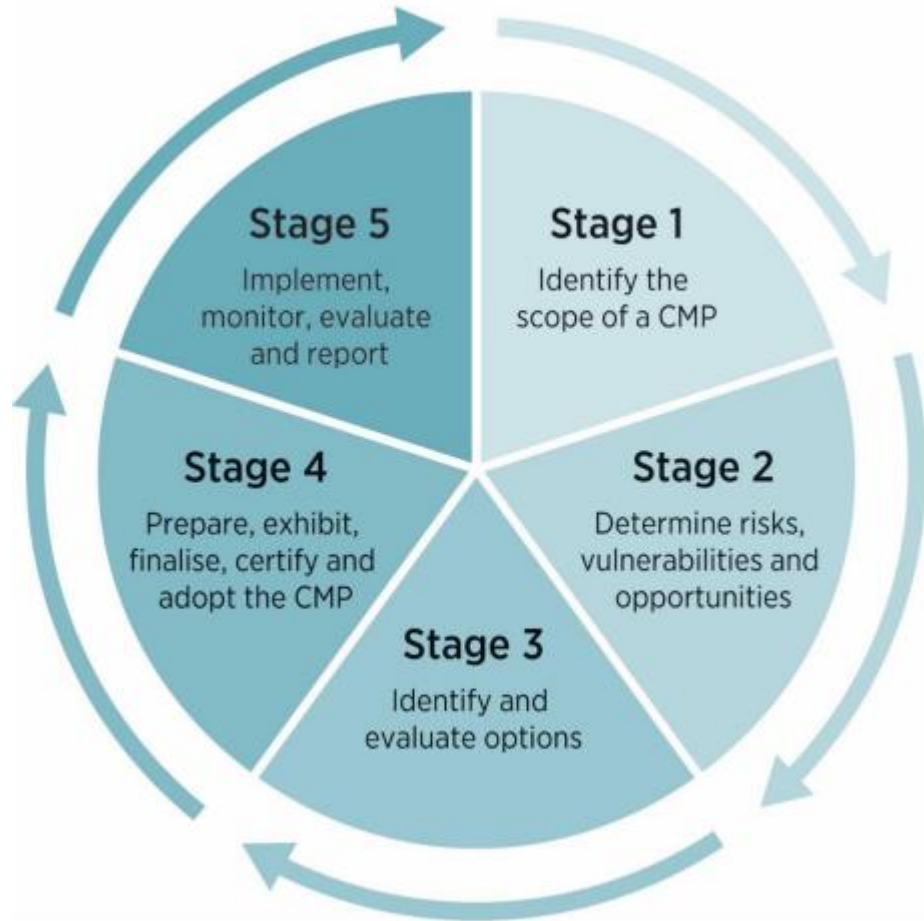
Councils (if not the proponent)

- Ensure requirements of local planning direction 4.2 and section 3.2 of the Guidelines have been met
- Ensure the information supplied in the proposal and checklist are completed and meaningfully address the requirements under the direction and section 3.2.
- Check any inconsistencies have been appropriately justified
- Discuss and resolve any concerns or inconsistencies with proponent
- If supported, allow proposal to proceed to DPHI for gateway determination

DPHI

- During adequacy assessment, ensure the proposal addresses local planning direction 4.2 and section 3.2 of the Guidelines, and that the checklist has been attached to the proposal
- Be satisfied that the checklist demonstrates consistency with the requirements, and any inconsistencies are appropriately justified
- Discuss and resolve any concerns with council

Using Chapter 3 when developing coastal management programs (CMPs)



When a CMP identifies a need to amend coastal management area mapping, change LEP planning controls or to rezone land

- *Stage 1 – Scoping:* refer to the chapter when scoping studies and modelling to ensure the studies will provide enough information to demonstrate that the planning proposal requirements are met
- *Stage 3 – Identify and evaluate options:* use to understand the implications and requirements for any actions requiring a planning proposal
- *Stage 5 – Implement, monitor, evaluate and report:* planning proposals to implement CMP actions would be assessed against Chapter 3

Resources for Chapter 3



The Coastal Design Guidelines webpage contains the following resources:

- [editable PDF version of the Assessment checklist for planning proposals](#) – for easy use
- worked example of a [completed planning proposal checklist](#) – to demonstrate how to use the checklist

NSW Coastal Design Guidelines 2023



Appendix 1: Assessment checklist for planning proposals

Hierarchy of coastal management areas:

1. CWLRA = coastal wetlands and littoral rainforests area
2. CVA = coastal vulnerability area
3. CEA = coastal environment area
4. CUA = coastal use area

Note: Requirements relating to coastal hazards must be considered for all coastal hazard and risk areas, regardless of which relevant coastal management area(s) these fall within. 'Coastal hazard and risk areas' mean any mapped coastal vulnerability areas and/or areas affected by (or projected to be affected by) coastal hazards that have been identified in a state environmental planning policy, local environmental plan, development control plan, coastal management program, coastal hazard policy or study adopted by council.

Outcome A. Protect and enhance coastal environmental values			
Requirement	Relevant coastal management area(s)	Applicable to planning proposal (Y/N)	Planning proposal is consistent with guidelines (Y/N) if 'No', justify this
Outcome A.1 Protect coastal ecosystems			
A.1a Avoid development on undeveloped headlands and significant coastal landforms.	CVA, CEA		
A.1b Do not increase development or intensify land uses where there is existing development on headlands and significant coastal landforms.	CVA, CEA		
A.1c Identify, protect and enhance sensitive coastal ecosystems including coastal wetlands, littoral rainforests and other coastal threatened ecological communities that may be affected by development.	CWLRA, CEA		
A.1d Maintain and protect the presence of beaches, rock platforms, coastal dunes, riparian vegetation and the natural features of foreshores, including along estuaries and coastal lakes.	CWLRA, CVA, CEA		
A.1e Use environmental buffers and limit the number of access points and pathways to protect coastal ecosystems. In some cases, it may not be appropriate to allow public access to areas with highly sensitive ecosystems or animal populations.	CWLRA, CEA, CUA		

Appendix 1: Assessment checklist for planning proposals

Hierarchy of coastal management areas:

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Outcome A. Protect and enhance coastal environmental values			
Requirement	Relevant coastal management area(s)	Applicable to planning proposal (Y/N)	Planning proposal is consistent with guidelines (Y/N) if 'No', justify this
Outcome A.1 Protect coastal ecosystems			
A.1a Avoid development on undeveloped headlands and significant coastal landforms.	CVA, CEA	Yes	N/A. Not located on a headland or coastal landform.
A.1b Do not increase development or intensify land uses where there is existing development on headlands and significant coastal landforms.	CVA, CEA	Yes	N/A. Not located on a headland or coastal landform.
A.1c Identify, protect and enhance sensitive coastal ecosystems including coastal wetlands, littoral rainforests and other coastal threatened ecological communities that may be affected by development.	CWLRA, CEA	Yes	N/A. Site does not contain, and is not located in close proximity to, coastal wetlands or littoral rainforests or any other threatened ecological communities that are likely to be affected by the proposal.
A.1d Maintain and protect the presence of beaches, rock platforms, coastal dunes, riparian vegetation and the natural features of foreshores, including along estuaries and coastal lakes.	CWLRA, CVA, CEA	Yes	N/A. The site is located more than 100m from the nearest foreshore feature (a lake) and is separated by existing urban built form. Therefore, it will not have any direct impact on natural coastal features.
A.1e Use environmental buffers and limit the number of access points and pathways to protect coastal ecosystems. In some cases, it may not be appropriate to allow public access to areas with highly sensitive ecosystems or animal populations.	CWLRA, CEA, CUA	Yes	N/A. There are no identified sensitive ecosystems or animal populations in this location.
A.1f Consider if the planning proposal is needed or if development zones could be better located to minimise effects on biodiversity.	CWLRA, CEA, CUA	Yes	YES. The site is highly disturbed, has been previously cleared for urban purposes and does not contain natural environmental features. Therefore, there are no anticipated adverse effects on biodiversity.
A.1g Avoid development that may disturb, expose or drain areas of Class 1 and Class 2 acid sulfate soils.	CWLRA, CEA, CUA	Yes	N/A. The land is mapped as Class 3 and Class 4 on the Acid Sulfate Soils Planning Maps.

Note: transitional arrangements for planning proposals



Planning proposals prepared **after the guidelines were published on 10 November 2023** must be consistent with and give effect to Chapter 3 (section 3.2) of the guidelines.

This means the 2023 guidelines must be addressed if:

- the planning proposal had not been lodged for gateway assessment by 10 November 2023, or
- the planning proposal had been lodged for gateway assessment by 10 November 2023 but was required to be amended, or
- a gateway determination condition requires the planning proposal to give effect to the guidelines.

For planning proposals that had progressed through these stages before 10 November 2023, the previous requirement to be consistent with and give effect to NSW Coastal Design Guidelines 2003 still applies.

Chapter 4

Urban design guidance for the coastal zone

Photography: Destination NSW



Urban design guidance



The guidelines contain best-practice urban design advice along 3 themes:

- Protecting the natural environment and accommodating natural processes
- Using the built environment to enhance connectivity, amenity and resilience
- Sustaining the social, cultural and economic values of coastal communities.

Example of the urban design guidance

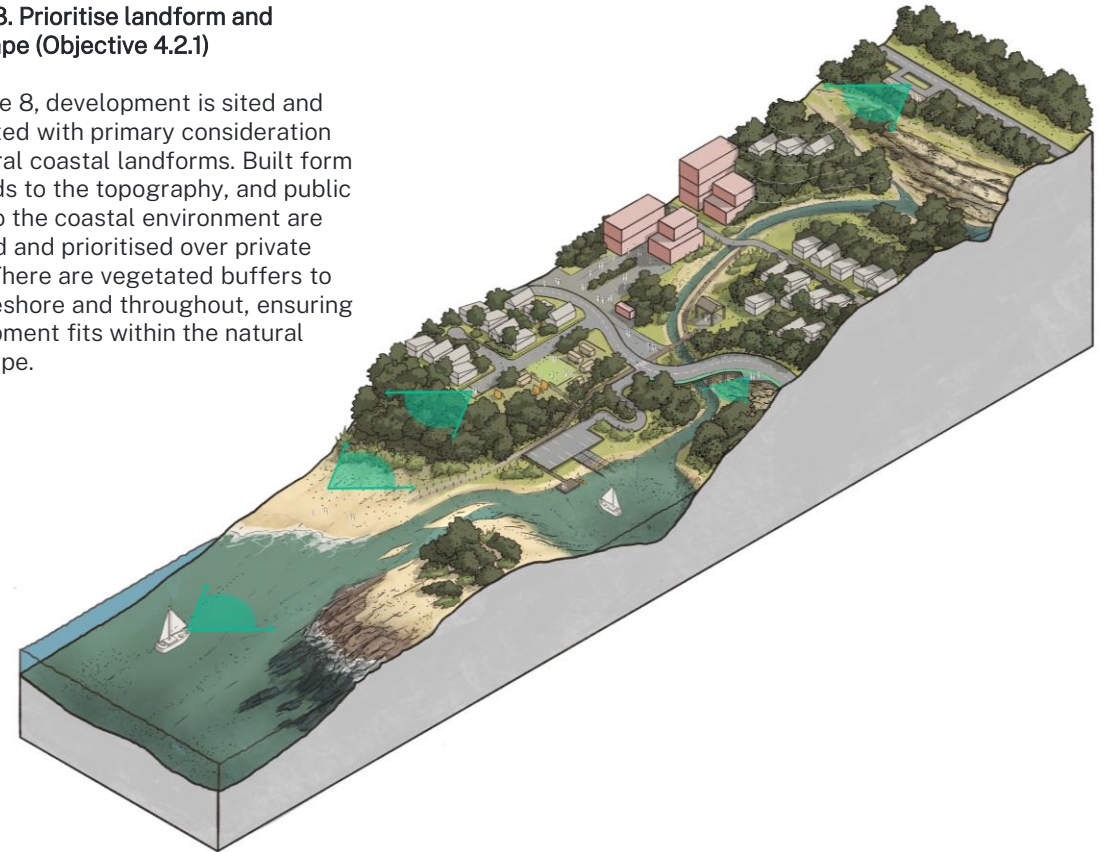
4.2.1 Base considerations on a hierarchy of landform, then landscape, then built form

Figure 8 illustrates strategies for achieving this objective.

- Site and orientate structures to reinforce natural coastal landform.
- Account for dynamic coastal processes and the changing nature of the landform under projected climate change scenarios and effects.
- Integrate public spaces and infrastructure with coastal landforms and systems.
- Create block and lot patterns responsive to topography, water flow, natural coastal assets and cultural landscapes.
- Maintain the ecological integrity of the foreshore and headlands, and retain public views of these coastal landscapes. Prioritise this over creating views and outlooks from private properties.

Figure 8. Prioritise landform and landscape (Objective 4.2.1)

In Figure 8, development is sited and orientated with primary consideration to natural coastal landforms. Built form responds to the topography, and public views to the coastal environment are retained and prioritised over private views. There are vegetated buffers to the foreshore and throughout, ensuring development fits within the natural landscape.



Example of the urban design guidance

4.3.3 Ensure civic amenity and appropriate access to the coastal environment

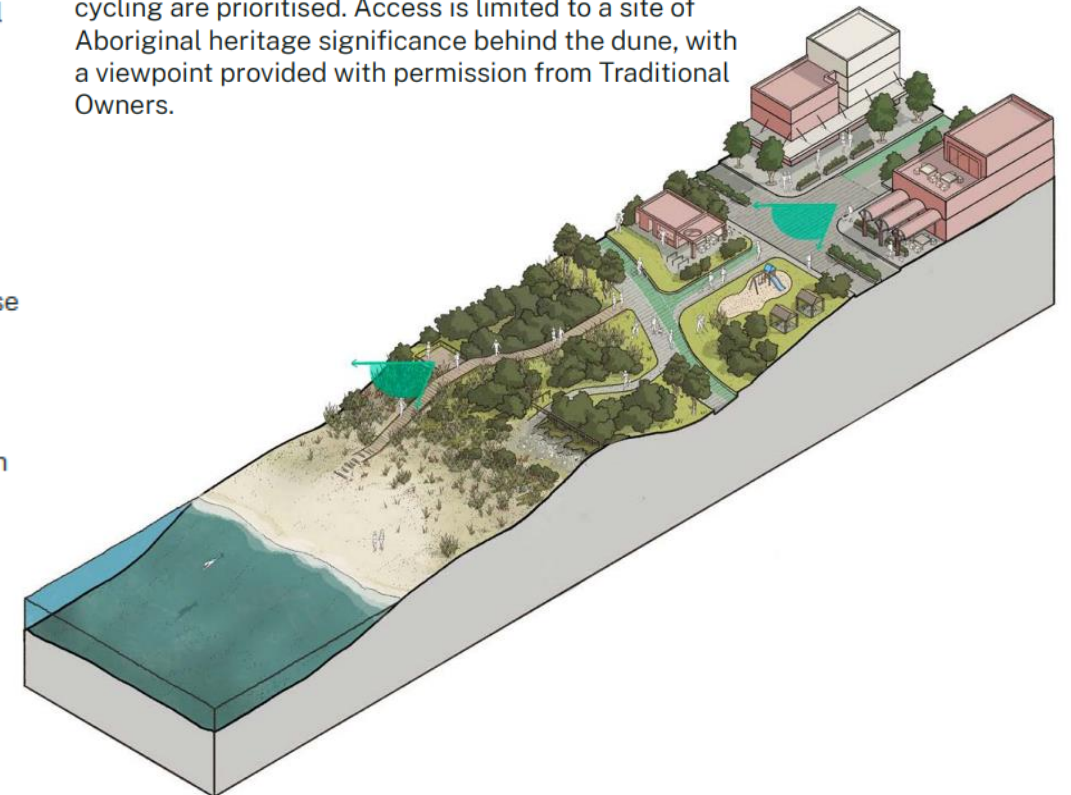
Figures 14 and 15 illustrate strategies for achieving this objective.

- Prioritise walking (including all forms of equitable access), cycling and public transport over movement and parking for private vehicles along coastal foreshores.
- Provide clear and limited entry points to coastal environments to protect coastal vegetation, sensitive coastal ecosystems and important habitat, such as for migratory species.
- Restrict vehicular entries and encourage non-vehicular access to, and within, the coastal environment.
- Minimise and elevate roads, crossings and walkways over waterways and water bodies.
- In high-use areas such as foreshores, if space allows, create distinct pedestrian walks and cycle paths, separated from busy roads. In areas with more limited space, separate roads from combined pedestrian and cycle paths.
- Protect the character of town centre and foreshore access roads by ensuring development fronting onto these roads is consistent with the existing or desired local character.
- Where vehicular traffic ends, ensure pedestrian and cycle movement can continue to provide access to the coastal environment.
- With permission and guidance from local Traditional Custodians, protect sacred and significant areas through siting and consolidating access points appropriately.

Low density settlement cross section

Figure 14. Appropriate access to the coastal environment (Objective 4.3.3)

In Figure 14, there are limited and well-defined entry points to the coastal environment to provide amenity yet protect coastal vegetation. Walking and cycling are prioritised. Access is limited to a site of Aboriginal heritage significance behind the dune, with a viewpoint provided with permission from Traditional Owners.



Example of the urban design guidance

4.3.3 Ensure civic amenity and appropriate access to the coastal environment

Figures 14 and 15 illustrate strategies for achieving this objective.

- a. Prioritise walking (including all forms of equitable access), cycling and public transport over movement and parking for private vehicles along coastal foreshores.
- b. Provide clear and limited entry points to coastal environments to protect coastal vegetation, sensitive coastal ecosystems and important habitat, such as for migratory species.
- c. Restrict vehicular entries and encourage non-vehicular access to, and within, the coastal environment.
- d. Minimise and elevate roads, crossings and walkways over waterways and water bodies.
- e. In high-use areas such as foreshores, if space allows, create distinct pedestrian walks and cycle paths, separated from busy roads. In areas with more limited space, separate roads from combined pedestrian and cycle paths.
- f. Protect the character of town centre and foreshore access roads by ensuring development fronting onto these roads is consistent with the existing or desired local character.
- g. Where vehicular traffic ends, ensure pedestrian and cycle movement can continue to provide access to the coastal environment.
- h. With permission and guidance from local Traditional Custodians, protect sacred and significant areas through siting and consolidating access points appropriately.

High-density area cross section

Figure 15. Access in a high-density coastal environment (Objective 4.3.3)

In a higher density environment, as illustrated in Figure 15, there are opportunities to provide separate pedestrian pathways with defined access points to the water, providing high-amenity areas where people can enjoy the coastal environment.



Using Chapter 4 for urban design guidance for the coastal zone

Chapter 4 provides useful guidance for designers to inform projects such as local strategic plans, place strategies, master plans, and large-scale development applications.

Proponents (public or private)

- Self-assess the project to determine alignment with best practice
- Consider whether any inconsistencies are justified or the project could be modified to better address a specific issue/outcome
- Supplement guidelines with design advice from other government publications relevant to the project.

Councils (when assessing DAs)

- Use the Ch 4 checklist provided in Appendix 2 as a guide to the consider design quality of project
- Determine whether any elements of the project could be improved to achieve better coastal outcomes
- Discuss and resolve concerns with the project proponent

Councils (when developing CMPs)

- Use the Ch 4 checklist to guide potential actions to address key issues for the area

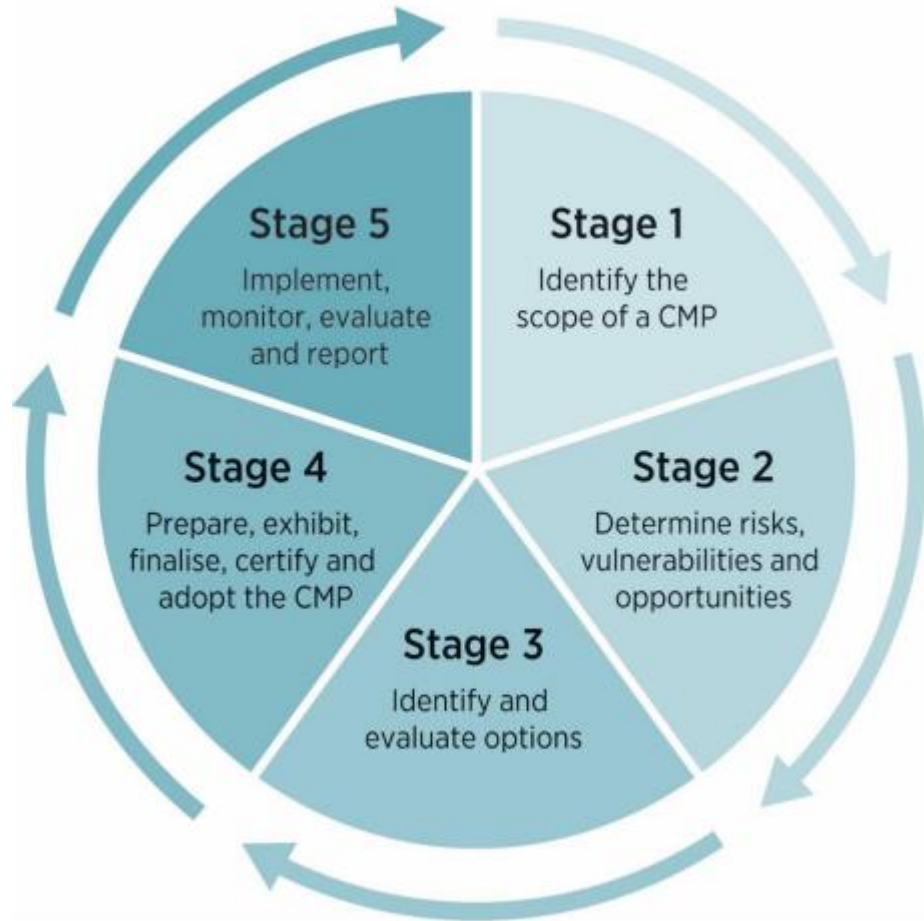
DPHI

- Use to inform preparation of master plans, precinct plans, regional plans and other major proposals DPHI is leading
- Use to inform assessment of major coastal developments DPHI is assessing

DCCEEW

- Use to guide councils in how they scope, prepare, evaluation and settle on CMP actions

Using Chapter 4 when developing coastal management programs (CMP)



- *Stage 3 – Identify and evaluate options:* use when evaluating options that involve changes to the built or urban form (e.g. construction of coastal protection works)
- *Stage 5 – Implement, monitor, evaluate and report:* development applications, masterplans and other documents to implement CMP actions could optionally be assessed against Chapter 4 to ensure they are suitable for the coastal context

Coastal Design Guidelines

Appendix 2: Assessment checklist for urban design

Hierarchy of coastal management areas:

1. CWLRA = coastal wetlands and littoral rainforests area
2. CVA = coastal vulnerability area
3. CEA = coastal environment area
4. CUA = coastal use area

4.2 Design guidance for the natural environment			
Design objective	Relevant coastal management area(s)	Applicable to design (Y/N)	The design is consistent with guidelines (Y/N) If 'No', justify this
4.2.1 Base considerations on a hierarchy of landform, then landscape, then built form			
4.2.1a Site and orientate structures to reinforce natural coastal landform.	CWLRA, CVA, CEA, CUA		
4.2.1b Account for dynamic coastal processes and the changing nature of the landform under projected climate change scenarios and effects.	CWLRA, CVA, CUA, CEA		
4.2.1c Integrate public spaces and infrastructure with coastal landforms and systems.	CVA, CEA, CUA		
4.2.1d Create block and lot patterns responsive to topography, water flow, natural coastal assets and cultural landscapes.	CEA, CUA		
4.2.1e Maintain the ecological integrity of the foreshore and headlands, and retain public views of these coastal landscapes. Prioritise this over creating views and outlooks from private properties.	CVA, CEA, CUA		
4.2.2 Protect and enhance water quality, hydrological systems and coastal processes			
4.2.2a Support and incorporate water-sensitive urban design approaches.	CWLRA, CVA, CEA, CUA		
4.2.2b Identify and protect sensitive downstream environments such as marine parks, aquatic reserves, coastal wetlands, coastal lakes and national parks from adverse effects on water quality and quantity, and hydrological flows.	CWLRA, CVA, CEA, CUA		
4.2.2c Consider opportunities to re-naturalise and engineer hydrology, hydraulics and flow regimes to support natural coastal and floodplain processes (for example, floodplain inundation, saltmarsh inundation, longshore drift).	CWLRA, CVA, CEA, CUA		
4.2.2d Remediate or remove legacy infrastructure that may be harming coastal environments and waterways.	CWLRA, CVA, CEA, CUA		
4.2.3 Identify, protect and enhance sensitive coastal ecosystems and threatened ecological communities			
4.2.3a Minimise disturbance to sensitive coastal ecosystems by grouping structures and providing	CWLRA, CVA, CEA, CUA		

4.2 Design guidance for the natural environment			
Design objective	Relevant coastal management area(s)	Applicable to design (Y/N)	The design is consistent with guidelines (Y/N) If 'No', justify this
common access points (such as walkways). Avoid vehicular access within sensitive coastal ecosystems.			
4.2.3b Avoid and minimise effects on areas of high biodiversity value.	CWLRA, CVA, CEA, CUA		
4.2.3c Restore, protect and improve sensitive coastal ecosystems – such as intertidal foreshores, coastal wetlands, littoral rainforests and riparian habitats – and increase connectivity between remnant areas where possible.	CWLRA, CVA, CEA, CUA		
4.2.3d Restore the natural characteristics of foreshore areas wherever possible.	CVA, CEA		
4.2.3e Provide vegetated setbacks to protect coastal ecosystems.	CWLRA, CVA, CEA, CUA		
4.2.3f Identify and plan for landward migration pathways for coastal wetlands to respond to climate change.	CWLRA, CEA		
4.2.3g Consider connectivity between the land and waterways holistically, including the effects of the development on ecological connectivity and ecosystem functions.	CWLRA, CEA		
4.2.3h Adopt lighting design that reduces light pollution to minimise effects on wildlife – refer to the <i>National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds</i> .	CWLRA, CVA, CEA, CUA		
4.2.3i Adopt acoustic design that minimises effects of construction and operational noise on wildlife.	CWLRA, CVA, CEA, CUA		
4.2.3j Naturalise drainage patterns and channels to manage overland flow, increase civic amenity, improve ecological connectivity and restore ecosystems.	CWLRA, CEA, CUA		
4.2.4 Ensure that the natural coastal environment is integrated into built coastal environments			
4.2.4a Maintain the presence of beaches, dune systems, undeveloped headlands and other natural features of foreshores.	CVA, CEA		
4.2.4b Encourage filtered views throughout the built environment to reinforce the presence of coastal landforms.	CEA, CUA		
4.2.4c Use landscaping and planting of locally endemic species to connect habitat, water systems and settlements.	CWLRA, CVA, CEA, CUA		
4.2.4d Use planting of locally endemic species and landscape design to screen built structures that may be viewed from the foreshore or coastal waterways.	CEA, CUA		
4.2.4e Mitigate urban heat island and climate change effects in built coastal environments by preserving and expanding tree canopy cover, riparian vegetation, wildlife corridors and habitat.	CWLRA, CEA, CUA		

Resources for Chapter 4

The Coastal Design Guidelines webpage contains the following resources:

- editable PDF version of the [Assessment checklist for urban design](#)
- case studies, including how they align with the urban design requirements

Parramatta Escarpment Boardwalk

Design guidance for the built environment



Summary

Project proponents: City of Parramatta Council

Location: Parramatta River foreshore in Rydalmere. Parramatta local government area / Dharug Country

Coastal management area(s): Coastal wetlands and littoral rainforests area (CWLRA) –proximity area, coastal environment area and coastal use area

Coastal Design Guidelines application

This case study shows how you can apply chapter 4.3 'Design guidance for the built environment' from the [NSW Coastal Design Guidelines 2023 \(PDF, 9.2 MB\)](#).

Objectives

Objective 4.3.1: Use built form to reinforce the beauty and character of coastal places

The boardwalk follows the natural form of the riverbank. While it is raised in sections, the boardwalk does not dominate the foreshore or block views to and from the river.

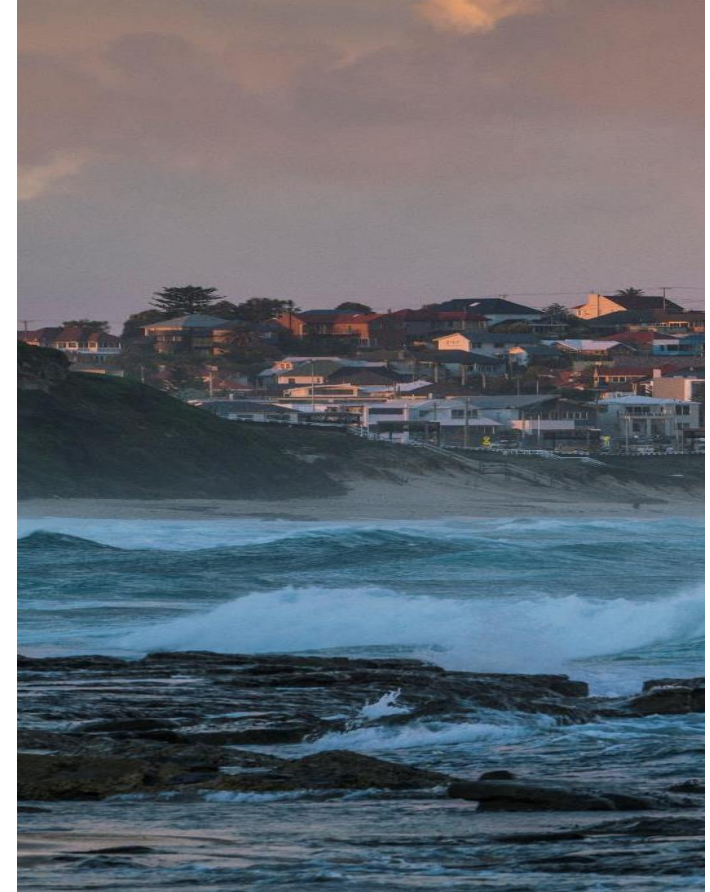
Objective 4.3.2: Ensure connectivity to and between coastal places

The boardwalk links with existing access paths as part of the Parramatta Valley Cycleway. It completes a continuous walking and cycling path connecting public spaces and institutions along the Parramatta River foreshore. The walkway also links the Parramatta Wharf to residential areas and a local school by 2 new sets of stairs.

Key messages

Key messages

- The NSW Coastal Design Guidelines help us to design places that are appropriate for their coastal context
- Useful as a rapid assessment tool for many coastal planning applications, including planning proposals
- Consistency with section 3.2 of the guidelines, and submitting the assessment checklist, are **mandatory** for planning proposals in the coastal zone
- The guidelines can be used for strategic planning and site-specific projects at a range of scales, from development applications to precinct and regional plans
- The guidelines are also useful for coastal management program development
- The [Coastal Design Guidelines webpage](#) includes a range of resources to help you apply the guidelines.



Questions or feedback?

For more information, to nominate case studies, or to give us feedback on how you are using the Guidelines, contact:

coastal@planning.nsw.gov.au