MIDCOAST
council

ASSET MANAGEMENT PLAN

Stormwater Assets
2024

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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V0.9	May 2023	Updated Morrison Low	ML	TMc	
V1.1	June 2023	Updated Team Leader Coastal, Flooding and Drainage	EV	SN	
V1.2	August 2023	Updated due to drainage asset team comments	EV	SN	
V1.3	November 2024	Updated NAMS Modelling	NK	TMc	
V2	April 2025	Updated with input from Finance	EV	SN	
V2.1	June 2025	Updated references to new IP&R documents	SW		

Contents

1. Executive Summary

1.1 The Purpose of the Plan

This Asset Management Plan (AM Plan) details information about MidCoast Council's (Council's) stormwater infrastructure assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The AM Plan defines the services to be provided, how the services are provided and what funds are required over the 10-year planning period. The AM Plan will link to a Long Term Financial Plan which considers a 10-year planning period.

1.2 Asset Description

This AM Plan covers the infrastructure assets that provide Stormwater services to MidCoast Council.

The Stormwater drainage network comprises:

- Water Sensitive Urban Design Areas 519
- Surface Drains 22.0 km
- Stormwater Pits 15,973
- Gross pollutant traps (Simple) 447
- Gross pollutant traps (Complex) 44
- Culverts 74.7 km
- Stormwater Pipes 368 km

The above infrastructure assets have a replacement value estimated at $541 million as at 30 June 2024.

1.3 Levels of Service

The allocation in the Planned Budget is insufficient to continue providing existing services at current levels for the planning period.

The main service consequences of the Planned Budget are:

- Premature failure of stormwater assets
- Increased localised flooding as a result of failed or undersized drainage infrastructure

1.4 Future Demand

The factors influencing future demand and the impacts they have on service delivery are created by:

- Increased density of urban development
- Increase in population
- Increased stormwater runoff due to climate change impacts

These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this AM Plan include the costs of the operation, maintenance, renewal, acquisition, and disposal of assets. Although an AM Plan may be prepared for a range of time periods, it typically informs a long term financial planning period of 10 years. Therefore, a summary output from the AM Plan is the forecast of 10-year total outlays, which for the Stormwater Assets is estimated as **$51,259,482** or $5,125,948 on average per year.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10-year period is $42,359,699 or $4,235,970 on average per year as per the Long Term Financial Plan or Planned Budget. This is 82.64% of the cost to sustain the current level of service at the lowest lifecycle cost.

The infrastructure reality is that only what is funded in the Long Term Financial Plan can be provided. Informed decision making depends on the AM Plan emphasising the consequences of Planned Budgets on the service levels provided and risks.

The anticipated Planned Budget for stormwater assets leaves a shortfall of $-889,978 on average per year of the forecast lifecycle costs required to provide services in the AM Plan compared with the Planned Budget currently included in the Long Term Financial Plan. This is shown in the figure below.

The large spike in acquisition of assets for 2024 relates to development activity and the significant increase in the number of subdivisions that were constructed in this period.

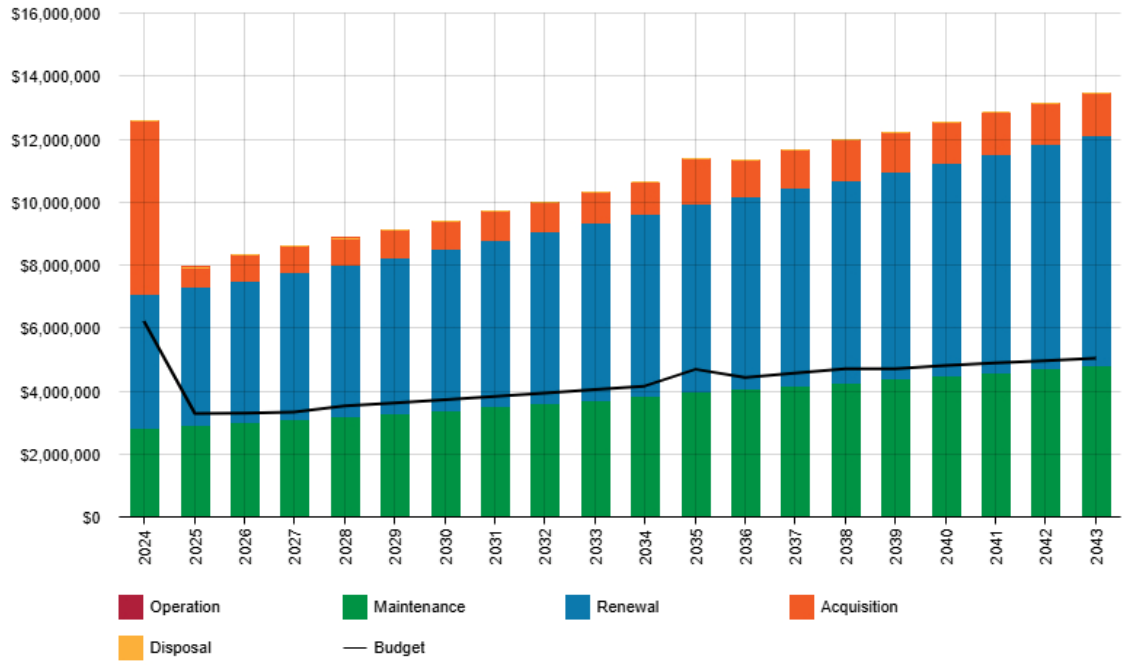

Figure 1.6.1: Forecast Lifecycle Costs and Planned Budgets

$ values are in current dollars.

We plan to provide stormwater services for the following:

- Operation, maintenance, renewal and acquisition of Water Sensitive Urban Design (WSUD), Surface drains, Stormwater pits, GPT's, Culverts and Pipes to meet service levels set by Council in annual budgets.

1.6.2 What we cannot do

We currently do **not** allocate enough budget to sustain these services at the proposed standard or to provide all new services being sought. Works and services that cannot be provided under present funding levels are:

- Fully funding long term renewals or
- Fully funding the necessary maintenance required to meet ongoing service levels

1.6.3 Managing the Risks

Our present budget levels are sufficient to continue to manage risks in the short term.

The main risk consequences are:

- Premature failure of stormwater assets
- Inability to undertake stormwater asset augmentation to address legacy capacity issues
- A longer term degradation of service level delivered due to climate change impacting system capacity through sea level rise and more intense rainfall events

We will endeavour to manage these risks within available funding by:

- Undertaking increased survey through the use of CCTV for piped systems and visual for other systems
- Undertaking (or maintaining) stormwater management plans to allow identification and prioritisation of legacy system issues
- Undertaking climate change impact assessments at the system level to determine vulnerability and prioritise accordingly

1.7 Asset Management Planning Practices

Key assumptions made in this AM Plan are:

- Base year is the current Financial Statements
- Asset values are based on current asset registers
    - May not exactly match IPP&E schedules in most recent statements but will be very close
- Capital works program is based on the Long Term Financial Plan Business-As-Usual scenario
    - Program in the Long Term Financial Plan is split 80/20 between renewals and new assets
    - Capital funding is split on asset values

- Works programs split into:
    - New assets
    - Renewal projects
    - Donated assets
    - Disposed assets
- Benchmarking of depreciation and required maintenance is based on the Regional Town & City Classification

Assets requiring renewal are identified from either the asset register or an alternative method.

- The timing of capital renewals based on the asset register is applied by adding the useful life to the year of acquisition or year of last renewal
- Alternatively, an estimate of renewal lifecycle costs is projected from external condition modelling systems and may be supplemented with, or based on, expert knowledge

The Alternate Method was used to forecast the renewal lifecycle costs for this AM Plan.

This AM Plan is based on a reliable level of confidence information.

1.8 Monitoring and Improvement Program

The next steps resulting from this AM Plan to improve asset management practices are:

- Improve data integrity in the corporate system
- Revise and update asset condition assessments in EAM (MC1)
- Develop renewal programs based on criticality and risk

2. Introduction

2.1 Background

This AM Plan communicates the requirements for the sustainable delivery of services through management of assets, compliance with regulatory requirements, and required funding to provide the appropriate levels of service over the planning period.

The AM Plan is to be read in conjunction with Council's planning documents. This includes the Asset Management Policy and Asset Management Strategy, along with other key planning documents:

- *MidCoast 2035* Community Strategic Plan (2025-2035)
- MidCoast Council Delivery Program 2025-2029
- MidCoast Council Operational Plans
- MidCoast Council Resourcing Strategy including the:
    - MidCoast Council Asset Management Strategy (2024-2034)
    - Workforce Management Strategy,
    - Long Term Financial Plan and
    - ICT Strategy
- MidCoast Climate Change Strategy

The infrastructure assets covered by this AM Plan include a range of stormwater assets across the MidCoast local government area (LGA). For a detailed summary of the assets covered in this AM Plan refer to Table 5.1.1 in Section 5.

These assets are used to provide stormwater services.

The infrastructure assets included in this plan have a total replacement value of $541,164,416 (as at 30 June 2024).

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan

External Bodies	• Community
	  ○ Participating in community surveys to determine required LOS
	  ○ Providing feedback on asset condition and usage
	• State & Federal Government
	  ○ Providing funding opportunities to assist with capital renewals and acquisitions
	  ○ Providing resources for best practice in asset management

MidCoast Elected Council	• Representing the needs of community/shareholders • Allocating resources to meet planning objectives in providing services while managing risks • Providing leadership and governance • Adopting a corporate asset management policy and strategy

Key Stakeholder	Role in Asset Management Plan
	• Considering the impact of financial and service level decisions on Council's assets • Ensuring that organisational resources are allocated to safeguard sustainable service delivery
MidCoast Council Leadership Group	• Allocating resources to the implementation of the Asset Management Strategy and Plans • Ensuring that actions identified in the Asset Management Strategy and Improvement Plan are completed within timeframes • Ensuring the integration and compliance with the Asset Management Policy and Strategy with other policies and business processes of the organisation • Developing and implementing maintenance and capital works programs in accordance with the Integrated Planning and Reporting documents • Delivering Levels of Service to agreed risk and cost standards • Ensuring the community is involved and engaged on all key Council matters affecting service delivery • Managing infrastructure assets in consideration of long-term sustainability • Presenting information to Council on lifecycle risks and costs • Approving the Asset Management Plans
Asset Management Working Group	• Collaborating across the organisation to consistently monitor, develop, implement and review all elements of the Asset Management Framework, associated policies and procedures • Monitoring and reporting on the implementation of Asset Management Improvement Plan(s) • Providing a forum for sharing of information and experience as well as providing professional advice and collaboration across the organisation in relation to asset management within the group's 'Terms of Reference'
Corporate Services	• Developing supporting financial processes such as capitalisation and depreciation • Preparing asset sustainability and financial reports incorporating asset depreciation in compliance with current accounting standards • Providing GIS support and administration
Manager, Strategic Asset Planning & Project Management	In consultation with Asset Owners: • Reviewing the Asset Management Policy and Asset Management Strategy and ensuring integration with the Long Term Financial Plan and other Integrated Planning & Reporting documents • Monitoring the development and implementation of the Asset Management Policy, Strategy and Plans • Developing and reviewing policies, processes and practices to ensure effective asset management across all asset classes • Implementing the Asset Management Improvement Plan in accordance with agreed timeframes • Collating and preparing the annual State of our Assets report • Providing professional advice and collaborating with other departments of Council in relation to asset management

Key Stakeholder	Role in Asset Management Plan
Team Leader Strategic Assets	• Managing and continually improving Council's asset management system for Transport assets • Developing, implementing and reviewing Council's Asset Management Plans, for Transport assets • Coordinating asset valuations in accordance with relevant accounting codes • Developing and managing processes to ensure the accurate collection and compilation of asset data from both internal and external sources.

2.2 Goals and Objectives of Asset Ownership

Our goal for managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost-effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance
- Managing the impact of growth through demand management and infrastructure investment
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service
- Identifying, assessing and appropriately controlling risks
- Linking to a Long Term Financial Plan which identifies required, affordable forecast costs and how it will be allocated.

Key elements of the planning framework are:

- Levels of service – specifies the services and levels of service to be provided
- Risk management
- Future demand – how this will impact on future service delivery and how this is to be met
- Lifecycle management – how to manage our existing and future assets to provide defined levels of service
- Financial summary – what funds are required to provide the defined services
- Asset management practices – how we manage provision of the services
- Monitoring – how the plan will be monitored to ensure objectives are met
- Asset management improvement plan – how we increase asset management maturity.

Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 [1]
- ISO 55000[2]

[1] *Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2| 13*
[2] *ISO 55000 Overview, principles and terminology*

A road map[3] for preparing an AM Plan is shown below.

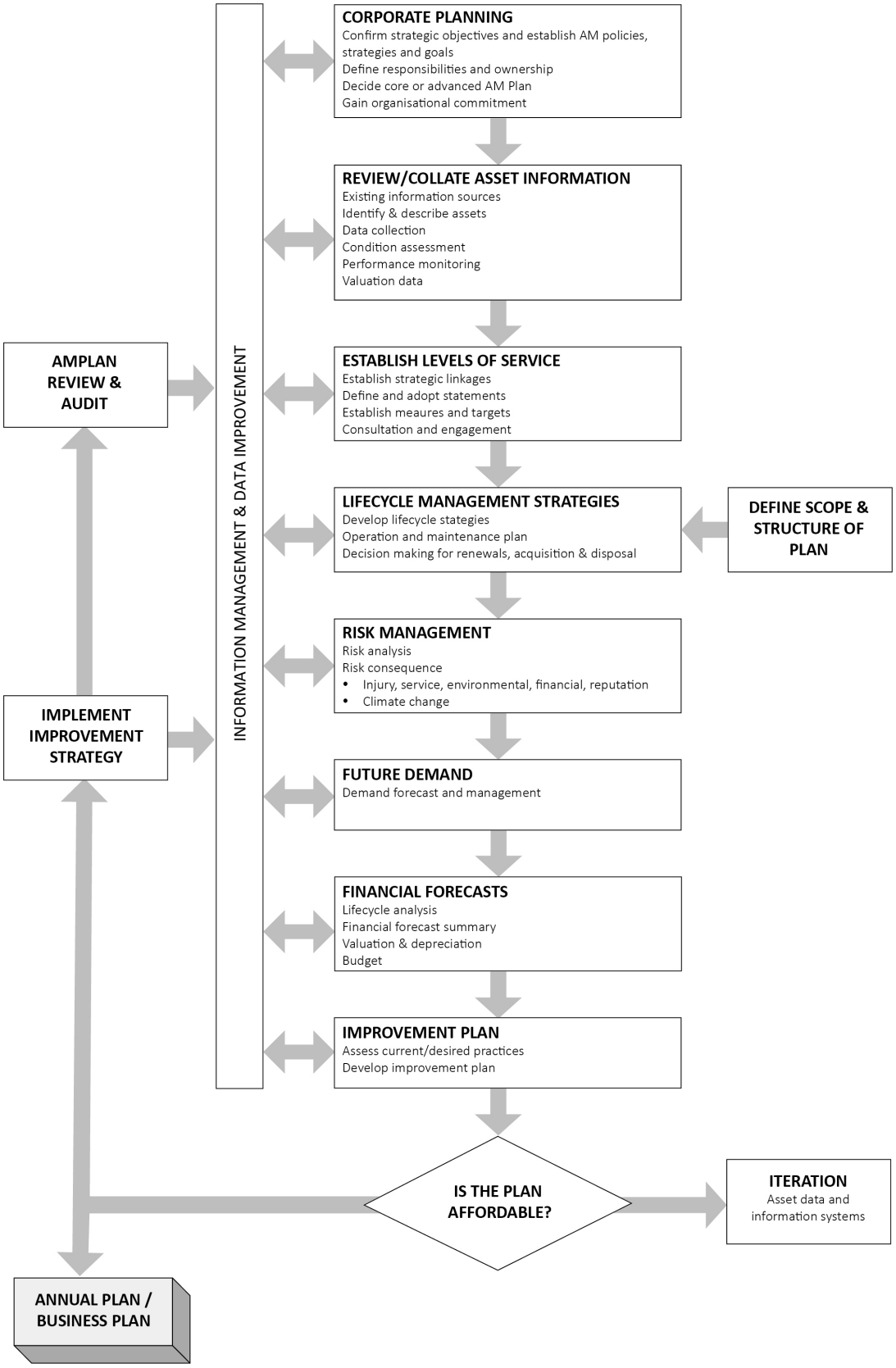

Figure 2.2: Road Map for preparing an Asset Management Plan

[3] *Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11*

3. Levels of Service

3.1 Customer Research and Expectations

A community satisfaction survey conducted by Micromex Research in 2023 identified our stormwater drainage assets as a priority and supported reducing funding gaps to improve the condition of these assets. The community's high expectation of our stormwater drainage influences the investment in capital and operational funding. Table 3.1 summarises the results from this survey:

Table 3.1: Customer Satisfaction Survey Levels

	Community Satisfaction		Community Importance	
	MidCoast Council	**LGA Benchmark[4]**	**MidCoast Council**	**LGA Benchmark[3]**
Stormwater Drainage	72%	77%	81%	81%

3.2 Corporate Goals and Strategic Links

This AM Plan is prepared under the direction and support of Council's vision, mission, goals and objectives as well as the key directions and strategic objectives as outlined in Council's Community Strategic Plan.

Our vision is **"to be a high performing organisation where we are always striving to be better. One where we work collaboratively and are trusted. One where we are better every day.**"

Council's mission sets out how we are going to achieve our vision, and ensures we are all working towards the same outcomes. Our mission is to **"deliver benefits to the community in a way that adds value and builds trust."**

Council's aim is to provide sustainable asset management and to ensure assets can deliver the community's desired service levels in priority areas in the most cost-efficient manner. This is considered necessary if we are to achieve the Vision and desired Community Outcomes identified in the *MidCoast 2035* Community Strategic Plan.

The community's vision is:

> **"Together we can make the MidCoast *even better"***

The Community Outcomes support the vision. They describe the 'big picture' results we want to see for our community for each of five focus areas our *Wellbeing, Natural Environment, Places and Infrastructure, Economic Prosperity, and Leadership.*

The Strategies describe at a high level what the community will do to support the achievement of the Community Outcomes.

The Community Outcomes and Strategies most relevant to stormwater assets and how these are addressed in this AM Plan are summarised in Table 3.2.

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[4] Micromex has developed Community Satisfaction Benchmarks using normative data from over 60 unique councils, more than 120 surveys and over 68,000 interviews since 2012

Table 3.2: Community Outcomes and Strategies and how these are addressed in this Plan

Community Outcome	Strategy	How the Community Outcome and Strategy are addressed in the AM Plan
Our Natural Environment		
Our natural environment is healthy and safeguarded for future generations.	**NE-1** Protect our native flora, fauna and local ecosystems **NE2** Protect and improve the health of our coastlines, waterways, wetlands and water catchments. **NE-5** Manage risks to our environment and communities from climate change and natural disasters	This AM Plan identifies how the stormwater assets can be maintained to meet performance, condition and safety requirements, while balancing costs and risk to ensure good environmental outcomes
Our Leadership		
Decisions are evidence-based and informed by our input. Decisions also balance the interests of current and future generations	**L-1** Inform, engage and involve the community in projects and decision-making	This AM Plan identifies community consultation as a necessary component in defining levels of service
		This AM Plan identifies the community (road users and other customers) as a valid source of information for the management of the stormwater assets
Our Council is financially sustainable	L-4 Deliver services to the community with a focus on customer service, efficiency, continuous improvement and long-term financial health	This AM Plan identifies the need for "developing and reviewing policies, processes and practices to ensure effective asset management across the organisation"
		This AM Plan identifies process review, project management and risk management as tool for effective and efficient delivery of services
		This AM Plan considers levels of service, demand management, efficiencies and their financial impacts
We have confidence and trust in our elected representatives and community leaders	L-3 Provide open and transparent leadership with a focus on clear decision-making processes and ongoing communication with the community	This AM Plan provides for documented, objective methodologies for prioritising maintenance, renewal and acquisition work, which can be demonstrated and explained to the community.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the stormwater service are outlined in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long-term financial plan supported by asset management plans for sustainable service delivery
Roads Act 1993	Sets out the rights for the use of public roads, confers certain road related functions on road authorities and regulates the carrying out of various activities
Environmental Planning and Assessment Act 1997	Encourages the proper management, development and conservation of natural and artificial resources, for the purpose of promoting the social and economic welfare of the community and a better environment
Protection of the Environment and Operations Act 1997 (POEO Act)	Enables the Government to set out explicit protection of the environment policies and adopt more innovative approaches to reducing pollution.
Work Health and Safety Act and Regulations	Aims to ensure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in NSW.
Public Works and Procurement Act 1912	An Act to consolidate the Acts relating to Public Works; and to make provision in relation to the procurement of goods and services for New South Wales government agencies.
Road Improvement (Special Funding) Act 1989	An Act to make provision with respect to special funding for road improvement, road safety and road related public transport infrastructure; and for other purposes.
Workers Compensation Act 1987	An Act to provide for the compensation and rehabilitation of workers in respect of work-related injuries; to repeal the Workers' Compensation Act 1926 and certain other Acts; and for other purposes.
Civil Liability Act 2002	An Act to make provision in relation to the recovery of damages for death or personal injury caused by the fault of a person; to amend the Legal Profession Act 1987 in relation to costs in civil claims; and for other purposes.
Disability Inclusion Act 2014	An Act relating to the accessibility of mainstream services and facilities, the promotion of community inclusion and the provision of funding, support and services for people with disability; and for other purposes.
Native Vegetation Act 2003	An Act relating to the sustainable management and conservation of native vegetation; to repeal the Native Vegetation Conservation Act 1997; and for other purposes.

3.4 Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer values indicate:

- what aspects of the service are important to the customer
- whether they see value in what is currently provided *and*
- the likely trend over time based on the current budget provision

3.5 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Condition How good is the service … what is the condition or quality of the service?

Function Is it suitable for its intended purpose …. Is it the right service?

Capacity/Use Is the service over or under used … do we need more or less of these assets?

In Table 3.5 under each of the service measure types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

These are quantitative measures related to the service delivery outcome (e.g. number of occasions when service is not available or proportion of replacement value by condition %s) to provide a balance in comparison to the customer perception that may be more subjective.

Table 3.5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Capacity - Health and Safety	Sufficient capacity to protect life and property	Number of customer requests of stormwater over floor flooding reported annually	1	3 requests annually
Function - Customer satisfaction	Be responsive to the needs of customers requesting service of stormwater assets	No customer requests received	92% addressed. 339 stormwater related requests received from January 2024	85% of requests are completed within Council's service charter
Condition - Reliability/ responsiveness	Planned inspection and associated works completed in accordance with schedules	Completion of scheduled inspections work	92%	90% completion within service standard

3.6 Technical Levels of Service

Technical Levels of Service – To deliver the customer values, and impact the achieved Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **Acquisition** – the activities to provide a higher level of service (e.g. replacing a stormwater pipeline with a larger size) or a new service that did not exist previously (e.g. installing new stormwater pits)
- **Operation** – the regular activities to provide services (e.g. inspections)
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. stormwater pipeline repairs)
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. pipeline replacement)

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[5]

Table 3.6 shows the activities expected to be provided under the current 10-year Planned Budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

Table 3.6: Technical Levels of Service

Type of Measure	Level of Service	Performance Measure	Current Performance	Extended Trend Based on Planned Budget
Affordability	The services are affordable and use the most cost effective methods for the required level of service	Review of service agreements and benchmark with other councils	Maintenance budget is fully expended.	Maintenance/Opex budget expenditure +/- 5% of Annual Budget
Quality / Condition	Pipes and culverts in adequate condition to convey design stormwater flows	Survey of Drainage network condition	88.9% of stormwater assets are in Condition 3 or better condition	90% of Drainage Assets condition 3 or better
Sustainability	Assets are being renewed in a sustainable manner	Asset renewal ratio (asset renewal expenditure / annual depreciation expense)	30.8%	OLG benchmark >100%
	Assets are maintained in a	Backlog ratio (estimated cost to bring asset to a	1.6%	OLG benchmark <2%

[5] *IPWEA, 2015, IIMM, p 2|28.*

Type of Measure	Level of Service	Performance Measure	Current Performance	Extended Trend Based on Planned Budget
	satisfactory condition	satisfactory condition / written down value of the assets)		

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged changing circumstances such as technology and customer priorities will change over time.

4. Future Demand

4.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices and environmental awareness.

4.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

4.3 Demand Impact and Demand Management

The impacts of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3.

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this AM Plan.

Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Increased density of urban development	Increased density is occurring slowly	Density will increase as land availability decreases	Increased hard surface will increase peak stormwater discharges meaning existing systems will be undersized	Enforce peak site discharge limits for increased flows through the consent process (i.e. through on-site detention)
Increase in population	Population is growing but largely through new subdivisions of land	Population growth will continue through new subdivision for the immediate future	Increased hard surface for new subdivisions will increase peak stormwater discharges meaning existing systems will be undersized	Enforce peak site discharge limits for increased flows through the consent process (i.e. through on-site detention)
Increased stormwater runoff due to climate change impacts	Climate change impacts are included in rainfall intensity frequency duration data	Rainfall intensity and sea level will increase due to climate change impacts	New systems will be designed to include climate change impacts. Legacy systems will require augmentation at outfalls to address sea level rise	New systems will be designed incorporating climate change impacts. Legacy systems will be assessed through tidal inundation studies being undertaken through the Catchment Management Plans initiated by Natural Systems

4.4 Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Additional assets are discussed in Section 5.4.

Acquiring new assets will commit Council to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the Long Term Financial Plan (Refer to Section 5).

5. Lifecycle Management Plan

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (Refer to Section 3) while managing life cycle costs.

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this AM Plan are shown in Table 5.1.1.

The age profile of the assets included in this AM Plan is shown in Figure 5.1.1.

Table 5.1.1: Assets covered by this AM Plan

Asset Category	Dimension / Number	Replacement Value (as at June 30, 2024)
Water Sensitive Urban Design Areas	132	$10,001,736
Surface Drains	22.0 km	$1,945,768
Stormwater Pits	15973	$40,231,631
Gross pollutant traps (Simple)	447	$316,443,397
Gross pollutant traps (Complex)	44	$46,761
Culverts	74.7 km	$2,112,520
Stormwater Pipes	368 km	$170,385,463
Total		**$541,167,276**

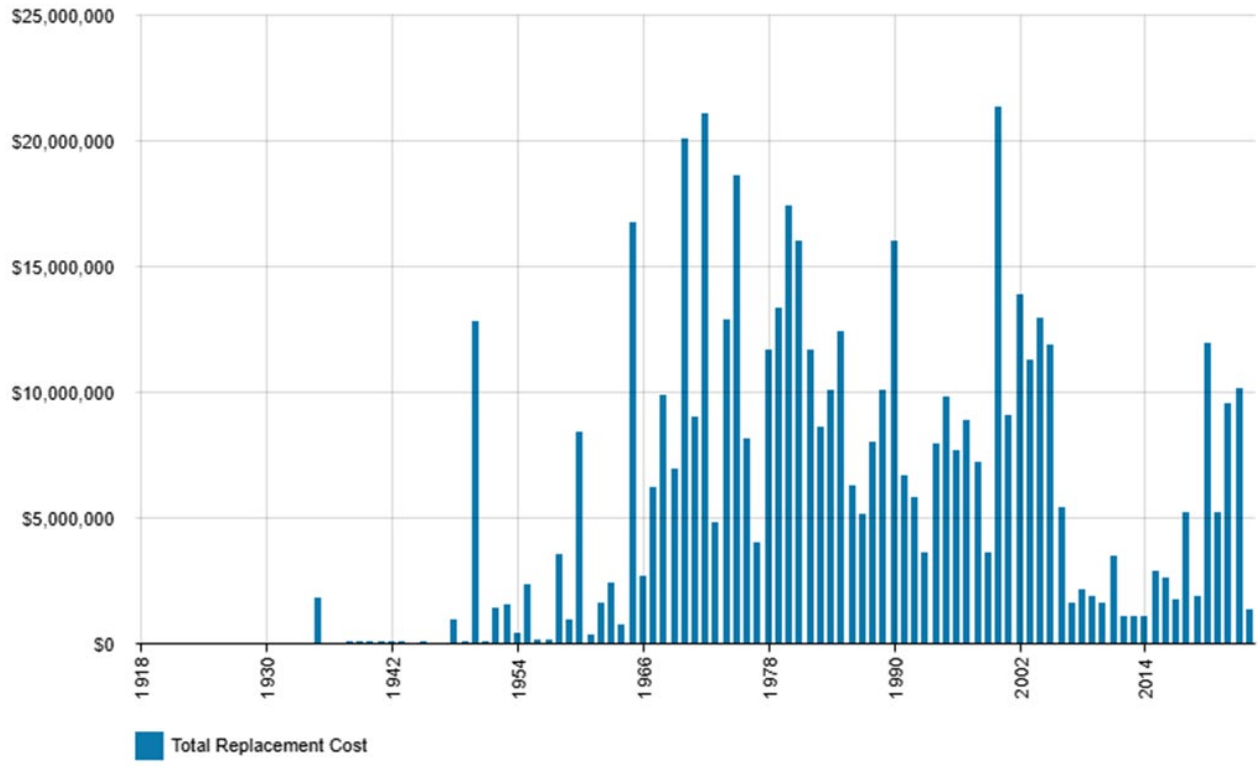


Figure 5.1.1 Asset Age Profile

All $ values are shown in current day dollars.

The graph indicates that significant investment in infrastructure occurred from the 1960's to the 1980's. Given the long life that stormwater assets have, the majority of these existing assets still have a long useful life. An increase in renewals will begin occurring and expenditure will increase into the future as these assets begin to deteriorate and reach the end of their useful life (2060 onwards).

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there are insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Taree	Numerous areas have legacy capacity issues due to lack of pipes and pits
Wingham	Numerous areas have legacy capacity issues due to lack of pipes and pits
Gloucester	Numerous areas have legacy capacity issues due to lack of pipes and pits
Taree	Creeks were concrete lined, and houses built over the top. This creates a flooding risk
Wingham	Creeks were concrete lined, and houses built over the top. This creates a flooding risk
Various	Low-lying areas around estuaries, impacted by rising sea levels

The above service deficiencies were identified from stormwater management plans and inspections.

5.1.3 Asset condition

Condition is currently monitored by an inspection regime involving CCTV inspections along with inspections undertaken by Council officers.

Condition is measured using a 1 – 5 grading system as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

	Acquisition		GENERAL ASSET INTERVENTION		
Rating	**Grade**	**Asset Description**	**Planned Maintenance**	**Reactive Maintenance**	**Renewal/ Upgrade**
1	Very Good	Defects free, only planned/routine maintenance required			
2	Good	Minor defects, minor planned maintenance required		Small amount	
3	Fair	Defects requiring regular and/or significant planned maintenance		Medium amount	Long-term
4	Poor	Significant defects, higher order cost intervention required		Large amount	Short/ Medium-term
5	Very Poor	Asset failed / beyond rehabilitation, urgent renewal /upgrading required			Immediate

The condition profile of our assets is shown in Figure 5.1.3

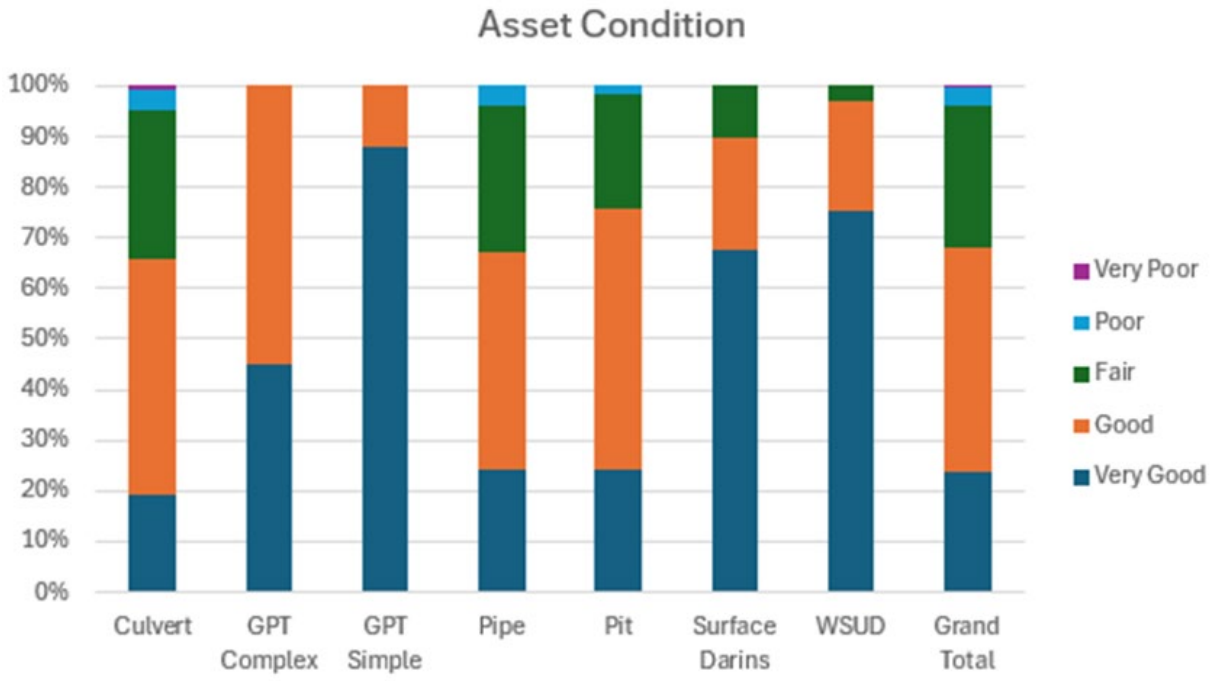


Figure 5.1.3 Asset Condition Profile

Currently most of Council's stormwater assets are in better than fair condition with only 11.08% of the total asset base in poor or very poor condition.

5.2 Operations and Maintenance Plan

Operations includes regular activities to provide services. Examples of typical operational activities include cleaning and asset inspections.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include pipe and culvert repairs.

The trend in maintenance budgets over the previous three years is shown in Table 5.2.1.

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget
2021/2022	$366,000
2022/2023	$422,000
2023/2024	$1,783,000

Maintenance budget levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance budget allocations are such that they will result in a lesser level of service, the service consequences and service risks have been identified and are highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and priority of reactive maintenance is undertaken by staff using experience and judgement.

Summary of forecast operations and maintenance costs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Figure 5.2 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

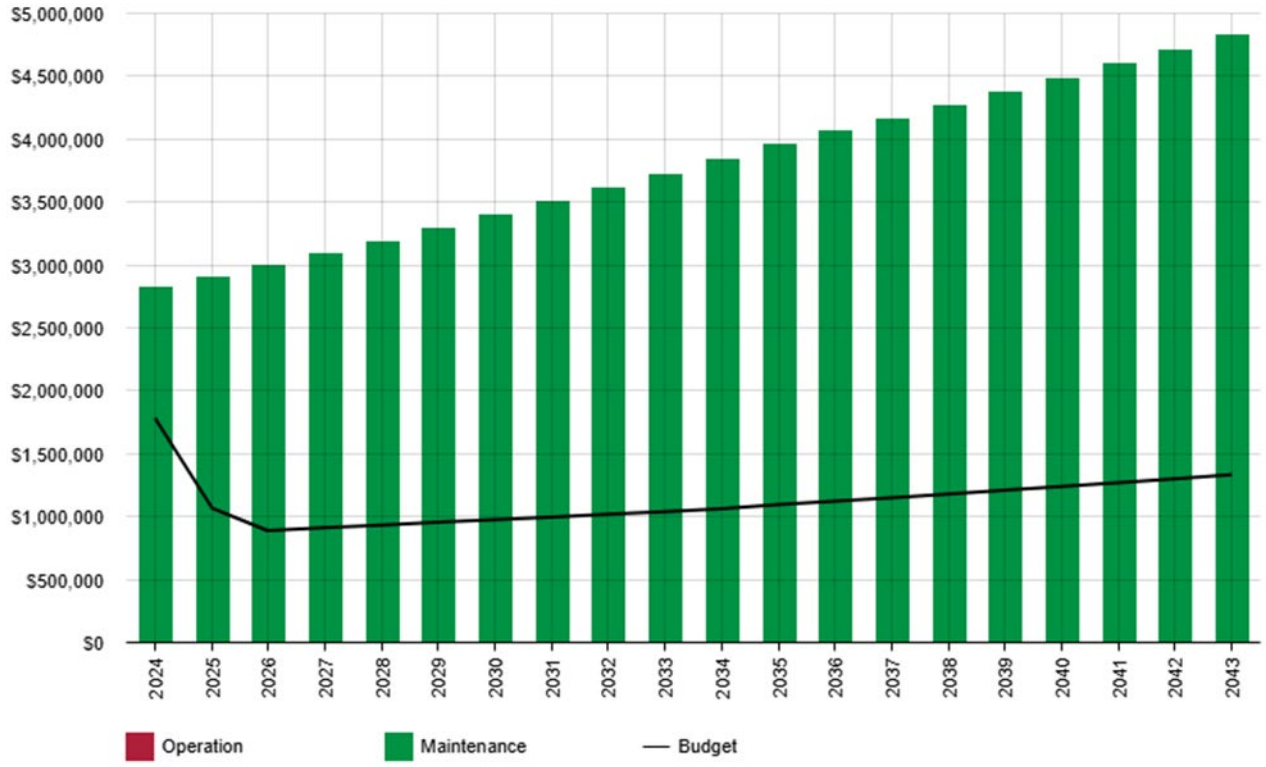


Figure 5.2: Operations and Maintenance Summary

All $ values are shown in current day dollars.

As can be seen above, there is a shortfall in the longer-term maintenance budget to meet the required maintenance standards. Council should initially determine whether the full maintenance and operational expenditure has been allocated to the appropriate asset before making a case for additional maintenance expenditure.

Deferred maintenance (i.e. works that are identified for maintenance activities but unable to be completed due to available resources) should be included in the infrastructure risk management plan.

5.3 Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to its original service potential is considered to be an acquisition, which results in additional future operations and maintenance costs.

Assets requiring renewal are identified from one of two approaches in the Lifecycle Model.

- The first method uses Asset Register data to project the renewal costs (current replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year), or

- The second method uses an alternative approach to estimate the timing and cost of forecast renewal work (i.e. condition modelling system, staff judgement, average network renewals, or other).

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives were last reviewed in conjunction with the cyclical revaluation of assets and the annual review of fair value in March 2023.[6]

Table 5.3: Useful Lives of Assets

Asset (Sub) Category	Useful life
Water Sensitive Urban Design Areas	Weirs and Outlets 100, Filter Media 20, Forebay 100, Earthworks 200
Surface Drains	100
Stormwater Pits	100
Gross pollutant traps (Simple)	20
Gross pollutant traps (Complex)	50
Culverts	Timber 50, PVC 60, Concrete 100, Corrugated steel 50
Stormwater Pipes	PVC 60, Conc 100

The estimates for renewals in this AM Plan were based on the Alternate Method.

5.3.1 Renewal ranking criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a stormwater pipe to be able to manage waterflow requirements), or
- Ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of the stormwater pits).[7]

It is possible to prioritise renewals by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have high use and subsequent impact on users would be significant,
- Have higher than expected operational or maintenance costs, and
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.[8].

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.3.1.

[6] *AssetVal Valuation of Water, Sewer & Stormwater Assets for Financial Reporting Purposes 31 Mar 2023*
[7] *IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.*
[8] *Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.*

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Age of assets	20%
Assets under roads	30%
Assets in easement in private property	50%
Total	**100%**

5.4 Summary of future renewal costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.4.1.

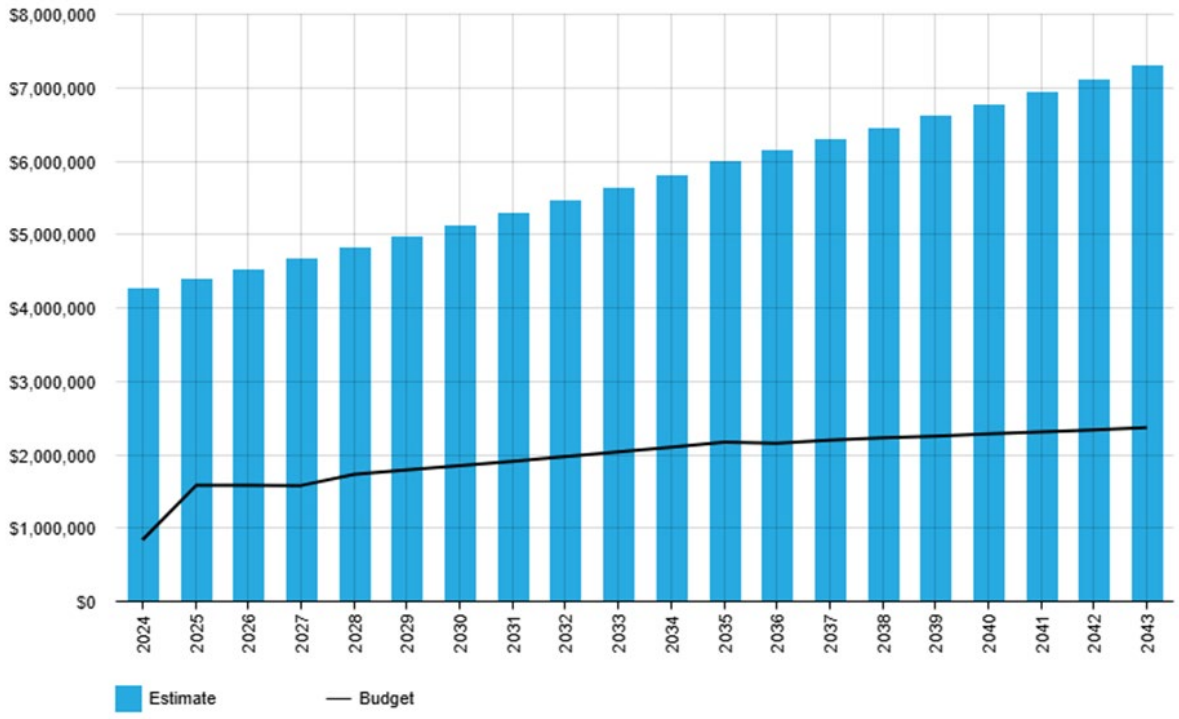


Figure 5.4.1: Forecast Renewal Costs

All $ values are shown in current day dollars.

An accurate estimate of required asset renewal for stormwater assets is very difficult. The long life span of assets and the difficult operational environment make the traditional “replace like with like assets” approach difficult and, in many cases, not practical. To get a better understanding of the renewal profile, additional and more regular asset inspections are required. It is possible that the adopted life for stormwater assets may be longer than anticipated. Further, the impact of pipe relining as a renewal practice will have a positive impact on the ongoing renewal requirement.

Deferred renewal (assets identified for renewal and not scheduled in capital works programs) should be included in the risk analysis process in the risk management plan.

5.5 Acquisition Plan

Acquisition refers to new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets may also be donated to MidCoast Council.

5.5.1 Selection criteria

Proposed acquisition of new assets, and upgrade of existing assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrades and new works should be reviewed to verify that they are essential to the community's needs. Proposed upgrades and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. Verified proposals can then be ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria are detailed in Table 5.5.1.

Table 5.5.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Flooding assessments from stormwater management plans	50%
Demonstrated over-floor flooding	50%
Total	**100%**

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised in Figure 5.5.1 and shown relative to the proposed acquisition budget. The forecast acquisition capital works program for 2025-26 is shown in Appendix A.

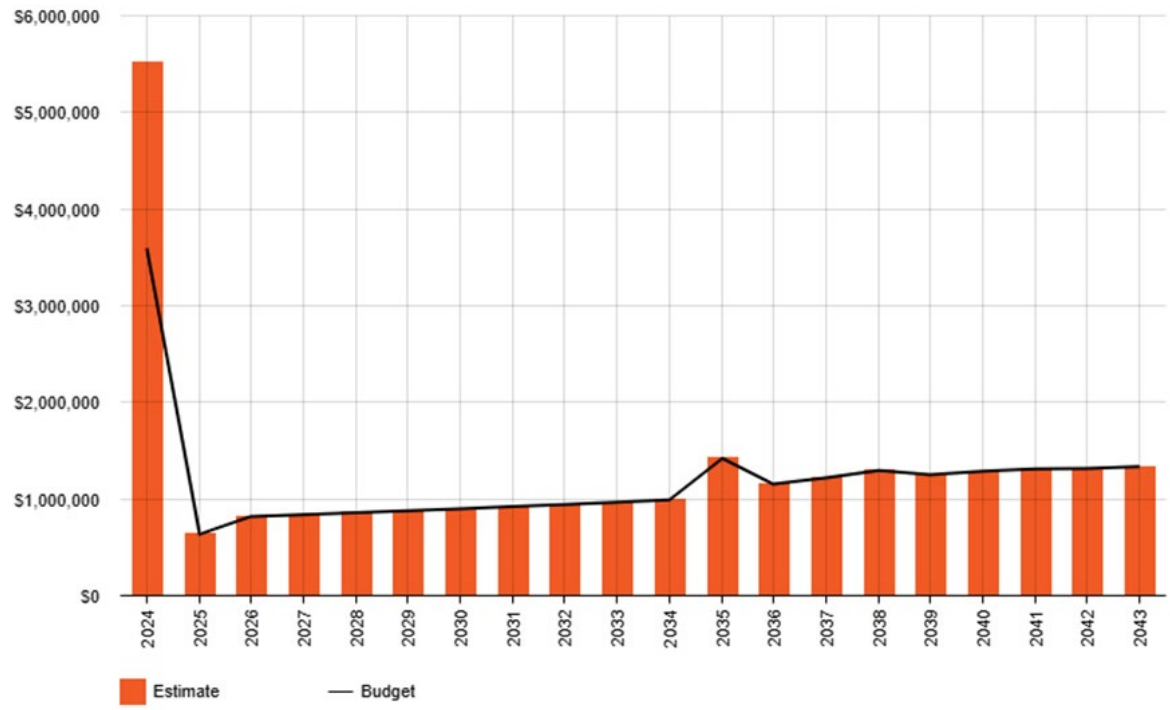


Figure 5.5.1: Acquisition (Constructed) Summary

All $ values are shown in current day dollars.

The year 2024 has a significant spike which represents the backlog of assets requiring renewal as they are nearing the end of their useful life.

When Council commits to new assets, we must be prepared to fund future operations, maintenance and renewal costs. We must also account for future depreciation when reviewing long term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by Council. The cumulative value of all acquisition work, including assets that are constructed and contributed is shown in Figure 5.5.2.

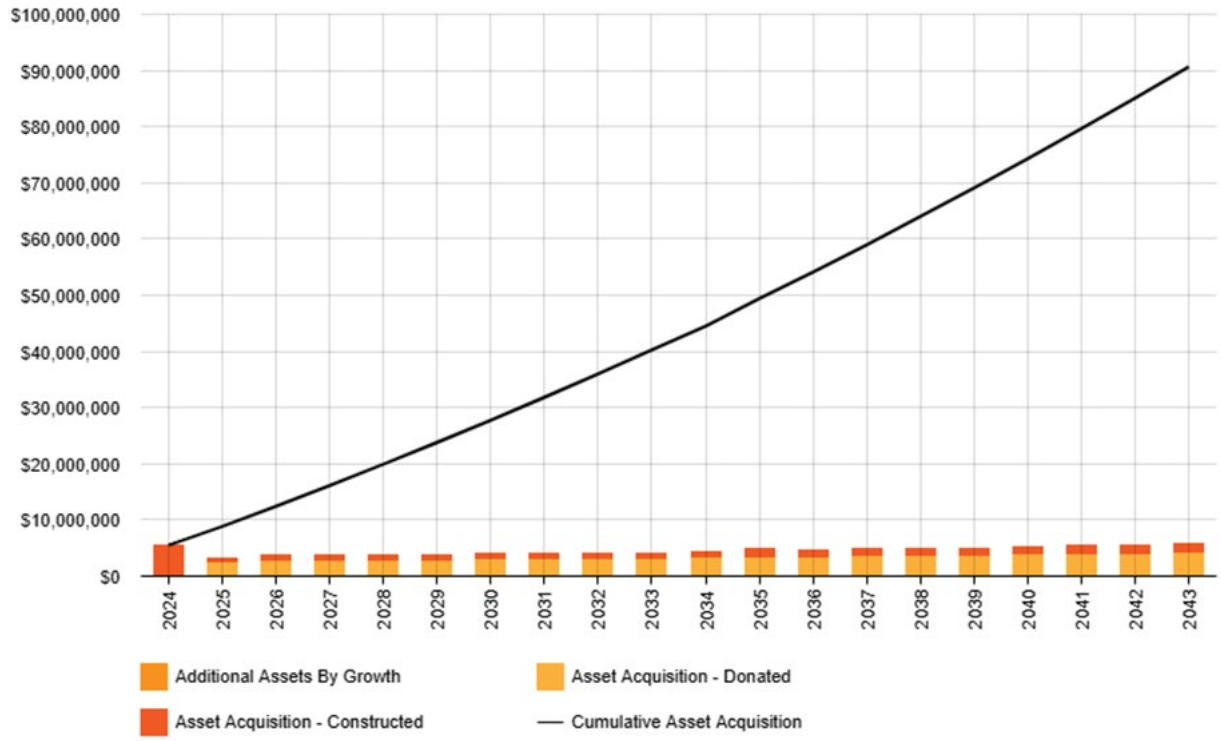


Figure 5.5.2: Acquisition Summary

All $ values are shown in current day dollars.

Expenditure on new assets and services in the capital works program will be accommodated in the Long Term Financial Plan, but only to the extent that there is available funding.

5.6 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Any costs or revenue gained from asset disposals is included in the long-term financial plan. Currently, no assets are being considered for disposal.

5.7 Summary of asset forecast costs

The financial projections from this AM Plan are shown in Figure 5.7.1. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

The bars in the graphs represent the forecast costs needed to minimise the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the

discussion on achieving balance between costs, levels of service and risk to achieve the best value outcome.

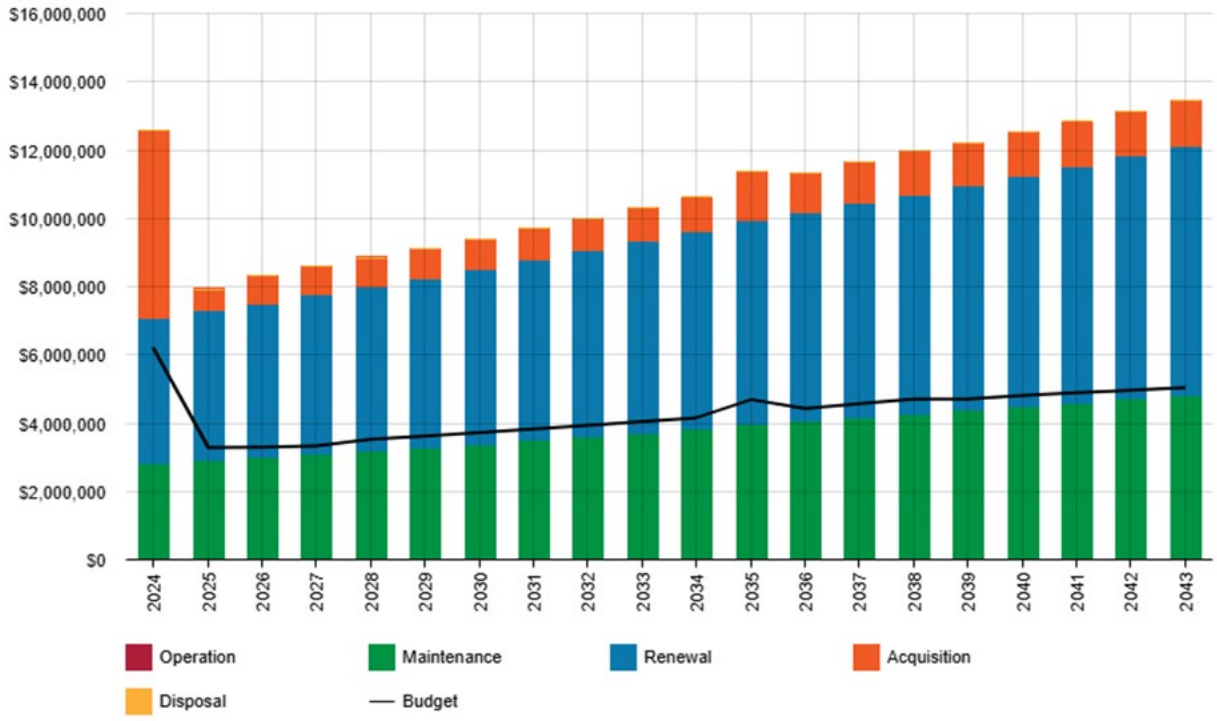


Figure 5.7.1: Lifecycle Summary

All $ values are shown in current day dollars.

6. Risk Management Planning

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'[9].

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery, these assets include trunk mains and infrastructure within private properties. Failure modes may include physical failure, collapse or essential service interruption.

By identifying critical assets and failure modes, Council can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

6.2 Risk Assessment

The risk management process used is shown in Figure 6.2 and is based on the fundamentals of International Standard ISO 31000:2018.

It is an analysis and problem-solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

An assessment of risks[10] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences.

[9] *ISO 31000:2009, p 2*
[10] *As part of MidCoast Council's Risk Management Process*

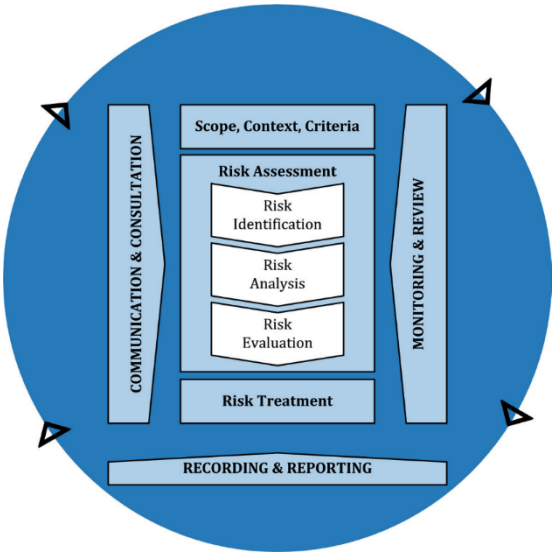


Fig 6.2 Risk Management Process – Abridged[11]

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan are shown in Table 6.2. It is essential that these critical risks and costs are reported to management and to the elected Council.

Table 6.2: Risks and Treatment Plans

Service or Asset at Risk	What Can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk[12]
Planned network infrastructure does not meet current and future community needs	• Service gaps - infrastructure does not meet community needs (current and in the future) • Negative long term impacts on asset base • Dissatisfied community • Increased financial costs • Complaints • Damage to reputation	H	Utilise improved methodology for asset condition assessment data for roads/drainage and implement ongoing procedure to ensure data remains accurate and current to inform future planning Periodically revise Asset Management Plans	M
Agreed Capital Works Program not delivered in accordance with allocated budget and timeframes	• Transport infrastructure condition declines / reduced services levels - adverse long term impacts on asset base and associated strategies	H	Audit the effectiveness of Project Management Framework and identify / implement improvements	H

[11] *Source: ISO 31000:2018, Figure 1, p9*
[12] *The residual risk is the risk remaining after the selected risk treatment plan is implemented*

Service or Asset at Risk	What Can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk[12]
	• Non-delivery of critical infrastructure - increased risk of existing asset failure • Reprioritisation of program • Increased financial cost to facilitate reactionary works • Complaints from the community • Damage to reputation			
Inability to deliver asset renewals in the medium to long term due to underfunding	• Disruptions to service due to increased failure rates, reactive maintenance and associated increased costs, maintenance backlog • Non-compliance with asset management principles, internal policies and procedures • Public health and safety issues • Claims, disputes, financial costs • Loss of trust / dissatisfied community and Council • Damage to reputation	H	Seek more funding through alternative funding sources	M

6.3 Infrastructure Resilience Approach

Council does not currently measure its resilience in service delivery. This will be included in future iterations of the AM Plan.

6.4 Service and Risk Trade-Offs

The decisions made in adopting this AM Plan are based on the objective to achieve the optimum benefits from the available resources.

6.4.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Upgrading legacy infrastructure to meet contemporary standards
- Constructing Overland Flow paths

6.4.2 Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- Less/no maintenance of easements in private property
- Lower flood immunity for older areas
- Increased risk of blockages

6.4.3 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- Unsatisfied customers
- Loss of reputation
- Property damage

These actions and expenditures are considered and included in the forecast costs and the Risk Management Plan.

7. Financial Summary

This section contains the financial requirements resulting from the information presented in previous sections of this AM Plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

7.1 Financial Sustainability and Projections

7.1.1 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AM Plan for this service area. The two indicators are the:

- asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years), and
- Lifecycle Funding Ratio (planned lifecycle budget for the next 10 years / forecast lifecycle outlays for the next 10 years identified as warranted in the AM Plan)

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[13] 30.88%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 30.88% of the funds required for the optimal renewal of assets.

Lifecycle Funding Ratio – 10-year financial planning period

This AM Plan identifies the forecast operations, maintenance and renewal costs required to provide an agreed level of service to the community over a 10-year period. This provides input into 10-year financial and funding plans aimed at providing the required services in a sustainable manner.

This forecast work can be compared to the proposed budget over the first 10 years of the planning period to identify any funding shortfall or surplus.

The forecast operations, maintenance and renewal costs over the 10-year planning period are $3,633,695 on average per year.

The proposed (budget) operations, maintenance and renewal funding is $2,743,717 on average per year giving a 10-year funding shortfall of $-889,978 per year. This indicates that 76% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the proposed budget. Note, these calculations exclude acquired assets.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to achieve a financial indicator of approximately 1.0 for the first years of the AM Plan and ideally over the 10-year life of the Long Term Financial Plan.

7.1.2 Forecast Costs (outlays) for the Long Term Financial Plan

Table 7.1.2 shows the forecast costs (outlays) required for consideration in the 10-year Long Term Financial Plan.

[13] *AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.*

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the Long Term Financial Plan.

A gap between the forecast outlays and the amounts allocated in the Financial Plan indicates further work is required on reviewing service levels in the AM Plan (including possibly revising the Long Term Financial Plan).

We will manage the 'gap' by developing this AM Plan to provide guidance on future service levels and resources required to provide these services in consultation with the community.

Table 7.1.2: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Budget
2024	$3,592,168	$0	$2,814,324	$2,182,649	$2,860,000	$9,074,168
2025	$635,000	$0	$2,933,527	$557,795	$83,900	$3,367,526
2026	$819,547	$0	$3,030,665	$0	$57,000	$3,346,148
2027	$839,071	$0	$3,132,264	$20,501	$74,933	$3,406,417
2028	$859,002	$0	$3,236,978	$61,613	$76,807	$3,602,067
2029	$879,523	$0	$3,344,902	$124,953	$78,727	$3,702,628
2030	$900,276	$0	$3,456,133	$242,235	$80,695	$3,804,386
2031	$921,634	$0	$3,570,770	$31,633	$82,712	$3,909,354
2032	$943,616	$0	$3,688,919	$70,422	$84,780	$4,017,642
2033	$966,239	$0	$3,810,689	$25,981	$86,900	$4,129,363
2034	$989,523	$0	$3,936,192	$12,509	$89,072	$4,244,633

7.2 Funding Strategy

The proposed funding for assets is outlined in Council's budget and Long Term Financial Plan.

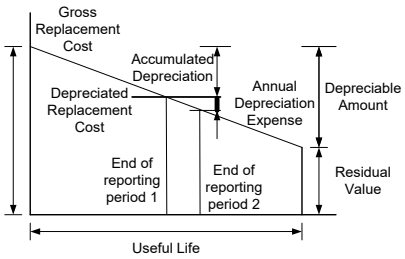
Council's financial strategy determines how funding will be provided, whereas the AM Plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3 Valuation Forecasts

7.3.1 Asset valuations

The best available estimates of the value of assets included in this AM Plan are shown below. The assets are valued at their fair value, which is the cost to replace service capacity:

Replacement Cost (Current/Gross)	$ 541,164,416
Depreciable Amount	$ 541,164,416
Depreciated Replacement Cost[14]	$ 336,759,616
Depreciation	$ 5,582,593



7.3.2 Valuation forecast

Asset values are forecast to increase as additional assets are added.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

7.4 Key Assumptions Made in Financial Forecasts

In compiling this AM Plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this AM Plan are:

- Base year is the current Financial Statements.
- Asset values are based on current asset registers.
    - These may not exactly match IPP&E schedules in most recent statements but are very close.
- Capital works program based on the Long Term Financial Plan Business-As-Usual scenario
    - The program in the Long Term Financial is split 80/20 between renewals and new assets
    - Capital funding is split on asset values
- Works programs are split into:
    - New assets
    - Renewal projects
    - Donated assets
    - Disposed assets
- Benchmarking of depreciation and required maintenance based on the Regional Town & City Classification

[14] *Also reported as Written Down Value, Carrying or Net Book Value.*

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on an A - E level scale[15] in accordance with Table 7.5.1.

Table 7.5.1: Data Confidence Grading System

Confidence Grade	Description
A. Very High	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B. High	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C. Medium	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D. Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40%
E. Very Low	No or very little data held

The estimated confidence level for the reliability of data used in this AM Plan is shown in Table 7.5.2.

[15] *IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.*

Table 7.5.2: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	High	Sourced from Council's strategic documents with some extrapolation
Growth projections	High	Sourced from Council's strategic documents
Acquisition forecast	Medium	Sourced from Council's strategic documents
Operation forecast	Very Low	Sourced from Council's strategic documentation, with significant extrapolation
Maintenance forecast	Medium	Sourced from Council's strategic documentation, with some extrapolation
Renewal forecast - Asset values	High	Sourced from 31 Mar 2023 valuations
- Asset useful lives	Medium	Sourced from 31 Mar 2023 valuations
- Condition modelling	Medium	Sourced from 31 Mar 2023 valuations
Disposal forecast	High	Sourced from Council's strategic documents

The overall estimated confidence level for the reliability of data used in this AM Plan is **Medium.**

8. Plan Improvement and Monitoring

8.1 Status of Asset Management Practices[16]

8.1.1 Accounting and financial data sources

This AM Plan utilises accounting and financial data. The source of the data is Council's Enterprise software as accessed by Council's Finance Section.

8.1.2 Asset management data sources

This AM Plan also utilises asset management data. The source of the data is Council's Enterprise software as accessed by Council's Transport Assets Section.

8.2 Improvement Plan

It is important that Council recognises areas of our AM Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AM Plan is shown in Table 8.2.

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Improve data integrity in the corporate system	Team Leader Coastal, Flooding and Drainage	Existing staff	Ongoing
2	Revise and update asset condition assessments in EAM (MC1)	Team Leader Coastal, Flooding and Drainage	Existing staff	Ongoing
3	Develop renewal programs based on criticality and risk	Team Leader Coastal, Flooding and Drainage	Existing staff	Ongoing

8.3 Monitoring and Review Procedures

This AM Plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the Long Term Financial Plan or will be incorporated into the Long Term Financial Plan once completed.

The AM Plan has a maximum life of 4 years and is revised and updated within 6 months of each Council election and following any significant change to the Asset Management Policy and the Asset Management Strategy.

[16] *ISO 55000 Refers to this as the Asset Management System*

8.4 Performance Measures

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the Long Term Financial Plan
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AM Plan
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into Council's strategic planning documents and associated plans
- The Asset Renewal Funding Ratio achieving Council's target of 100%.

9. References

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2015, 3rd edn., 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.
- IPWEA, 2015, 2nd edn., 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMM.
- IPWEA, 2020 'International Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney
- IPWEA, 2018, Practice Note 12.1, 'Climate Change Impacts on the Useful Life of Assets', Institute of Public Works Engineering Australasia, Sydney
- IPWEA, 2012, Practice Note 6 Long-Term Financial Planning, Institute of Public Works Engineering Australasia, Sydney, https://www.ipwea.org/publications/ipweabookshop/practicenotes/pn6
- IPWEA, 2014, Practice Note 8 – Levels of Service & Community Engagement, Institute of Public Works Engineering Australasia, Sydney, https://www.ipwea.org/publications/ipweabookshop/practicenotes/pn8
- ISO, 2014, ISO 55000:2014, Overview, principles and terminology
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- *MidCoast 2035* Community Strategic Plan (2025-2035)
- MidCoast Council Delivery Program (2025-2029)
- MidCoast Council Operational Plans
- MidCoast Council Resourcing Strategy including the:
    - MidCoast Council Asset Management Strategy (2024-2034)
    - Workforce Management Strategy,
    - Long Term Financial Plan and
    - ICT Strategy
- MidCoast Climate Change Strategy

APPENDIX

Appendix A Capital Works Program

2025-2026 Financial Year

Project	Estimate	Start Date	Completed Date	Assets Added
Oceanic Place, Old Bar – Revetment Wall Renewal	$350,000	25/26		
7 Saltwater Crescent, Diamond Beach	$100,000	25/26		
Patsys Flat Road, Smiths Lake – Drainage improvements	$120,000	25/26		
Eastslope Way, North Arm Cove – Drainage Renewal works	$50,000	25/26		
Kindaron Close, Wingham – Drainage Impvements	$100,000	25/26		
Total Estimated	**$720,000**			

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