



MIDCOAST
council

OLD BAR MANNING POINT COASTAL MANAGEMENT PLAN

**Issues and Management Options Discussion Paper
2023**





Acknowledgement of Country

We acknowledge the traditional custodians of the land on which we work and live, the Gathang-speaking people and pay our respects to all Aboriginal and Torres Strait Islander people who now reside in the MidCoast Council area. We extend our respect to Elders past and present, and to all future cultural-knowledge holders.

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Introduction

Background

NSW Councils are required to prepare coastal management programs (CMP) for their coastal areas. CMPs set the long-term strategy for the coordinated management of the coast, with a focus on achieving the objectives of the Coastal Management Act 2016 (CM Act).

CMPs identify coastal management issues and the actions required to address these issues in a strategic and integrated way and detail how and when those actions are to be implemented, their costs and proposed cost-sharing arrangements and other viable funding mechanisms.

The Old Bar Manning Point CMP is a part of a larger project that will be integrated with the future Open Coast CMP. Council committed to advance the Old Bar Manning Point CMP ahead of the broader project because of concerns about rapid coastal erosion and shoreline recession in this area and the need to provide the community with a clear direction about how this area is to be managed in the future. The spatial extent of the Old Bar Manning Point CMP is represented in Figure 1.

An exhaustive number of studies and reports have been prepared for the study area. These have considered various coastal processes and hazards and considered numerous hard and soft engineering options to address coastal erosion, flooding, and shoreline recession.

The CMP process requires Council to detail the management issues in the study area and to outline suitable options to respond to these issues.

Coastal erosion and shoreline recession

Coastal erosion and shoreline recession are persistent themes throughout the study area.

Coastal erosion is the loss of beach sediment/sand from the system. Beach erosion is generally a rapid onset hazard. It occurs quickly, generally over periods of days to weeks, as a result of a storm event, storm surge or sustained periods of high-energy waves. Erosion is part of a natural response of beaches, and *generally* most beaches recover from this process. The eroded sands are typically returned to the shore, and the beach is rebuilt during calm weather. However, the recovery process relies on the existence of adequate sand supplies to replenish the beach profile.

Shoreline recession refers to the progressive landward shift of the average long-term position of the coastline. Recession is different to coastal erosion, in that it is a longer-term process, and occurs over many years or decades. The two main causes of shoreline recession are:

1. the cumulative long-term loss of sand from the beach sediment compartment, and
2. a shift in the position of the beach landward as mean sea level increases.

There is no natural recovery from this process, the land is lost.

The OBMP CMP applies to part of the coast within the Manning Valley Coastal Sediment Compartment. This compartment is characterised as sediment deficient, meaning that more sand is moving through or leaving the compartment than is being replenished. This means that coastal erosion and shoreline recession will continue to occur. This will be exacerbated by sea-level rise and more intense storm events.

Although these processes are not the same, many of the management options are. These are primarily intended on sand retention or nourishment.

Management Issues and Actions

The following section outlines the management issues that have been identified in the study area. These issues are the result of:

1. Local knowledge and experience.
2. Studies and reports of the subject area.
3. Discussions with the Community Reference Group.
4. Internal consultation.

The following list of management issues and options have been agreed to by the Community Reference Group at its meeting dated 9 November 2023.

This section is divided into 'general issues' and 'site-specific issues'. General issues are those that affect all or several of the areas and sites. The site-specific section relates to issues that are unique to specific areas.

General

Adaption policy and guidelines

MidCoast Council has not specifically articulated its policy position in relation to how it intends to approach coastal adaption.

It is essential that Council formalises its policy position and to adopt guidelines to clearly state how it intends to treat different land-use scenarios and how this is to be practically realised. This is essential to ensure consistent decision making and to provide transparency to landowners and the wider community.

Management issue/s	Management option/s	Responsibility
Governance	Prepare adaption policy and guidelines	MidCoast Council

Community education and awareness

Overtime, coastal erosion and shoreline recession will fundamentally change our coastline and how we interact with it. The coast is intrinsic to our coastal lifestyles and the identity of many of our towns and villages. Increasing the community's awareness of coastal processes is important to build understanding and resilience. Ongoing structured and opportunistic media outputs should be used to achieve this.

Acute coastal erosion events can place people and property at risk. Like bushfire and flooding, encouraging community preparedness is important. Council and the SES have opportunities to educate and encourage communities to anticipate and prepare for storm seasons. Campaigns targeting impacted residents and communities should be considered.

The coast is a diverse, dynamic and cultural environment. There are opportunities to provide educational information about a range of ecological, cultural and geomorphologic qualities. However, this needs to be undertaken in a manner that does not detract from the natural qualities of the coastline. A coastal signage strategy should aim to provide consistent and complementary signage along the MidCoast. The strategy should anticipate rationalising existing signage and minimising educational signage using alternative solutions such as QR codes. Emergency signage should be consistent, easily interpreted and appropriately located.

Management issue/s	Management option/s	Responsibility
Community awareness	Include opportunistic features/stories in Council's media outputs including webpage	MidCoast
Community preparedness	Undertake a targeted media campaign as storm season approaches	MidCoast SES
	Mail outs to households at risk of coastal erosion as storm season approaches	MidCoast SES
Educational signage and wayfinding	Undertake a coastal signage strategy	MidCoast

Amendment to the State Environmental Planning Policy (SEPP) (Resilience and Hazards), Local Environmental Plan (LEP) and Development Control Plan (DCP)

A key outcome of the CMP is to install statutory (SEPP and/or LEP) and non-statutory (DCP) regulations and controls to regulate development in areas vulnerable to coastal processes. There are two statutory options available. These need not be exclusive and it is argued that they can and should be used together.

1. MidCoast Local Environmental Plan

Council's MidCoast Local Environmental Plan (currently awaiting gazettal) includes a local clause (c7.4) relating to coastal risk planning. The clause requires that development within the coastal planning area demonstrate compliance against specific standards. The clause reflects the strategic direction for the MidCoast including avoiding intensification and discouraging additional investment in vulnerable areas commensurate with the timing of impacts.

2. State Environmental Planning Policy (Resilience and Hazards)

An option exists to map the areas as 'coastal vulnerability areas' in the SEPP. This activates [clause 2.9 of the SEPP](#) when assessing development. There are several disadvantages of this option. The primary consideration (clause 2.9(a)) is that: "the building or works are engineered to withstand current and projected coastal hazards for the design life of the building or works." The secondary clause (2.9(b)) requires the development to not alter coastal processes or reduce public amenity and to incorporate measures to manage risk.

Promoting engineering solutions over other approaches such as managed retreat is not specifically accommodated in clause. Proponents of the SEPP argue that it is important that there is alignment between the Act, the SEPP and the LEP. However, it does not reflect Council's strategic direction for the MidCoast. The LEP is subordinate to the SEPP, so where there is conflict the SEPP clause will prevail. Therefore, it is strongly recommended not to map those areas as 'coastal vulnerability areas' in the SEPP.

Another amendment to the MidCoast LEP is proposed to rezone existing residentially-zoned areas within the 1% Exceedance Probability at 2100 to a conservation zone. For example, C4 Environmental Living. This is an important signal to future purchases of property within the impacted area that there is an environmental constraint affecting the land. This zone is more restrictive, it is a closed zone¹ and it does not permit multi-unit dwellings.

¹ A closed zone means that any use not in the 'permitted with consent' table is prohibited.

The DCP has an important role for the interpretation and application of the statutory clause in either the SEPP or the LEP. An existing DCP for coastal hazards exists in the Great Lakes DCP and Greater Taree DCP. A similar, albeit revised DCP will be required to support the statutory clause. Following the preparation of the MidCoast LEP, Council will commence the DCP.

Management issue/s	Management option/s	Responsibility
Land-use planning Governance	Prepare a planning proposal to amend the SEPP (Resilience and Hazards) for the Coastal Vulnerability Area and/or the LEP	MidCoast Council
	Prepare an amendment to the DCP to provide guidance about how the LEP and/or SEPP provisions are to be interpreted	MidCoast Council

Section 10.7 Planning Certificates

A section 10.7 Planning Certificate is a legal document that Councils are required to provide. These certificates state the various planning controls and limitations on a property. These are a very important means to notify prospective purchasers of issues on a property such as vulnerability to coastal processes.

Council has a robust s10.7 planning certificate process that meets the requirements of the Environmental Planning and Assessment and Regulation. Mapping of coastal hazards relies on:

- Great Lakes LEP – Coastal Risk Planning mapping
- Greater Taree DCP2010 – Coastal Risk Hazard line

These are stated on s10.7(2) and 10.7(5) certificates.

The probabilistic hazard modelling has provided updated coastal hazard risk data including properties that are no longer subject to coastal erosion risk in the 2100 timeframe. A planning proposal is required to update the SEPP and/or LEP mapping which will then be used to inform the s10.7 certificate hazard notification. Once Council resolves to proceed with this amendment, certificates will need to state that the land is subject to a draft LEP amendment.

Management issue/s	Management option/s	Responsibility
Regulation	Prepare a planning proposal to amend the SEPP (Resilience and Hazards) for the Coastal Vulnerability Area and/or the LEP	MidCoast Council
	Update the s10.7 certificate draft LEP layer after Council resolves to proceed with the amendment	MidCoast Council
	Update the s10.7 certificate layer relating to coastal hazards on the gazettal of the LEP	MidCoast Council

Aboriginal Cultural Heritage

Council is aware that there are many aboriginal cultural heritage sites in proximity of the coast. As the coastline continues to recede and is subject to acute coastal erosion events, there is the high risk that these sites will be exposed and damaged.

It is necessary to undertake a cultural heritage impact assessment and adaption study to determine those cultural heritage assets are at risk and to empower the local Aboriginal Community to respond in culturally appropriate way. It is likely that exposure or damage to known items will occur during an acute event. There is also the likelihood that unknown items will be exposed during these events. The Emergency Management Plan should include clear protocols and responsibilities in such an event.

Management issue/s	Management option/s	Responsibility
Aboriginal cultural heritage	Undertake an Aboriginal Cultural Heritage Assessment and Adaption Study	Local Aboriginal Land Council with support from MidCoast Council
	Include emergency response in an Emergency Management Plan	Local Aboriginal Land Council with support from MidCoast Council

Public parks and assets

There are numerous public recreation assets in the study area that will be subject to coastal processes including Mudbishops, Vic Shoemsmiths Reserve and Farquhar Park. Plans of management for these parks and reserves are reviewed on a regular basis. Therefore, there will be opportunity to consider the impact of coastal processes on these assets in the review cycles of those plans.

Many of the public spaces including beaches have shared or unclear management responsibilities. There needs to be a clear and coordinated approach to the management of these areas. This issue has been addressed in the MidCoast Open Space and Recreation Strategy 2023-2035.

Management issue/s	Management option/s	Responsibility
Open space and recreation	Undertake a Community Facilities Strategy that includes: <ul style="list-style-type: none"> An audit of community assets and facilities at risk from coastal processes at various timeframes A plan to response to vulnerable assets 	MidCoast Council
	Prepare a Coastal Reserves Plan of Management that responds to coastal risks	MidCoast Council

Table 1: Recreation assets at risk.

Asset	Location	Timeframe	Process
Vic Shoesmith Reserve	Manning Point	2060	Shoreline recession / coastal erosion
Manning Point Boat Ramp	Manning Point	2060	Shoreline recession / coastal erosion
Farquhar Park ²	Farquhar	Present	Shoreline recession / coastal erosion
Mudbishops Reserve	Old Bar	Unknown**	Shoreline recession / coastal erosion / Flooding
Old Bar Park*	Old Bar	Present	Shoreline recession / coastal erosion
Beach access and viewing platform	Old Bar	Present	Coastal erosion / recession.
Beach access	Marine Drive, Wallabi Point	2060	Coastal erosion / recession
Beach accesses (4)	Wallabi Point	Present	Coastal erosion / recession

* The hazard modelling indicates that erosion will be limited due to bedrock.

** Mudbishops Reserve is identified as an area of uncertainty in the hazard report.

Transport Assets

There are many areas where roads, car parks, associated drainage, footpaths and cycleways are vulnerable to damage or destruction. An audit of these assets should be undertaken to determine immediate, short-, medium- and long- term risks and vulnerabilities and their impacts.

The preference is to relocate these assets where possible, however this will not always be practical or feasible. Other options may be appropriate including redesigning the asset, the use of relocatable or sacrificial structures and materials or the asset is *managed to fail*.

In some locations there is a public road between the coastal threat and private properties or public land. Damage to these roads will occur over time to a point where they are no longer safe or functional. A clear policy outlining the 'buying time' works and adaption pathways that are acceptable needs to be articulated. See Adaption policy and guidelines. For example, a 2-way street may be converted into a 1-way system when part of the road is compromised. The roadway could then be used as pedestrian only path and finally abandoned as a thoroughfare.

² Farquhar Park is under the control and management of Crown Lands.

Management issue/s	Management option/s	Responsibility
Road infrastructure	Undertake an audit of transport assets at risk from coastal processes at various timeframes	MidCoast Council
	Prepare a Transport Asset Management Plan to respond to coastal processes	MidCoast Council
	Prepare Adaption Policy and Guidelines	MidCoast Council

Table 2: Transport assets identified as at risk.

Asset	Location	Timeframe	Process
Road network	Manning Street Main Street Manning Point Road All roads, Manning Point	2060-2100	Coastal erosion / recession
	Oyster Catcher Lane, Manning Point	2100	Coastal erosion/recession
	Sandridge Road, Mitchells Island	2100	Coastal erosion/recession
	Beach Road, Mitchells Island	Present	Coastal erosion/recession
	Old Bar Road (to Mudbishops)	2060	Coastal erosion/recession
	Pacific Parade, Old Bar	Present	Coastal erosion/recession
	Lewis Street, Old Bar	2060	Coastal erosion/recession
	Rose Street, Old Bar	2060	Coastal erosion/recession
	Hall Street, Old Bar	2100	Coastal erosion/recession
	George Street, Old Bar	2100	Coastal erosion/recession
	Marine Drive, Wallabi Point (in part)	2060	Coastal erosion/recession
	Saltwater Road, Wallabi Point	2060	Coastal erosion/recession
Car park	Seaview Parade, Wallabi Point	Present	Coastal erosion/recession

Infrastructure and utilities

There is various infrastructure located within the 2100 hazard zone. MidCoast Council - Water Services are the Asset Manager for water and sewer infrastructure. The implications for compromised water and sewer infrastructure ranges from inconvenient to disastrous.

There are various locations where stormwater pipes discharge into vulnerable coastal environments. As shoreline recession progresses many of these will become exposed. They may also become exposed during acute weather events. Exposed pits and pipes may cause issues for safety and access. Their function to convey stormwater may be compromised because of changes in water height and ingress of debris and sediment.

Each stormwater pipe and system and the environment in which it discharges will be unique and it may not be possible to identify their vulnerability until the asset is exposed.

There are also communications and electricity infrastructure within the impacted area. These are owned and managed by external organisations who will need to respond to these risks in accordance with their own risk management and asset management strategies.

Management issue/s	Management option/s	Responsibility
Infrastructure (water and sewer)	Undertake an audit of water and sewer infrastructure at risk from coastal processes in at various timeframes	MidCoast Council
	Prepare an Infrastructure Asset Management Plan to respond to coastal processes	MidCoast Council
	Investigate appropriate design and materials for services affected by saltwater and sediment intrusion	MidCoast Council
Telecommunications, electricity and gas	Forward all relevant information to service and utility providers	Telstra NBNCO Essential Energy

Table 3: Infrastructure assets identified at risk from coastal processes.

Infrastructure	Location	Timeframe	Process
Stormwater pipes	Manning Point	2100	Coastal erosion / recession
Sewer network	Manning Point	2100	Coastal erosion / recession
Sewerage Treatment Plant	Manning Point	2060	Coastal erosion / recession
Reticulated water network	Manning Point	2060	Coastal erosion / recession
Reticulated water network	Old Bar South	2060	Coastal erosion / recession
Sewer network (domestic connection points)	Old Bar South	Present – 2060	Coastal erosion / recession
Sewer network	Old Bar South	2060	Coastal erosion / recession
Sewer pump station	Wallabi Point	2060	Coastal erosion / recession
Sewer network	Wallabi Point	2060	Coastal erosion / recession
Stormwater outlet (3)	Wallabi Point	2060	Coastal erosion / recession

Infrastructure	Location	Timeframe	Process
Water network	Wallabi Point	2060	Coastal erosion / recession
Electrical network	Wallabi Point	2060	Coastal erosion / recession
Telecommunications network	Wallabi Point	2060	Coastal erosion / recession
Electrical network	Manning Point	2060 - 2100	Coastal erosion / recession
Telecommunications network	Manning Point	2060 - 2100	Coastal erosion / recession

Littoral rainforest and coastal wetlands

There are several mapped areas of littoral rainforest and coastal wetlands along the coastline. The littoral rainforests have recently been remapped. An amendment to State Environmental Planning Policy (Resilience and Hazards) 2021 is required to reflect improved knowledge in these areas. Many of these rainforest areas are in danger of destruction because of changes to salt exposure and hydrological characteristics, coastal erosion and shoreline recession.

Retreat buffers to allow littoral rainforest to migrate landward may be an option in some locations such as Wallabi Point and Mitchells Island. In other communities, for example seaward of the Old Bar Village, the stand of littoral rainforest is unlikely to persist due to coastal squeeze.

Littoral rainforest is a relatively slow-growing community and unassisted migration may not keep up with the pace of shoreline recession. It may be necessary to actively revegetate areas. To support this, endemic species should be germinated and replanted in these buffer areas. This would need to be guided by a revegetation strategy that considers biodiversity and connectivity and the relationship between other rainforest communities and stands of littoral rainforest.

Most coastal wetland areas are within private land ownership and cross the boundary between the OBMP CMP and the adopted Manning River CMP. Where relevant, the management option/s in the Manning River CMP will be carried across to the OBMP CMP. However, it is acknowledged that coastal wetlands within 2km of the coast can have very different requirements, functions, and biodiversity than those further away.

The mapping of coastal wetlands has been completed for the Manning Coastal Management Program area. Mapping is currently being updated for the remainder of the MidCoast. Another planning proposal will be required to implement the updated mapping for coastal wetlands.

There may be opportunities for Council to improve the hydrological conditions of wetlands by considering the implications of, and opportunities in the design of roadworks and other infrastructure projects.

Management issue/s	Management option/s	Responsibility
Littoral rainforest	Prepare a planning proposal to amend the SEPP mapping for littoral rainforest	MidCoast Council
	Identify buffer retreat areas for existing littoral rainforest communities	MidCoast Council Coastcare Local Land Services Landowners
	Prepare a vegetation strategy to improve the biodiversity, connectivity and the relationship between other rainforest communities and stands of littoral rainforest	MidCoast Council Coastcare Local Land Services
Coastal wetlands	Prepare a planning proposal to amend the SEPP mapping for coastal wetlands	MidCoast Council
	Consider additional benefits in infrastructure projects (eg roads) to improve/support coastal wetlands	MidCoast Council TfNSW

Table 4: Littoral rainforest at risk.

Asset	Location	Timeframe	Process
Littoral rainforest	Manning Point	Present	Coastal erosion / Shoreline recession
Littoral rainforest	Mitchells Island (Beach Road)	Present	Coastal erosion / Shoreline recession
Littoral rainforest	Farquhar Park	2060	Coastal erosion / Shoreline recession
Littoral rainforest	Old Bar (Second corner)	Present	Coastal erosion / Shoreline recession
Littoral rainforest	Old Bar (Opp Old Bar School)	Present	Coastal erosion / shoreline recession
Littoral rainforest	North of Wallabi Point	Present	Coastal erosion / shoreline recession

Beach Access and User Management

There is a range of beach access and user management issues in the coastal zone. These issues should be considered collectively in a Beach Access Strategy that addresses the following issues:

- Recreational 4WD Vehicles
- Commercial fishers
- Commercial use of beaches (eg tourist operations)
- Domestic animals (eg dogs, horses).

Compliance and enforcement are fundamental opportunities to manage 4WD recreation vehicles and domestic animals on beaches. Ahead of the Beach Access Strategy, greater resources could be allocated to the enforcement of existing regulations. These could be targeted at key areas and times of the year when shorebirds are nesting and there is high vehicle activity.

Recreational 4WD Vehicles

For some people, 4WD beach driving is an important part of the lifestyle that living in the MidCoast affords. However, growth in 4WD ownership, increasing environmental sensitivities and conflicts, increased accessibility of intra-State visitors and higher use of beaches by a range of other users means that existing policies for beach access and permitting should be reviewed.

There are 3 beaches in the study area that allow vehicles.

Table 5: 4WD beach access locations.

Beach	Access point/s	Restrictions
Crowdy Head -> Harrington	Two access points via Crowdy Head Road	Vehicle access over the breakwall is prohibited. Shorebirds
Manning Point -> Farquhar Inlet	Access via Manning Point ramp	Shorebirds (at Manning Point Spit and Farquhar Inlet) Access to Old Bar possible when inlet is closed
Old Bar -> Farquhar Inlet	Access via Mudbishops Point Road	Left turn only
Wallabi Point		Boat launch only

There is evidence of conflict between beach users and vehicles, poor behaviour including speeding and littering, conflict between beach users and domestic pets and shorebirds and environmental damage to coastal ecosystems.

Beach drivers require a permit issued by MidCoast Council that outlines responsibilities and restrictions. However, these can be easily obtained from various locations with limited commitment to the responsibilities and requirements of beach driving. The permitting system needs a thorough review to address a number of issues included restricted access permits, out-of-area permits, permit costs and fines for non-compliance.

A fundamental issue is enforcement is relatively low. Additional resourcing to allow for greater compliance and enforcement activities is needed to address many of these issues. Alternative, remote technologies such as compliance cameras could be used in lieu of, or to supplement traditional enforcement activities in some locations.

Speed regulations can only be enforced by NSW Police, so joint operations between Council, Crown and NSW Police is required to enforce this key compliance issue.

One management option that may be considered is to require a more rigorous and formal education program whereby the issuance of a license is dependent on attendance to an educational event.

Education and signage will also play an important role in reinforcing community understanding and compliance and fencing can be used to define exclusion areas around sensitive sites.

A final issue to consider in relation to 4WD access and user management is the uncertainty over the licensing, regulation, and liability responsibilities:

1. Where there are multiple or adjoining land managers (ie Local Government, Crown Land and NPWS).

2. Where land has eroded and cadastral boundaries of the private properties are across the shoreline.

This is likely to require formal legal advice.

The proposed Beach Access Strategy should consider these issues.

Commercial fishers

Commercial fishing, including the collection of bait species is regulated by the Department of Primary Industry. However, commercial fishers often seek beach access exemptions for vehicles where general access is not granted. This requires Council to open and close barriers and has resulted in barriers being damaged to gain access.

Commercial fishing is not appropriate in some location such as Old Bar Beach, Black Head, Seal Rocks Main Beach and Forster. There is no formal policy or user agreement for granting access to commercial fishers or to define where these activities may occur.

It is Council's preference to define specific areas where commercial fishing can occur and to gate off agreed access points. Access to these areas could be regulated through a user agreement and access arrangement. The NPWS permitting system may provide an appropriate model to adapt or adopt. This includes the issuance of keys to allow permit holders to unlock specified barriers.

Domestic animals on beaches

Dogs are permitted on:

- Harrington Beach except in defined areas between August and March
- Old Bar Beach (south of the 4WD access point at Manning Point) to North of Farquhar Park
- Old Bar Beach (outside patrolled swimming areas).

Dogs are expressly prohibited on:

- Manning Point Spit north of the 4WD access point at Manning Point.
- Farquhar Park.
- North of Second Corner to the north of Farquhar Park.
- Within 50m of a patrolled swimming area.

These rules are routinely ignored, and greater enforcement is required. However, like 4WD vehicles on beaches, there are limited resources to enforce non-compliance.

Beaches are also used for horse riding. There is no formal policy on this. There may be different considerations for this activity over dogs.

The proposed Beach Access Strategy should review the location and extent of areas available to take domestic animals and any additional controls on timings. The rules in the former local government areas are inconsistent, so the strategy should anticipate the development of a consistent policy over both the Manning and Great Lakes areas.

Commercial uses of public beaches

The use of public beaches for commercial activities such as tourism activities and surf schools should also be considered in the proposed strategy. This may consider the appropriateness of specific activities at specified locations rather than a blanket policy to allow activities on all beaches.

Management issue/s	Management option/s	Responsibility
Recreation vehicle access and use	To prepare a Beach Access Strategy	MidCoast Council
Commercial fishers		
Domestic animals on beaches		
Commercial uses of public beaches		
User management	Undertake additional compliance and enforcement	MidCoast Council
Open space and recreation (Beach access)	Install emergency actions to reinstate beach access where possible or restrict access after an event in the Emergency Management SubPlan	MidCoast Council SES
Land managers - regulation, compliance, and liability	Audit all Crown Land to determine where Council is and is not the land manager	MidCoast Council Crown Lands NPWS
	Seek legal advice on the Doctrine of Accretion in relation to public beach access and use	Department of Planning, Housing and Infrastructure

Important shoreline bird sites

There are various locations along the coast where, at certain times of the year, migratory and resident shorebirds nest, feed and rest. There can be conflict between beach users, domestic animals, introduced pest animals (eg foxes), predatory native animals (gulls, etc) and these shorebirds. Education, regulation, compliance and enforcement of beach user behaviours is required. The management of shorebird sites is a coordinated, strategic effort of a range of stakeholders, including Council, Hunter Local Land Services, NSW National Parks and Wildlife Service (NPWS), Crown Lands, the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and others.

Management issue/s	Management option/s	Responsibility
User management	Undertake additional compliance and enforcement presence	MidCoast Council
Regulation of domestic animals and control of feral pest animals.	Deliver coordinated annual strategic fox controls at important shorebird sites (particularly nesting areas)	MidCoast Council Crown Lands NPWS Local Land Services DCCEEW

Management issue/s	Management option/s	Responsibility
	Support trials of new shorebird protection measures, such as exclusion fencing and odour deterrents, etc	MidCoast Council Crown Lands NPWS Local Land Services DCCEEW

Site-specific areas

The following items outline the issues that have been identified for specific sites and areas. Issues that have been identified in the general issues above *have not* been repeated.

Wallabi Point

The southern boundary of the study area starts on the northern side of the Wallabi Point Headland. The coast is subject to beach erosion and shoreline recession which will impact key infrastructure in the short and longer terms.

The probability hazard assessment illustrates that the exfiltration ponds and optical fibre network is bordering on the 1% exceedance probability of the present zone of reduced foundation capacity³. Therefore, these assets are particularly susceptible in the short-term. A strategy to relocate these is required immediately.

By 2060, the modelling shows that these assets, including the electricity network servicing the exfiltration ponds have been eroded. By 2100, around a third of the current Council site has been subsumed by the sea.

After the exfiltration ponds are relocated, there is an opportunity for the land to assume an alternative, albeit short-term purpose. Any future use of the land should provide some resilience to coastal processes such as revegetation. There may be opportunities to provide retreat buffers for coastal vegetation communities with active revegetation of vulnerable communities outside the 2100 hazard line.

All essential infrastructure is to be located outside of the 1% Exceedance Probability line at 2100.

Management issue/s	Management option/s	Responsibility
Utilities and servicing	Prepare a relocation strategy for exfiltration ponds and associated infrastructure	MidCoast Council Energy provider
	Prepare a relocation strategy for Telstra optical fibre	Telstra
Land use planning	Prepare a reuse strategy for the site with a focus on resilience against coastal processes	MidCoast Council Coastcare

³ Reduced foundational capacity is where the bearing capacity (capacity to support building foundations) is reduced.

Old Bar South

This area, that includes Pacific Parade, Rose Street and Lewis Street is particularly susceptible to coastal erosion and shoreline recession and private properties have been lost to these processes. There is a comprehensive understanding of coastal processes in this location and there has been exhaustive study into options to slow or arrest coastal erosion and shoreline recession in this area.

Many of the hard engineering options are very expensive to construct and there is an ongoing maintenance burden that will be borne by future generations. These options often result in the loss of sand or a change in the dynamics of the system with unintended impacts on other areas. Any hard engineering option is likely to require ongoing beach nourishment to ensure beach amenity. Where a management option is identified as the preferred option by the multicriteria analysis assessment and the option is supported by the Department through the certification process⁴.

Racecourse Creek has been raised as an issue in various community forums. There are concerns in the community about flooding, additional development in the catchment and the quality of the waterway. A Flood Study was prepared in association with the Palm Lakes Development. The study demonstrated that there are limited opportunities to install measure that will make a significant contribution to flood management apart from a proposed retention basin in Rushby Park. This option was rejected by the community, and it was not pursued. Council is considering a revised development proposal for the site which will require a revised flood study. The management option proposed is to undertake the recommendations of that revised study.

Pacific Parade is a vulnerable road servicing 26 properties. Overtime, Pacific Parade will be damaged, and access will eventually be lost. Soft interventions measures such as revegetation may provide greater resilience to damage. A management option that is proposed is to reduced Pacific Parade to a single carriageway and to revegetate the gained land. This project may also help reinforce the vulnerability of the area in the community.

Management issue/s	Management option/s	Responsibility
Coastal erosion Shoreline recession	Construction of a revetement wall (Lewis Street), beach nourishment and maintenance	Landowners
	Construction of a revetment wall (Pacific Parade), beach nourishment and maintenance	Landowners MidCoast Council
	Artificial reef and maintenance	Landowners MidCoast Council (Depending on attribution of benefit)
	Groyne, beach nourishment and maintenance	Landowners
	Beach nourishment (including sand scraping / sand transfer / sand trapping)	Landowners (Lewis Street) Landowners/MidCoast Council (Pacific Parade)

⁴ All CMPs need to be certified by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

Management issue/s	Management option/s	Responsibility
	Sand-filled geotextile bags	Landowners (Lewis Street) Landowners/MidCoast Council (Pacific Parade)
	Rock-filled bags	Landowners (Lewis Street) Landowners/MidCoast Council (Pacific Parade)
	Prepare an Adaption Policy and Guidelines	MidCoast Council
Coastal erosion Flooding Stormwater management	Implement the recommendations of the Racecourse Creek Flood Study	MidCoast Council
Coastal erosion Shoreline recession	Reconfigure Pacific Parade to a single carriage, and fence and revegetate the gained land ⁵	MidCoast Council

Old Bar North

This area is north of Racecourse Creek and includes the foreshore in front of the Old Bar School and surf club. It is an important recreation and cultural space for the community. The hazard modelling has demonstrated that the area is underlain by bedrock, so erosion will be arrested at that point. However, it is likely that the beach will be lost over time and the bedrock will be exposed. This will fundamentally change the functionality and amenity of the beach in this location. Many of the options proposed are the same as those for Old Bar South. The key difference in this area is that any intervention will be protecting public assets. So, where an option is supported by the State Government through the certification process, the funding distribution will be between the State and MidCoast Council.

Soft engineering options such as sand scraping, beach nourishment and sand trapping relies on the ongoing access to sufficient and available sources of sand.

Stormwater management has also been identified as an issue in the area. There are areas within the dune system that are eroding because of overland flow and the poor performance of existing stormwater infrastructure in major events. This may be exacerbated by the caravan park that does not appear to have a reticulated stormwater system.

A stormwater strategy or investigation is required to understand the functionality of the existing system and to resolve any legacy issues that might exist such as redundant pipelines unmanaged catchments.

Council is currently preparing a plan of management for Old Bar Park. There may be opportunities within that project to consider stormwater management in the redesign of that space.

⁵ This option was raised after consultation with the Community Reference Group and was not considered by that group or included in the MCA.

Management issue/s	Management option/s	Responsibility
Shoreline recession	Groyne and maintenance	MidCoast Council
	Beach nourishment (inc Sand scraping / sand transfer / Sand trapping)	MidCoast Council
Stormwater management	Undertake a stormwater management strategy or investigation	MidCoast Council
	Include stormwater management in the preparation of the plan of management	MidCoast Council

Farquhar Inlet

The key management issues identified at Farquhar Inlet (in addition to shorebirds and 4WD users) are the inlet opening strategy and dredging regimes.

Farquhar Inlet is intermittently opened and closed. When the inlet is closed for an extended period of time, community and industry pressure build to reopen it. An opening strategy exists for the inlet at certain triggers including flooding, salinity levels and water quality. However, the dynamics of the system mean that opening on water quality and salinity triggers alone mean that any opening is rarely sustained, and the inlet closes and rebuilds. In flood conditions there is sufficient head of water in the inlet to scour through the berm to sustain the opening for an extended period.

One option proposed is to permanently open the entrance by constructing training walls. The Manning River has two openings, and the openings are inextricably linked. A permanent opening at Farquhar is likely to have unintended consequences on the Harrington Entrance.

Farquhar Inlet is mapped as an *area of hazard uncertainty* in the probabilistic hazard modelling report. This environment is highly dynamic, and the model could not predict how coastal processes will interact with this system. Installing hard engineering in this location could result in very unpredictable outcomes.

The Manning River Dredging Strategy was first adopted in 2010 with an update in 2015. This strategy should be reviewed and dredging priorities, including South Arm and Farquhar Inlet be revisited.

Management issue/s	Management option/s	Responsibility
Inlet closure	Install training walls	MidCoast Council Crown Lands
Inlet closure Water quality Salinity	Review existing inlet opening strategy	MidCoast Council
Dredging	Review the Manning River Dredging Strategy	MidCoast Council
Flood management	Include inlet opening trigger in an Emergency Subplan	MidCoast Council Crown Lands

Mitchells Island

The area north of Farquhar Inlet to the south of Manning Point is shown as particularly impacted by coastal processes. There are residences expected to be impacted by shoreline recession by 2060 and several more by 2100. An important response is to ensure that s10.7 certificate state this to alert future landowners of the risk.

A large area of this coastline has been nominated for acquisition under the Coastal Lands Protection Scheme. The scheme does not take back land. It buys it from willing landowners at market prices. The land acquired is managed by the local council or the NSW National Parks and Wildlife Service. See <https://www.planning.nsw.gov.au/policy-and-legislation/coastal-and-marine-management/coastal-lands-protection-scheme> .

If purchased, there may be opportunities to provide retreat buffers for coastal vegetative communities. However, this will be a very short-term response as the probabilistic modelling illustrates that this land will be eroded by 2060 and it is unlikely that vegetative communities could naturally move landward in time. There may be other opportunities to work with landowners in the area to actively revegetate parts of their properties with species to accommodate the loss of coastal vegetation and in particular littoral rainforest (and other rainforest) species.

Management issue/s	Management option/s	Responsibility
Loss/damage to residences	Prepare a planning proposal to amend the SEPP (Resilience and Hazards) for the coastal vulnerability area and/or the LEP	MidCoast Council
	Update the s10.7 certificate draft LEP layer after Council resolves to proceed with the amendment	
	Update the s10.7 certificate layer relating to coastal hazards on the gazettal of the LEP	
Littoral rainforest	Work with landowners to revegetate areas of their properties with littoral rainforest (and other rainforest) species	MidCoast Council Landowners Coastcare

Manning Point

The long-term outlook for Manning Point is not optimistic. The Manning Point community is facing threats from coastal processes, flooding and inundation. The modelling shows that by 2060, shoreline recession and coastal erosion is already affecting that community and towards the end of the century, most properties no longer exist.

In the short-term the sewerage treatment plant (STP) is at risk. At 2060, the STP is within the 1% Exceedance Probability for reduced foundation capacity. Given the expense and design life of this type of infrastructure and the anticipated disruption of the Manning Point community, it may not be feasible to rebuild a new STP. A servicing strategy must be undertaken to ensure the ongoing servicing of Manning Point.

Sand scraping and sand nourishment works have been considered in the mix of options for Manning Point. These activities may provide some short-term resistance to coastal processes, but these will not provide any enduring protection for the community. Cost-sharing arrangements in this location are complicated as most of the seaward land is Crown land. Beyond that is a mix of

public and private land. Cost-sharing arrangements will depend on the location of the works and the assets that the works protect.

The Manning River Flood Risk Management Plan includes actions relating to flooding. The recommendations of this plan should be implemented.

The modelling report identifies the Manning River Inlet as an *area of hazard uncertainty*. Again, this is because of the complexity and uncertainty of the processes that are interacting in this location. One of those uncertainties relates to the potential overtopping and break-through of the spit. If this occurs, it is possible that the river mouth could relocate further south. A monitoring project that records the profile of the spit at key locations should be started. This information could be used to determine changes to the profile and to identify vulnerabilities. This information could be used to inform sand nourishment, sand scraping activities and dredge spoil placement.

Management issue/s	Management option/s	Responsibility
Servicing	Prepare a strategy for the ongoing servicing of Manning Point	MidCoast Council
Flooding	Implement recommendations of the Manning River Flood Risk Management Plan	As defined in the plan
Coastal erosion Shoreline recession	Sand scraping Sand nourishment	MidCoast Council Crown Land Landowners
	Place dredge spoil on Manning Spit (where available)	MidCoast Council
Manning Spit break-through	Commence a profile monitoring study of the Manning Point spit	MidCoast Council
	Placement of dredge spoil on Manning Spit	MidCoast Council
	Sandscraping Sand nourishment	MidCoast Council

Harrington

There has been significant pressure on Local and State Government to improve the navigability of the Manning River entrance. In response to this, the State Government prepared a feasibility study of a few options to achieve this outcome. The report is available at:

<https://www.transport.nsw.gov.au/projects/current-projects/manning-river-entrance>

The Manning River entrance is identified as an *area of hazard uncertainty*. Coastal processes will continue to erode Manning Point and the spit and there is the potential of Harrington being exposed to the open coast. This is a highly dynamic system. With the information that is currently available it is not possible to predict how the entrance will respond. Therefore, the proposed management option is to continue to monitor the spit and entrance over the life of the plan to respond if necessary to changes in that information.

Management issue/s	Management option/s	Responsibility
Navigability of Manning River entrance	Construct southern break wall	State Government
	Dredging campaign/s	State Government MidCoast Council
	Relocate the 'gantry'	State Government
	Augment alternative port ie Crowdy Head	State Government
	Create a tombolo or sandspit	State Government
	Construct an alternate river entrance at Manning Point	State Government
Harrington open coast exposure	Continue to monitor changes to the entrance and Manning Point Spit during the lifetime of the CMP	MidCoast Council

Crowdy Head

Shoreline bird habitat and 4WD user management are issues identified in the stretch of coast between Harrington and Crowdy Head. These are addressed in previous sections of this paper.

Where to from here?

This is a complete list of management issues and options that has been identified from a range of sources. These options have not been considered against any criteria. These options will be considered by an independent consultant who will assess each option against a range of mandated (and other) criteria to determine if they meet those criteria. This will be the subject of an additional report.

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