MOSMAN

ASSET MANAGEMENT STRATEGY 2020-29

Adopted by Council 6 October 2020

CONTENTS

INTRODUCTION

Mosman Council utilises asset management to make informed decisions about infrastructure assets and deliver reliable and cost effective services to the community.

The Asset Management Strategy (AMS), Policy and each infrastructure Asset Management Plan (AMP) provide the framework within the Community Strategic Plan (MOSPLAN) for Council to effectively manage its infrastructure resources. Council's infrastructure assets include:

- Roads;
- Parks and Open Spaces;
- Stormwater Drainage;
- Marine Structures; and
- Buildings

The plans consider the financial implications of maintaining community assets and balancing this expenditure against the operational realities of other community priorities and regulatory requirements.

The AMS has taken into consideration the recommendations made by the NSW Government Office of Local Government's document Integrated Planning and Reporting Manual for Local Government in NSW (March 2013).

COVID-19

The assets values, data and modelling that informed the Asset Management Plans was done prior to the full ramifications of the COVID-19 pandemic being known. Due to the variability in market conditions during this time, it is recommended that the AMPs be reviewed and updated in 18 months' time to account for any changes.

Strategy Objectives

Council manages over $425 million of infrastructure assets. The objective is to ensure asset portfolio meets the service delivery needs of the community and is consistent with MOSPLAN.

The purpose of this AMS is to ensure adequate provision is made for the long-term cost effective management of Council's infrastructure assets by:

- Identifying all relevant legislative, regulatory and statutory requirements together with political, social, economic, and environmental requirements;
- Establishing consistent Asset Management throughout Council;
- Integrating asset management principles within existing planning, development and operational processes;
- Fully funding agreed service levels defined in the Asset Management Plans;
- Ensuring resources and operational capabilities are identified and responsibility for asset management is allocated;
- Demonstrating transparent and responsible asset management processes that align with best practice;
- Implementation of the principals outlined in the Mosman Climate Strategy and Action Plan including the use of recycle materials, renewable energy, consideration for the lifecycle cost and the promotion of a circular economy; and
- Ensuring that Council's infrastructure is provided in a sustainable manner, with the appropriate levels of service to residents, visitors and the environment.

Scope

This AMS applies to all Council infrastructure assets and sets guidelines for implementing consistent asset management processes for a period of 10 years.

Asset Management Framework

Figure 1 demonstrates the connection between MOSPLAN, legislation and the Asset Management framework. The strategy and policy are Council's commitment to Asset Management and the framework includes planning, implementation and review.

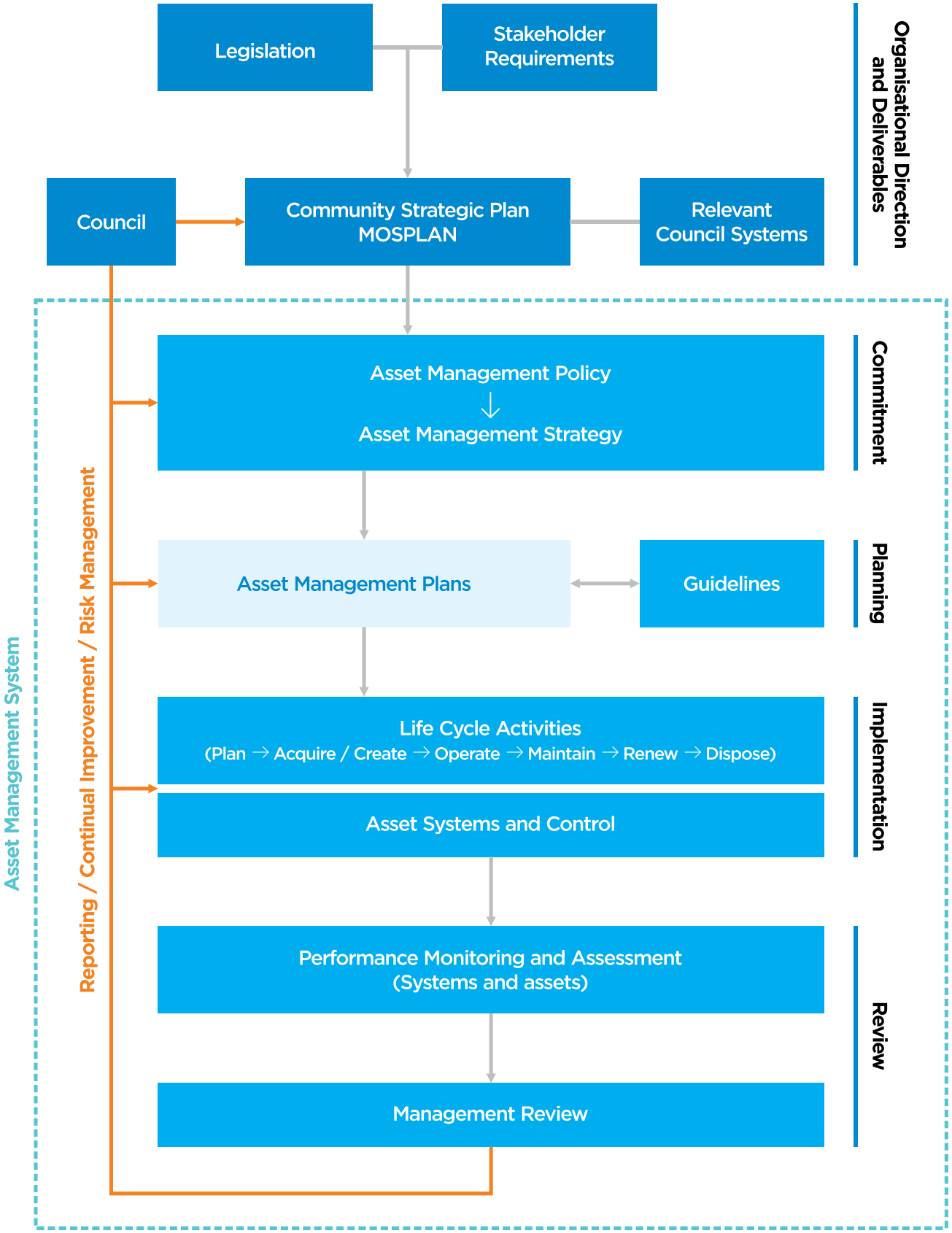

Figure 1 – Asset Management System

LEGISLATION, PLANS & POLICIES

Relevant Legislation

State Legislation & Regulations

- Local Government Act 1993;
- Local Government Act 1993 – Chapter 3 – Principles for Local Government;
- Local Government Act 1993 - Section 406(5) - Integrated Planning and Reporting Guidelines;
- Local Government Act – Section 428(2) – Annual Reports;
- Heritage Act 1977;
- Crown Land Management Act 2016;
- Coastal Management Act 2016;
- Fisheries Management Act 1994;
- Environmental Planning and Assessment Act 1979;
- Environmental Planning and Assessment Regulation 2000;
- Protection of the Environment Operations Act 1997;
- Biodiversity Conservation Act 2016;
- Pesticides Regulation 2017;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- State Environmental Planning Policy No 19 - Bushland and Urban Areas;
- State Environmental Planning Policy (Coastal Management) 2018;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017;
- Roads Act 1993;
- Water Management Act 2000;
- Civil Liability Act 2002; and
- Work Health and Safety Act 2011

National Legislation & Regulations

- Climate Change Authority Act 2011
- Local Government (Financial Assistance) Act 1995;
- Environment Protection and Biodiversity Conservation Act 1999;
- Biosecurity Act 2015; and
- Disability Discrimination Act 1992

Associated Council Policies and Documents

- Mosman Community Strategic Plan (MOSPLAN);
- Long Term Financial Plan;
- Asset Management Policy;
- Strategic Risk Review and Action Plan; and
- Asset Management Plans:
  - Roads;
  - Stormwater Drainage;
  - Buildings;
  - Parks and Open Space; and
  - Marine.

Service Delivery Requirements

The level of service to be delivered to the community is defined within MOSPLAN and each adopted Infrastructure AMP. The level of service was determined in consultation with the community and is restrained by the resources available.

CURRENT POSITION

Council's assets and asset management practices have made steady improvements over the last 10 years.

A summary of assets conditions as at 30 June 2019 is given in Table 1 below. A very small percentage of the total assets 0.9% are in unsatisfactory condition due to the implementation of strategic operational, maintenance and capital works.

Council has also taken many steps in improving asset management practices and systems which include:

- Adoption of the asset management system AssetFinda
- Transition from asset registers stored on spreadsheets to AssetFinda
- Improvements to GIS asset data
- Yearly inspection programs which inform works programs
- Standardised maintenance and inspection practices
- Scheduled maintenance and operational activities
- Update of asset values and useful lives

Councils asset and asset management practices are currently in good standing but there are still significant improvements to be made within asset management practices which are covered in the AMS and AMPs.

Condition	Condition description	Assets in condition as a percentage of total value
1	Excellent	23.0%
2	Good	46.2%
3	Average	29.9%
4	Poor/Unsatisfactory	0.8%
5	Very Poor/Unsatisfactory	0.1%

Table 1 – Overall condition by replacement value (as of June 30, 2019)

ASSET MANAGEMENT PLANNING

Council's infrastructure assets exist primarily to provide services to the community.

The objective in managing assets is to meet the agreed level of service in the most cost effective manner for the benefit of present and future members of the Mosman community. To help achieve this, Council has developed Infrastructure AMPs for each asset class.

The key elements of each AMP are:

- Taking a life cycle approach to managing assets
- Developing cost-effective management strategies
- Providing a defined level of service for assets
- Providing performance monitoring processes
- Understanding and meeting the demands of growth, legislative change, statutory requirements and infrastructure investment
- Managing risks associated with asset failures
- Providing long term financial projections for asset sustainability
- Continuously improving asset management processes and practices

The AMPs have been prepared in accordance with the relevant industry standards and guidance from MOSPLAN, Council's vision, goals and objectives.

Each AMP includes provision for capital, operational and maintenance works and the principles used to prioritise works on assets. They provide a long-term planning framework, including expenditure forecasts, which will assist Council in making informed decisions on MOSPLAN, maintenance programs and capital projects. The AMPs include:

- Levels of service – defining the quality of the service to be delivered by the asset
- Future demand – the impact on future service delivery and the resources required
- Asset data status – what Council owns, what the network is valued at and its most recent assessed condition
- Life cycle management – how Council will optimise the management of its existing and future assets to provide the required services
- Prioritised capital and maintenance works
- How risk is managed
- Financial summary – what funds are required to provide the agreed service levels

The data that informs the plans includes:

- The asset register data on location, extent, size, age, value, condition and remaining life of the asset network
- The unit rates for categories of assets, materials and works
- Performance relative to adopted service levels
- Projections of factors affecting future demand for services
- Data on new assets developed or acquired by Council
- Data on assumed works programs and trends
- Lifecycle analysis data

This information impacts the Council's long term financial plan, strategic business plan, annual budget and departmental work plans. An overview on the five infrastructure assets classes is given below.

Stormwater Drainage AMP

Management Philosophy

There are approximately 73 kilometres of Council managed stormwater pipes, culverts, open drains and natural watercourses in the Mosman local government area. Council also manages 2,930 stormwater assets including stormwater quality improvement devices (SQIDs), rainwater reuse tanks, junction and kerb inlet pits, manholes, headwalls, endwalls and converters.

Mosman's stormwater system is designed to safely convey rainwater falling within the catchment to the harbour and minimise flooding on public and private property. As part of the Community Environmental Contract, 36 SQIDs have been constructed with the objective of improving the quality of the storm water runoff into Sydney Harbour.

Issues	Program
Current level of uninspected assets underground	CCTV investigations of critical pipes and pits (Funded 10 year program). Target of 2.5% of the network per year
Parts of the stormwater network are under capacity	Identified by investigations and updated as need arises
SQIDs may not be achieving maximum results with two cleans per year	Monitor and implement more cleans as necessary
Headwalls may need to be secured to stop people enter the stormwater network	Conduct review by 2022
Other utility services (gas, electricity, communications) being installed across and through stormwater assets	Identify locations, develop approach with service providers by 2024
Assets on private property	To be formalised during development application

Table 2 – Current Issues and Projected Action Program

Financials

The budgeted expenditure for the stormwater program consists of operations, maintenance, and renewal works.

The expenditure is greater than the total minimum required expenditure over most of the next 10 years except the first and second year. This is to ensure improvements can be made to parts of the network that are under capacity or have flooding issues. Parts of the network predate development of the suburb.

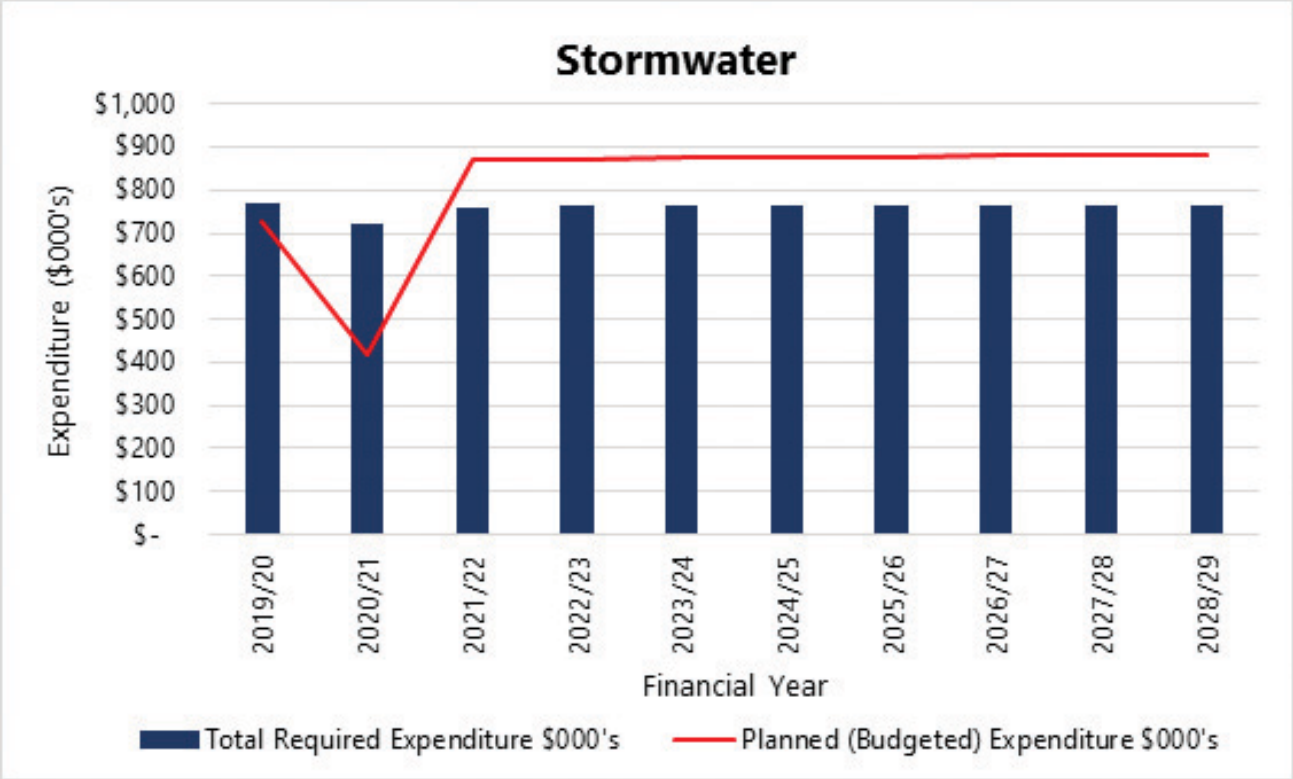

Figure 2 – Stormwater Expenditure Total Required and Budgeted

Buildings AMP

Management Philosophy

Council manages 51 buildings and facilities. These assets are operated and maintained in partnership with specialist contractors to ensure community services levels are met.

Issues	Program
Limited information on mechanical, electrical, hydraulics services for building assets	Implement inspection and data gathering of at least 20% of buildings per annum
Improvement of public amenities accessibility	Improve equality of access when buildings are being upgraded
Sporting pavilions are in need of renovation or redevelopment	Investigate upgrades of these facilities to meet current standards
Management of a significant leased building portfolio including various shops and flats	Improved procedures for managing leased properties and their maintenance
Vandalism and graffiti	Maintain and expand CCTV including outsourcing and graffiti removal contract

Table 3 – Current Issues and Projected Action Program

Financials

The funding for the projected action program is part of the overall budget expenditure which consists of operations, maintenance and capital works.

The current budgeted expenditure is greater than the total required expenditure over the next 10 years. Therefore, Council has planned to cover the costs of the minimum required work over this period.

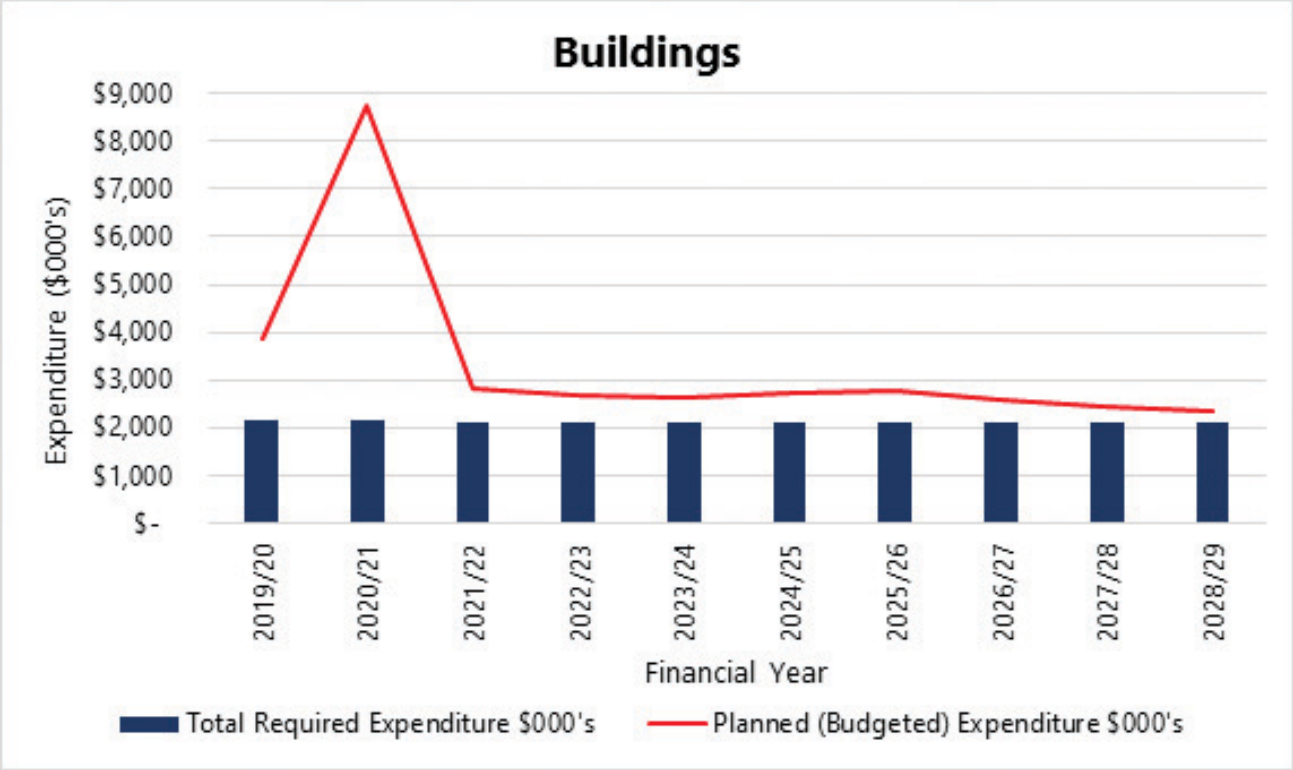

Figure 3 – Buildings Expenditure Total Required and Budgeted

Roads AMP

Management Philosophy

There are approximately 90 kilometres of Council managed road. Road assets cover road pavements, footpaths, retaining walls, line marking, signs and physical traffic devices. These assets are designed to support efficient and safe travel in the area for vehicles, pedestrians and cyclists.

Issues	Program
Number of weathered rock faces need assessment	Identify these rock faces and arrange draft works list by 2022
A number of guardrails do not meet current standard for end terminals, height or offset from kerb face	Renew guardrails and include the in 10 year roads capital works program
Some footpaths have missing links or only exist on one side of the street	Include the missing links in the footpath capital works program
A number of intersections do not have pram ramps	Include the missing pram ramps in the footpath capital works program
A number of pram ramps, steps and refuge islands in the Council area do not comply with current accessibility standards	Assets will be assessed and a priority list generated for capital works program

Table 4 – Current Issues and Projected Action Program

Financials

The budgeted expenditure for the roads program consists of operations, maintenance, and capital works.

The budgeted expenditure is greater than the required expenditure for the majority of the next 10 years. Some of the additional expenditure is a result of under expenditure in 2019/20 & 2020/21 and also to improve the quality of the roads, reduce the risk and address the issues in table 4.

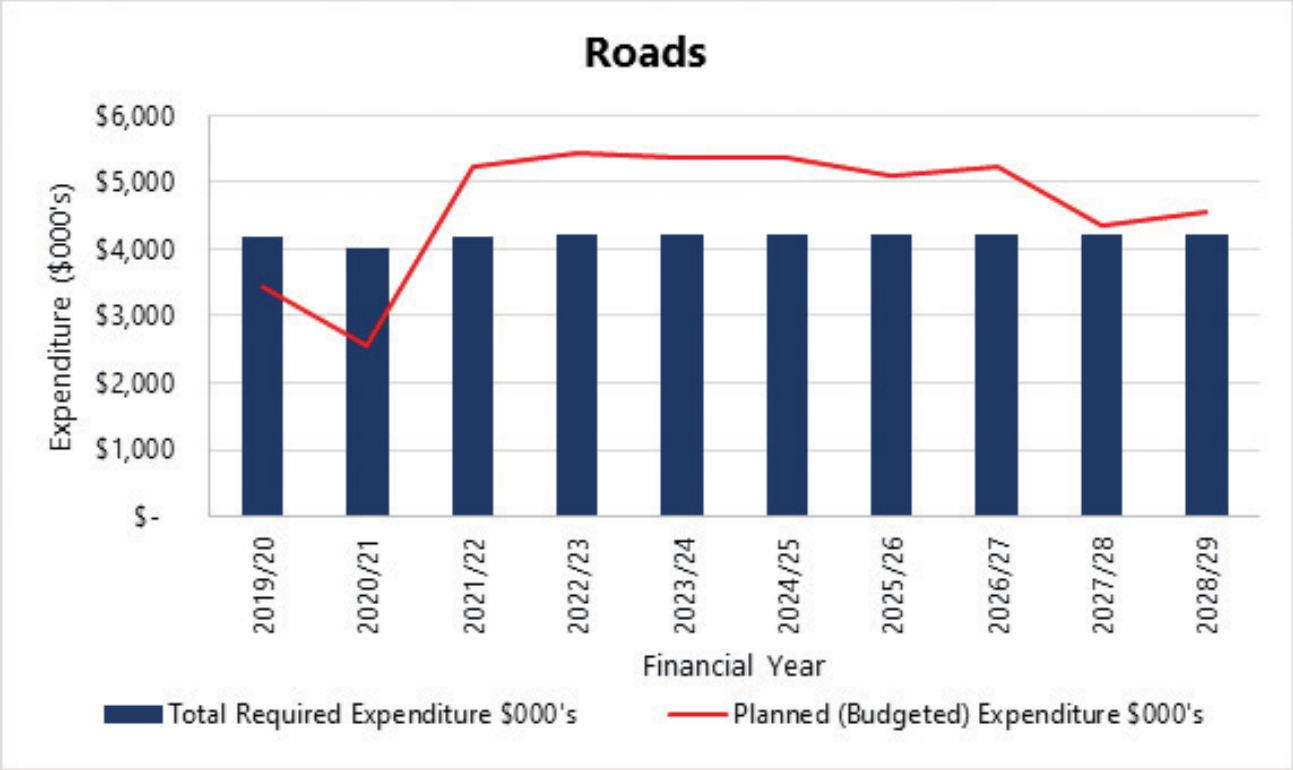

Figure 4 – Roads Expenditure Total Required and Budgeted

Parks and Open Space AMP

Management Philosophy

Council maintains approximately 76 hectares of playgrounds, sporting fields, bushlands, unmade roads, parks and reserves.

These assets provide a range of passive and active recreation opportunities for the community. While traditionally it has been difficult to put a value on parks and open space assets, increasing demands on these facilities is making the community more aware of their worth.

Issues	Program
A number of playgrounds require new equipment or upgrades to cater for accessibility	Include these upgrades in the 10 year parks and open space capital works program
Sports field require various upgrades such as irrigation, drainage and flood light installation	List these renewals and upgrades and include them in the 10 year parks and open space capital works program
Conversion of park lights to LED	Identify these locations and arrange for the upgrade to LED lighting
Lack of funding for retaining wall upgrades in parks and open spaces	Assess funding strategy and determine way to raise funding to upgrade these walls
A number of bushland areas are not included in the bushland contract	Include in the next bushland contract due in 2022
Unmade road priority matrix being applied to budget with some sites with low biodiversity value not being managed due to high cost with low benefit	Remove or reprioritise the maintenance of these areas at the next review of the matrix
Ordinance fencing is failing in various locations	Identify and include renewal of these fences in 10 year parks and open space capital works program
A number of assets identified as having short remaining life	Monitor assets and schedule for renewal when funding is available

Table 5 – Current Issues and Projected Action Program

Financials

The funding for the projected action program is part of the overall budget expenditure which consists of operations, maintenance and capital works.

The current budgeted expenditure is greater than the total required expenditure over the next 10 years. Council has budgeted to spend more than the minimum requirement due to high use, to improve the quality of parks and open spaces and reduce the risk consistent with the community expectations.

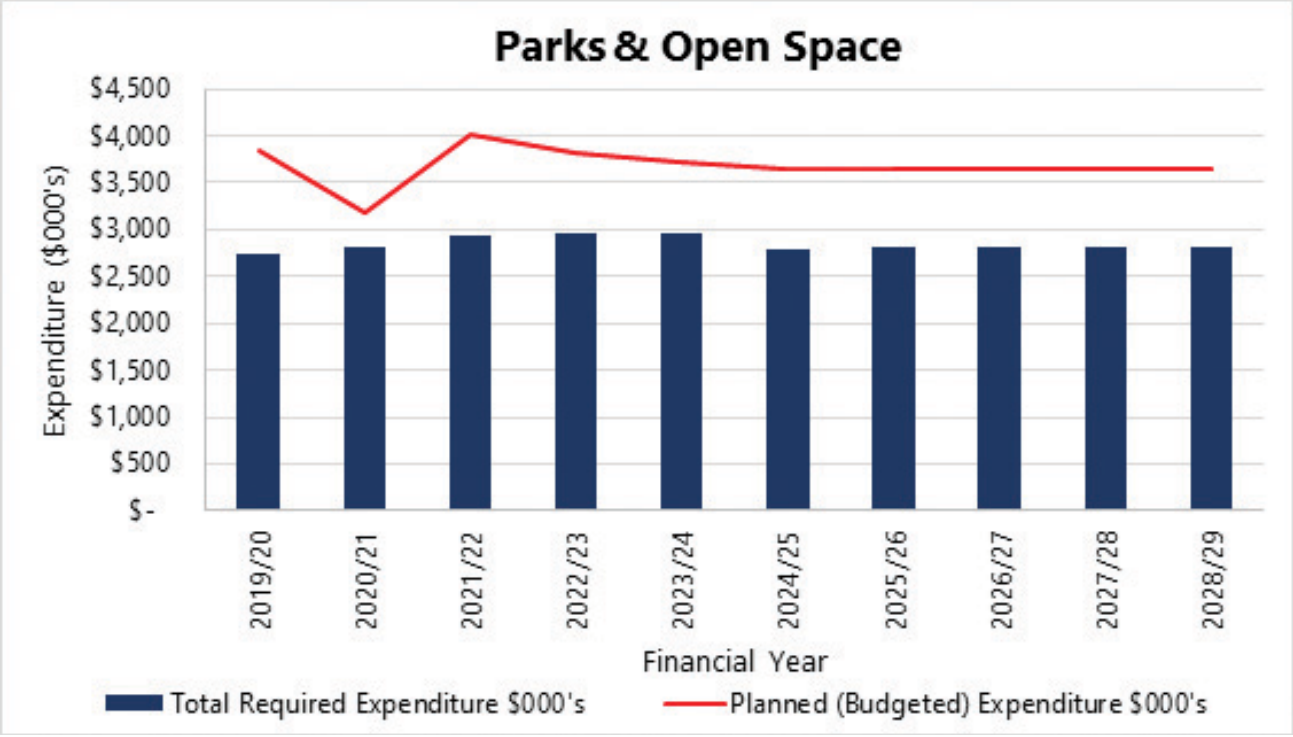

Figure 5 – Parks and Open Space Expenditure Total Required and Budgeted

Marine Structures AMP

Management Philosophy

Council's marine structures include the Balmoral and Clifton Gardens baths and jetties, the Inkerman Street jetty, a natural rock pool at Edwards Beach and various seawalls.

Issues	Program
Reduction of the structural capacity of timber piles due to marine borer attacks	Employment of new treatment techniques and sourcing materials not susceptible to marine borer attack, such as HDPE sleeves and alternate pile materials
Timber raker piles causing abrasive wear to the shark nets	When due for renewal, replace with HDPE sleeved steel piles
Damage to shark nets due to other marine forces	Check and maintain the shark nets in accordance with the Marine AMP
Damaging storm frequencies appear to have increased causing a more rapid deterioration of marine assets	Investigate the extent and implement a strategy that manage the effects of storm events

Table 6 – Current Issues and Projected Action Program

Financials

The funding for the projected action program is part of the overall budget expenditure. The budgeted expenditure consists of operations, maintenance and capital works.

The budgeted expenditure is greater than the required expenditure for the majority of the next 10 years except for 2020/21 and 2028/29. Council has budgeted to spend more than the minimum requirement to implement new technologies for piles and to ensure that structures can be protected against increasing storm frequency.

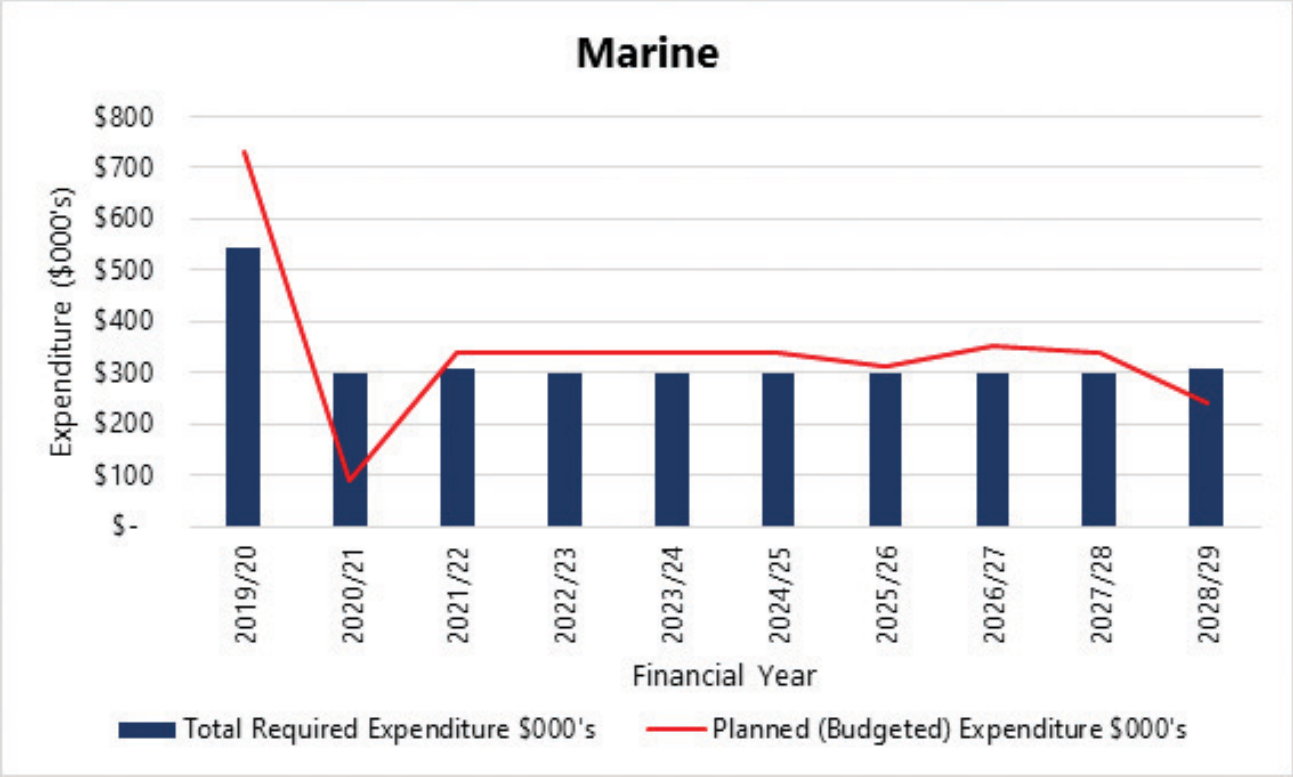

Figure 6 – Marine Expenditure Total Required and Budgeted

ASSET MANAGEMENT IMPLEMENTATION

Prioritisation Criteria

Each AMP contains a 10 year work program which is developed with consideration for the MOSPLAN priorities, asset condition, risks and resources available in each asset category.

There may be variation to the work programs as more updated information becomes available for instance:

- Change in the condition of an asset warrants earlier renewal
- Grant funding applications are either successful or unsuccessful
- Additional funding is provided for a specific project (e.g. donation from an external organisation or an increase in budget allocation)
- Budget constraints mean that full funding for a project is not available and a project of lower priority and cost can be completed that financial year
- Larger projects may require more budget than initially estimated and other projects are deferred to compensate
- Upgrade of other surrounding assets near a capital works project will achieve cost efficiency, an example is stormwater assets within a major road reconstruction
- Safety concerns, increased risks or regulatory requirements
- Resolution by Council

Procedures

Guidelines exist within a number of the asset categories which outline maintenance procedures based on risk analysis for corrective maintenance. This involves moving from reactive maintenance to programmed maintenance for more efficient and effective expenditure. These procedures need to be expanded to all asset categories.

Risk Management

Council's broad risk management approach is covered in the Strategic Risk Review and Risk Management Policy. The standard procedure includes the following:

- Risk identification
- Risk analysis
- Risks evaluation
- Risk treatment
- Monitoring and review
- Communication

The implementation of an effective asset management strategy is integral in assisting Council to manage the risks and liabilities of infrastructure assets. Each asset management plan covers a number of risk management procedures including:

- Routine inspection and maintenance regimes
- Prioritisation of maintenance and capital works to support the delivery of Council services
- Long term asset renewal program and required funding estimates
- Key responsible staff for assets
- High quality data on the useful life and condition of assets

Each plan also covers the major risks and their treatments. The major risks for infrastructure assets are summarised below:

Description of Risk	Previous Risk Rating	Risk Planning	Risk Treatment	New Risk Rating
General defects	Medium	Inspections and routine maintenance	Replace aged and/or damaged infrastructure as a part of routine maintenance	Low
Hazards & emergency	High	Regular monitoring and emergency procedures	Road closure or set up exclusion zone if necessary. Clear communication through signage. Assistance with from Rapid Response, Rangers and SES	Medium
Failure of critical assets	High	Identify alternatives available such as buildings, road detours or temporarily discontinuing the service	Business continuity plan, road detours and alternative buildings have been identified to use	Medium
Construction risks	Medium	CTMP, barriers, insurance and WHS site plan	Review traffic plan and construction management plans. Prior to construction, contractor insurances are to be submitted. Check on site to ensure construction works are carried out in a safe manner	Low
WHS and environmental protection	Medium	Appointment of suitable contractor, clear contract conditions	Selection of contractors will entail their compliance with WHS and Environmental requirements. Regular audits will be undertaken to ensure work is compliant with WHS and Environmental standards.	Low
Reputation/ Political risks	Medium	Communication plan	Communicate the benefits of the AMS to the community and ensure works programs are well planned	Low

Table 7 – Risk and Treatment Plan

Information Systems

Council uses a computer-based information system called AssetFinda to effectively deal with the high volume of detailed information on its assets. Asset Finda also has a Geographic Information Systems (GIS) component containing the spatial data of the assets within MapInfo.

Council's information systems are integral in the management and monitoring of assets and allows Council to:

- Document asset attributes, conditions and values
- Assign works via the works requests system and record the expenditure
- Fulfil the requirement to report regularly to the community and other government authorities about Council's asset management programs and asset information
- Calculate end of financial year valuations required in Special Schedule 7 and other documents
- Continuously develop the process, knowledge and support information systems as the feedback process progresses

Desired uses of the system in the future include:

- Project forward capital and recurrent expenditure
- A more comprehensive understanding of the risk levels associated with the assets
- Undertake predictive modelling to optimise the decision making process
- Develop preferred treatment options for assets requiring expenditure
- Weigh up asset maintenance with renewal to decide the most cost effective approach

AssetFinda is partially integrated with Council's financial management system Powerbudget. Expenditure recorded within the works requests is exported to PowerBudget. There is a desire to fully integrate the two systems.

AssetFinda contains the asset register including dimensions, unit rates, useful lives and condition ratings for all assets and is used to issue work orders.

Several barriers that prevent AssetFinda from being used to its full potential are summarised in Table 8.

Issues	Projects
Lack of integration between some of the databases such as: ▪ No direct database link for spatial data between AssetFinda and Spectrum Spatial Analyst ▪ No link to Civica Authority finance system ▪ AssetFinda works requests costs transferred to PowerBudget not capturing all works	Set up database system to transfer spatial data directly to Spectrum Spatial Analyst Train users of AssetFinda to correctly capture costs of works
Asset Coordinator only staff member capable of supporting the software and managing the various systems	Train a small number of staff to update and manage the software
Reliance on spreadsheets to calculate end of financial year values required in reporting such as Special Schedule 7	Consult with asset management software owner to determine if these functions can be added to the software
Lack of flexibility in some parts of the software, e.g. separate unit rates for components of one asset	Consult with asset management software owner to allow this level of flexibility in a future update of the software

Table 8 – AssetFinda Current Issues and Improvement Projects

ASSET MANAGEMENT REVIEW

Asset Management Improvement Planning

The asset management improvement program enhances the processes, systems and data that support the AMP by:

- Identifying the corporate need for asset management planning
- Assessing the current status of asset management practices
- Identifying gaps between current practices and business needs
- Developing an optimised program for asset management improvements, considering risks, costs and availability of resources
- Monitoring and reviewing the effectiveness of AM planning activities

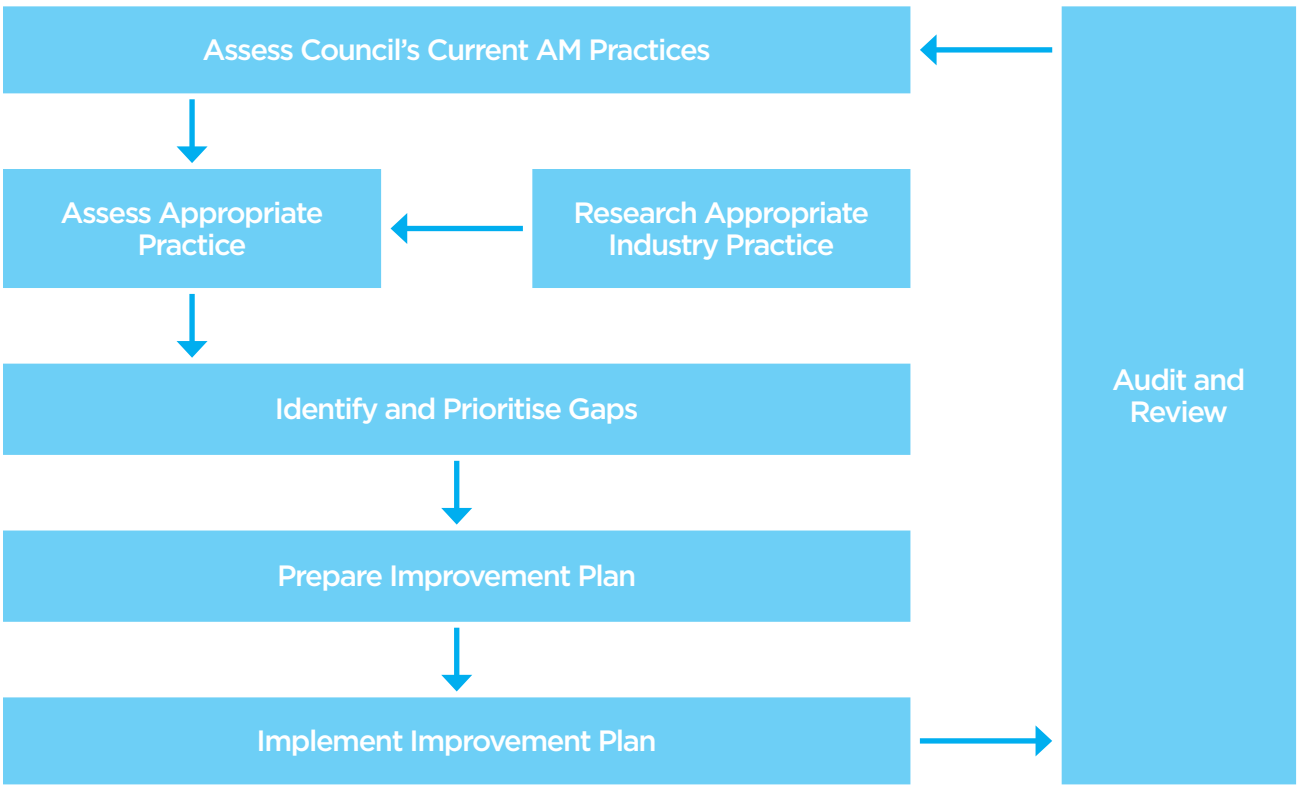

Figure 7 – Asset Management Improvement Program Process (adopted from International Infrastructure Management Manual. 2006)

Review Approach

The AMS will be reviewed every 4 years to ensure that it meets the requirements of legislation and Council.

Reviews will consider factors such as external changes in asset management practice, industry standards, new technology, legislation changes, variation in available resources and community demand.

Reviews may be conducted earlier if instructed by the Executive Team due to major changes in these factors.

Asset Management Resources

The Asset Coordinator is responsible for managing the portfolio of assets and their updates through Asset Finda and MapInfo. The task requires specialised skills and the support of internal and external staff.

Condition inspections are carried out by internal staff that manage the assets or external contractors when budget is available. The ability to understand the full life cycle of an asset is important when undertaking inspections to be able to calculate the remaining life of the asset. This level of experience may be unavailable internally.

Valuations are preferably done by external contractors that are suitably qualified but this can be a significant expense to Council.

Issues	Projects
The level of resources available to support asset management practise including funding for external consultants	Review resource requirements to implement AMPs
Review capacity to inspect assets as required in the AMPs	Review work schedules of internal staff or allocate budget for external consultants
Internal knowledge of assessing asset remaining useful may be limited	Train staff to understand life cycle of assets and be able to determine in how many years an asset will no longer be able to provide service

Table 9 – Asset Management Resource Issues and Improvement Projects

Asset Revaluations

Asset registers will be revalued when there is a material change in the fair value. This typically occurs every 2-4 years when the change is more than 5-10% across the majority of the category. Revaluations are generally conducted externally if budget is available.

In 2019/2020, $140,000 was budgeted for asset management works, including revaluations. Historically, expenditure has been lower on average. In 2020/21, $30,000 has been budgeted for asset management and between 2021/22 and 2028/29, $40,000 has been budgeted each year.

Asset Funding Strategy

All five asset management plans have sufficient allocated funding to meet the minimum requirements over the next 10 years.

However, unforeseen circumstances can alter the funding and resources available for assets. If this occurs the following additional resources and actions may be necessary:

- Use of emergency funds
- Rate variations
- Grants
- Infrastructure levies
- Loans
- Reducing the level of service (may increase risk in some asset categories)

Backlog Ratio

The backlog ratio is calculated by measuring the replacement value of assets in an unsatisfactory condition against the depreciated value of all assets. As unsatisfactory assets are renewed each year, the backlog of assets decreases, however there may also be other assets that decline to an unsatisfactory condition.

Therefore, the amount spent needs to offset not just those unsatisfactory assets but also assets that are deteriorating.

In each AMP, the backlog ratios decrease by the end of the 10 year plan. The combined results are shown in Figure 8 and indicate that Council is expected to do well in maintaining its assets over the next 10 years.

Between 2019/20 and 2028/29, the backlog ratio is expected to reduce from 1.06% to 0.92%. Achieving an overall backlog ratio under 1.0% is an ideal position for Council as it is less than half of the 2.0% benchmark. Keeping the ratio under 1.0% will be the goal following 2028/29.

Achieving a backlog ratio of 0% is very difficult and may not be cost effective for low risk assets as they are not achieving their full useful life.

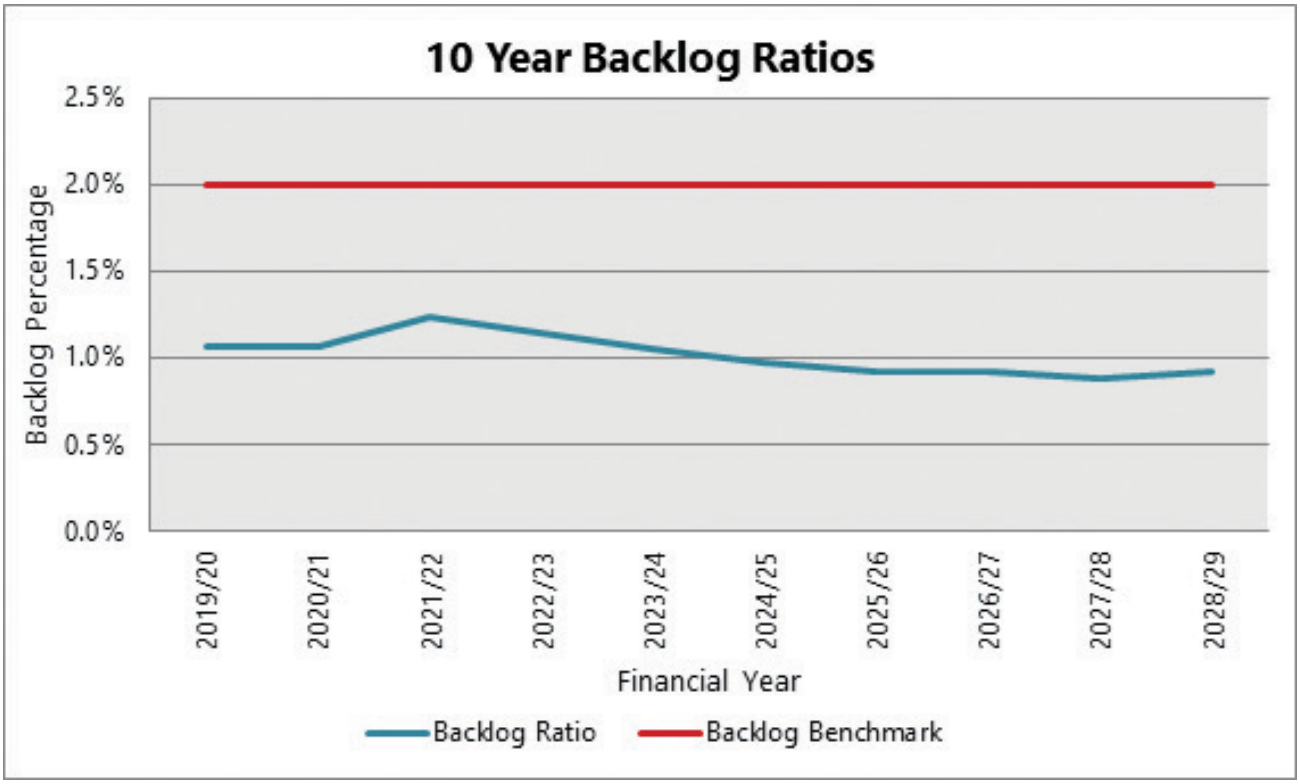

Figure 8 – Forecast 10 Year Backlog Ratio (All Assets)

Asset Management Strategy Summary

Council has a significant and varied asset portfolio which requires strategic direction to assist in its management and provide services to the community.

The AMS acts as the essential link between Councils policy direction and more detailed asset management planning and delivery. It highlights major issues, which need to be addressed for each of the asset classes in order for Council to achieve best practice asset management that is appropriate for Mosman.

Council's assets and asset management practices are currently in good standing and it is expected that this will continue with the adoption of the AMS and AMPs.

The strategy has identified that Council's proposed future funding allocations are sufficient to maintain assets and services. Council's backlog ratio indicates that unsatisfactory assets are expected to reduce over the 10 year period and are below the 2% benchmark.

To improve asset management, Council will provide the necessary resources and undertake the programs recommended in this AMS and will continue to monitor and update it regularly to ensure its currency and consistency with Council's policy directions.

ASSET MANAGEMENT STRATEGY 2020-29

Mosman COUNCIL