

Long Term Asset Management Plan

For the period 2023-24 to 2032-33



DOCUMENT REVISION HISTORY

This document is Version 2.4, of the Long-Term Asset Management Plan and covers the period 2024-2033.

Date	Version	Revision details
March 2017	1.0	Long Term Asset Management Plan 2017-2026 adopted by Council.
August 2018	2.0	Long Term Asset Management Plan second release and major update. Includes updated Enterprise Risk Management Framework and incorporation of Asset Management Policy into the body of the LTAMP.
October 2019	2.1	Long Term Asset Management Plan Version 2.1. Minor update including updated Long-Term Financial Plan capital renewal and upgrade figures for the period 2020-2029.
June 2021	2.2	Long Term Asset Management Plan Version 2.2. Minor update including: <ol style="list-style-type: none"> 1. Section 4 State of the Assets data updated. 2. Section 8 Financial Summary updated. 3. Section 10 Asset Management Strategies updated.
May 2022	2.3	Long Term Asset Management Plan Version 2.3. Minor update including: <ol style="list-style-type: none"> 1. Executive Summary Current Replacement Cost updated. 2. Section 4 State of the Assets data updated and capital expenditure for asset service delivery now included. 3. Section 8 Financial Summary updated. <ul style="list-style-type: none"> • 2032 Mareeba WTP Upgrades are noted as being addressed in the Water Asset Management Sub Plan. • Waste capital expenditure is on hold while the Regional Waste Plan is developed. 4. Section 10 Asset Management Strategies updated.
May 2023	2.4	Long Term Asset Management Plan Version 2.3. Minor update including: <ol style="list-style-type: none"> 1. Cover page dates updated (page 1). 2. Section 1 Executive Summary dates updated (page 4). 3. Section 3 Overview MSC Corporate Plan dates updated (page 6). 4. Section 4 Overview data updated and Capital and Operational expenditure for asset service delivery updated (page 10). 5. Section 8 Financial Summary 10-year forecast charts for Capital and Operational expenditure updated (page 17). 6. Section 10 Asset Management Strategies Table 10 1.1 Council's current commitments comment updated (page 20) and Table 11 2.2 Actions comment updated (page 21). 7. Photos updated (pages four, five, eight and twelve.)

Next Review Date:	June 2024
Date Adopted:	21 June 2023

Table of Contents

1.	Executive Summary	4
2.	Legislation	5
3.	Overview	6
	Strategic Framework.....	6
	Asset Management Principles	7
	Asset Management Governance	9
4.	State of the Assets	10
5.	Service Levels.....	12
6.	Future Demand.....	13
	Demand Forecast.....	13
	Demand Management.....	13
	Asset Planning.....	13
7.	Lifecycle Management.....	14
	Background Data	14
	Risk Management	14
	Critical Assets.....	16
	Operations and Maintenance Plans	16
	Capital Investment Decisions.....	16
8.	Financial Summary.....	17
9.	Asset Management Maturity.....	18
10.	Asset Management Strategies.....	20
11.	References	22

1. Executive Summary

Mareeba Shire Council (MSC) manages assets with a current replacement cost of \$825 million¹, to deliver fundamental services for the ongoing prosperity, liveability and sustainability of the shire. The assets include transport; water; wastewater; waste; community housing; aviation and industrial facilities; office buildings and depots; parks and open spaces; plant and fleet. Striking an optimal balance between affordability, levels of service and risk management of these assets is key to achieving Council's Corporate Vision of, *"A growing, confident and sustainable Shire"*.

The Long-Term Asset Management Plan (LTAMP) has been developed in accordance with the requirements of the Local Government Act 2009 and Local Government Regulation 2012, referencing the International Infrastructure Management Manual (IIMM). It is consistent with the Long Term Financial Plan 2023-24 to 2032-33 with the objective of maintaining financial and infrastructure capital over the long term.

The LTAMP demonstrates how Mareeba Shire Council will meet its legislative requirements in relation to asset management over the next ten years. The plan provides background information around asset management and our legislative requirements as well as an overview of our strategic framework, asset management principles and community aspirations; the state of our assets, service levels, future demand, lifecycle management, a financial summary and an assessment of our asset management maturity. The plan then provides strategies to ensure the sustainable management of assets in our asset register.

The strategies together with the Long Term Financial Plan are intended to ensure officers can provide frank and transparent advice to inform Council's expenditure decisions. This will support an optimal balance between affordability, levels of service and risk management in the pursuit of ongoing prosperity, liveability and sustainability for the people of the Mareeba Shire.



Photo 1 Mareeba Township and Northern Section Bi-Centennial Lakes

¹ Figure as at 30 June 2022

2. Legislation

This document has been prepared to demonstrate how Mareeba Shire Council intends to meet the asset management requirements of the *Local Government Act 2009* ('The Act') and the Local Government Regulation 2012. According to the Act, local governments must establish a system of financial management that includes a long-term asset management plan (*Local Government Act 2009.s104*).

Under the *Local Government Regulation 2012.s167-168*:

S167

- (1) Councils must prepare and adopt a long-term asset management plan.
- (2) The long-term asset management plan continues in force for the period stated in the plan unless the local government adopts a new long-term asset management plan.
- (3) The period stated in the plan must be 10 years or more.

And;

S168

The contents of the long-term asset management plan must:

- (a) provide for strategies to ensure the sustainable management of the assets mentioned in the local government's asset register and the infrastructure of the local government; and
- (b) state the estimated capital expenditure for renewing, upgrading and extending the assets for the period covered by the plan; and
- (c) be part of, and consistent with, the long-term financial forecast.



Photo 2 Mareeba Eastern Catchment Park Amaroo Stage 1

3. Overview

Strategic Framework

There are several planning documents that help Council achieve the community's desired outcomes. This plan is prepared under the guidance of the Corporate Plan, Community Plan, Local Government Infrastructure Plan and Long Term Financial Plan. This Long-Term Asset Management Plan establishes our asset management principles together with our current practices; and develops strategies to ensure the sustainable management of our assets. The plan also provides the estimated capital expenditure for renewal, upgrade and extension of assets for the period 2023-24 to 2032-33 and is consistent with the long-term financial forecast.



Figure 1 Our Asset Management Strategic Framework

Asset Management Principles

Council aims to strike an optimal balance between affordability, levels of service and risk management to maintain our financial and infrastructure capital over the long term and support Council's Vision of *"A growing, confident and sustainable Shire"*.

Where possible, funding will provide some flexibility for Council to assess and plan priority projects. However, where there are funding constraints, statutory obligations for safety across each asset class should take precedence.

Our principal focus areas for asset management are:

1. Understand the risk profile associated with Mareeba Shire Council's asset portfolio;
2. Correlate agreed service levels with available funds to justify planned expenditure to the community and government stakeholders;
3. Affordability for the whole community;

so that Council can:

4. Ensure infrastructure and financial capital sustainability by:
 - Understanding the business consequences of reducing capital or maintenance budgets over a ten-year period; and
 - Facilitating appropriate project prioritisation and deferral to meet budget constraints

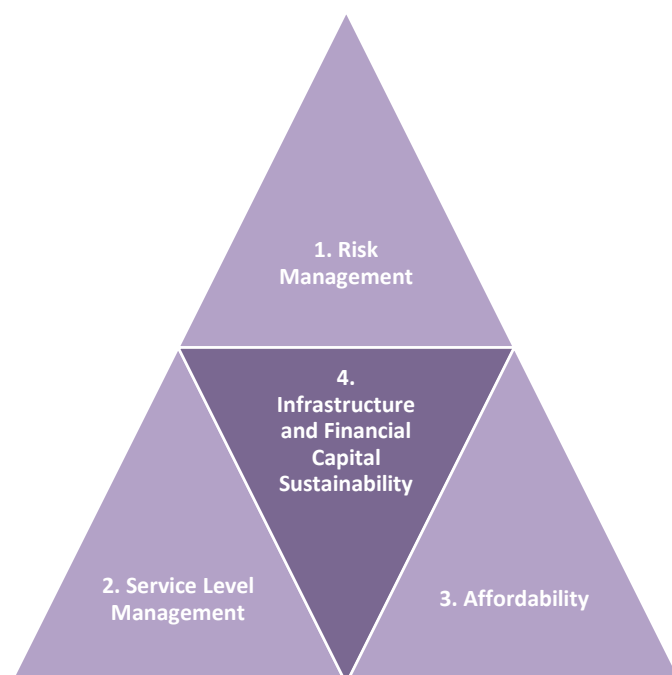


Figure 2 Asset Management Principles

Community Aspirations

Council engages with the community through reference groups, user groups and through Councillor representation.

Requests for maintenance and capital works are investigated and prioritised for consideration and scheduling as part of our maintenance works and potentially as a capital works proposal. Capital works proposals are assessed against a multi-criteria and risk assessment framework that is approved by Council on an annual basis prior to the Capital Works planning period.

Our community's aspirations have been through community meetings and grouped into the areas of Transport Networks, Water Waste and Wastewater, Community Facilities, Parks Open Spaces and Trails and Aviation Facilities & Industrial Estates. These aspirations are summarised in Figure 3.

Transport networks

- Are well maintained and upgraded with adequate capacity for future population, economic growth and enhanced community safety in a rural and remote shire.

Water, waste and wastewater

- Infrastructure meets the needs of our growing population and is managed sustainably.

Community facilities

- Support our growing and diverse population and enable safe, active, healthy, vibrant lifestyles.

Parks, open spaces and trails

- Foster health and wellbeing in our rural and remote towns and districts.

Aviation facilities and industrial estates

- Meet increased demand contribute to jobs and economic growth.

Figure 3 Community Aspiration Summary



Photo 3 Graham Fraine, Director-General Regional Development, Manufacturing and Water, Mayor Toppin, Councillor Wyatt and Councillor Mlikota at Mareeba Water Treatment Plant

Asset Management Governance

Asset Management is an issue for everyone across the organisation. A team approach reduces the risk of silos being created and ensures that specialist skills are brought together effectively.

A multi-disciplinary asset management team has been established with the following responsibilities:

Councillors

- Act as custodians of community assets;
- Set and approve asset management plans with linkage to Council's Corporate Plan;
- Set levels of service, risk and cost standards based on the community's needs, legislative requirements and Council's ability to fund;
- Ensure asset investment decisions consider whole of life costs and balance the investment in new/upgraded assets with the required investment in asset renewal to meet specified levels of service; and
- Ensure appropriate resources for asset management activities are made available.

Chief Executive Officer and Executive Management Team

- Provide strategic direction and leadership;
- Review existing policies and develop new policies related to asset management; and
- Monitor and review performance of Council's managers and staff in achieving the asset management strategy.

Managers and Staff

- Work collaboratively to develop and implement asset management plans;
- Deliver levels of service to agreed risk and cost standards; and
- Manage infrastructure assets in consideration of long term sustainability.

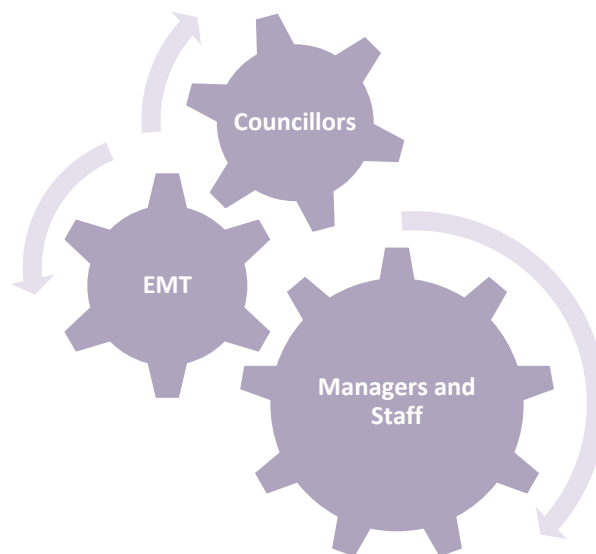


Figure 4 Asset Management Governance

4. State of the Assets

Council generates approximately \$38.5M in net rates and utility charges and owns approximately \$825M² (Current Replacement Cost) of assets that are managed to deliver services to the community. Council also receives other funding including grants which brings our total operating revenue to approximately \$52.5M. The following tables provide a snapshot of our assets, and service delivery profile including an operational budget of \$32.9M for service delivery and capital budget of \$22.2M.

Table 1 Assets and Service Delivery Snapshot

Service	Assets	#	Operational Budget 2023-24	Capital Budget 2023-24
Transport	Roads	2304 km	8,092,358	\$7,671,000
	Footpaths	49.12km		
	Kerb & channel	236.4 km		
	Drainage	44.2 km		
	Street Lighting	N.a	\$190,000	
	Street Cleaning	N.a	\$879,778	
	Bridges	81	\$1,297,275	
	Major Culverts	130		
	Minor Culverts	3071		
Facilities	Depots	9	\$463,327	\$2,930,000
	Caravan Parks	2	\$270,176	
	Commercial Buildings	1	\$167,982	
	Council Buildings	53	\$251,073	
	Aquatic Facilities	3	\$935,530	
	Community Housing	108	\$66,426	
	Industrial Estates	1	\$34,055	
	Aerodromes	3	\$755,556	
	General Facilities		\$1,470,609	
	Public Halls	14		
	Public Toilets	28		
Water ³	Treatment Plants	4	\$3,678,051	\$2,632,228
	Water Reservoirs	15	\$2,128,219	
	Pump Stations	14		
	Water Mains	260 km		
Wastewater ³	Treatment Plants	2	\$2,624,272	\$5,686,000
	Reticulation		\$1,301,627	
	Pump Stations	30		
	Length sewerage mains	134.95 km		
	Manholes	1862		
Plant & Fleet	Plant and Fleet	206	\$2,441,485	\$1,232,000
Waste	Landfills and trenches	1	\$376,037	\$110,000
	Waste Transfer Stations	10	\$3,637,858	
Parks & Open Spaces	Parks & Rec Reserves	222 ha	\$1,721,504	\$1,555,000
	Cemeteries	10	\$118,838	\$385,000
TOTAL			\$32,902,037	\$22,201,228

² Figure as at 30 June 2022

³ Asset data as at 30 June 2022

Table 2 Capital Replacement, Residual Value and Depreciation 2022

Asset Class	Current Replacement Cost	Residual Value	Depreciated Replacement Cost	Annual Depreciation Expense
Transport	\$507,422,468	-	\$351,834,167	\$4,340,204
Facilities	\$93,763,121	-	\$67,443,905	\$1,423,541
Water	\$92,118,278	-	\$57,382,556	\$1,002,230
Wastewater	\$97,385,334	-	\$64,094,405	\$1,171,182
Land	\$13,382,447	-	\$13,382,447	-
Fleet	\$7,246,542	\$1,334,000	\$2,920,031	\$327,517
Waste	\$9,373,006	-	\$5,009,244	\$120,616
Other (IT, Office Equipment, Telecommunications)	\$1,402,367	-	\$515,144	\$75,962
Parks & Open Spaces	\$2,513,022	-	\$1,723,642	\$75,633
WIP	-	-	\$36,050,592	-
Total⁴	\$824,606,584		\$600,356,133	\$8,536,883

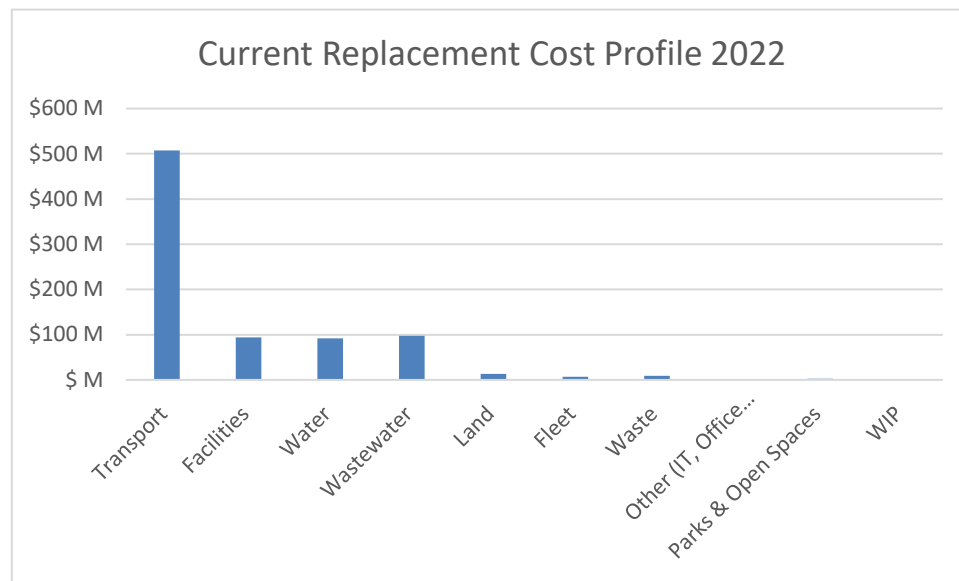


Figure 5 Asset Replacement Cost Profile 2022

⁴ Figures as at 30 June 2022

5. Service Levels

"Levels of service are the outputs a customer receives from Council. Level of Service statements describe what Council is intending to deliver, commonly relate to service attributes such as quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost and *should be written in terms the end user can understand and relate to*". (IPWEA, 2011)

Documentation of levels of service are being developed through the asset management plan development for individual asset classes. The maturity of these levels of service documents vary between asset classes and are prioritised for improvement through annual asset management maturity assessments and the Operational Plan planning process.

Desired levels of service have been adopted by Council in MSC's Local Government Infrastructure Plan (Jacobs Pty Ltd, 2018).

We can maintain current levels of service for the next ten years based on current knowledge and projections in the Long-Term Financial Plan. However, caution is required when making capital investment decisions to avoid creating funding pressure from allocating funding to new projects, instead of maintaining and renewing existing assets (IPWEA, 2011). Further asset data verification and analysis has been prioritised by Council in the Operational Plan to confirm and formalise our current asset knowledge.



Photo 4 Mareeba Rail Trail Upgrade Stage 1

6. Future Demand

Demand Forecast

Population growth and ultimate residential development capacity are provided within the Local Government Infrastructure Plan (LGIP) and supporting documents. These were prepared in accordance with the requirements of the *Planning Act 2016* to assist Council's in its long-term asset and financial planning. (Jacobs Pty Ltd, 2018).

Table 3 Existing and Projected Population

	Existing and projected population			
Priority Infrastructure Area (PIA)	2016	2021	2026	2031
Chillagoe	188	195	203	212
Dimbulah	372	386	402	419
Kuranda	1,906	1,978	2,062	2,146
Mareeba	8,902	9,241	9,631	10,022
Total PIA	11,368	11,801	12,299	12,798
Total outside PIA	10,189	10,804	11,263	11,724
Total for area of Planning Scheme	21,557	22,605	23,562	24,522

(Jacobs Pty Ltd, 2018)

Demand Management

Demand for new services is managed through a combination of managing existing assets, upgrading existing assets, providing new assets to meet demand, including conditions on development applications to build new infrastructure and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures (NAMS and IPWEA, 2011). An example of how Mareeba uses non-asset demand management solutions is enacting water restrictions and encouraging water conservation methods during periods of drought.

Asset Planning

The LGIP establishes assumptions about future growth and urban development including the assumptions of demand for each trunk infrastructure network, the priority infrastructure areas and the desired standards of service for each trunk infrastructure network the desired standard of performance. Schedules of works for existing and future trunk infrastructure have been developed for water supply, wastewater, storm water, transport, public parks and land for community facilities (Jacobs Pty Ltd, 2018). The LGIP Schedules of Works inform the capital works planning processes and development approval conditions.

7. Lifecycle Management

Background Data

MSC uses Technology One to store asset data. Council has well developed asset registers including most core asset data such as asset ID, description, replacement value, depreciation, year of installation and essential financial reporting information.

“Asset condition is a measure of the asset's physical integrity. Information on asset condition underpins effective, proactive asset management programs by enabling prediction of maintenance, rehabilitation and renewal requirements. Asset condition is also critical to the management of risk, because it is linked to the likelihood that the asset will physically fail.” (IPWEA, 2011).

Condition assessments are currently managed differently depending on asset class and asset criticality. Condition assessments are scheduled to meet regulatory requirements and inform the capital renewal planning process. In addition to defect identification, an overall condition rating is assigned to the asset which is used to inform the capital renewal prioritisation process.

Table 4 Condition Rating Criteria

Score	Score Description	Criteria
1	Very Good	Approximately 0 - 20% of useful life consumed.
2	Good	Approximately 20 - 40% of useful life consumed.
3	Fair	Approximately 40 - 60% of useful life consumed.
4	Poor	Approximately 60 - 80% of useful life consumed.
5	Very Poor/Unsafe	Approximately 80 - 100% of useful life consumed.

(Mareeba Shire Council, 2020)

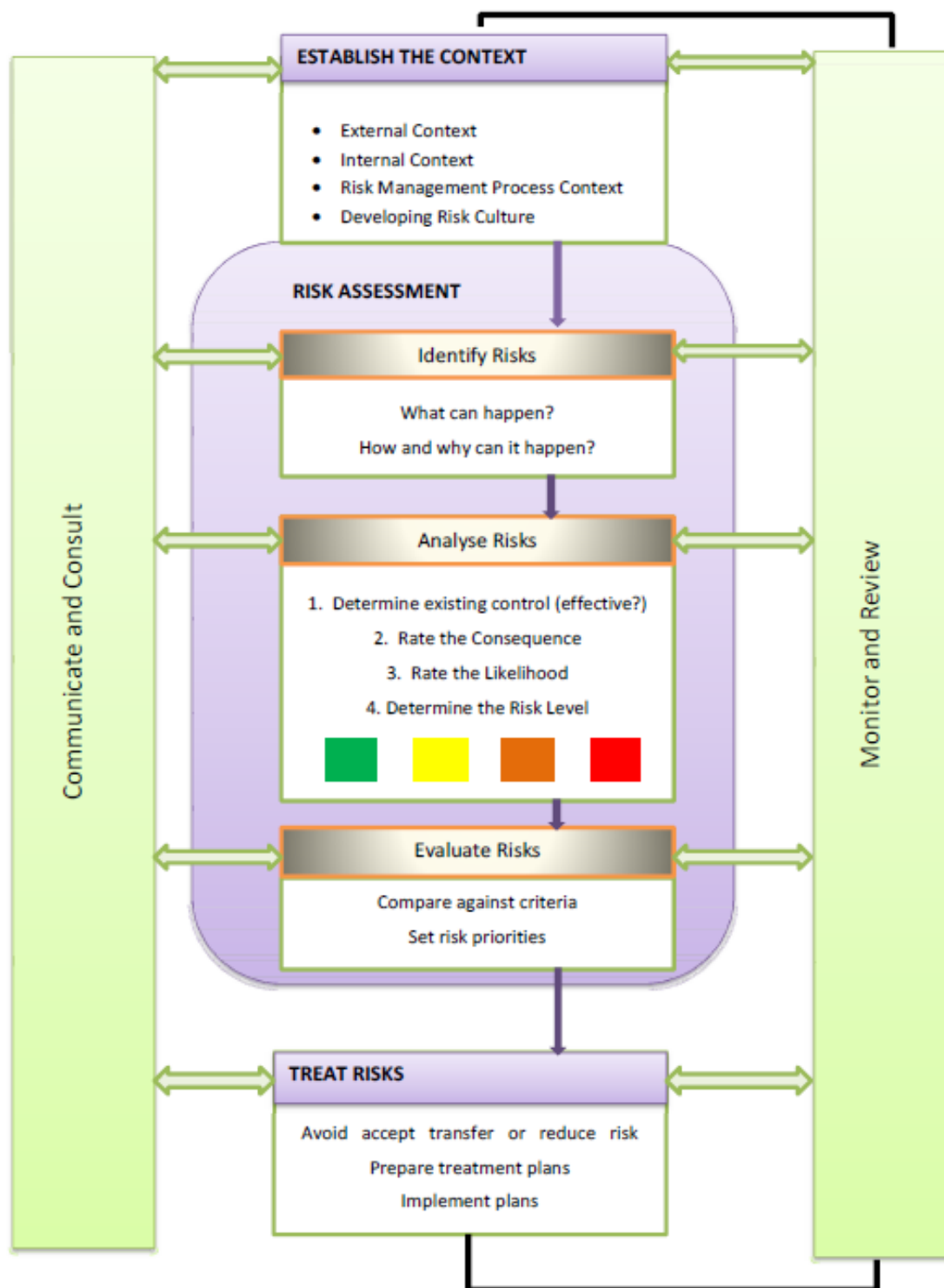
MSC has prioritised asset data verification, including condition assessment and defect identification, as a primary strategic focus area for improvement and this has been captured as an initiative in the Operational Plan.

Risk Management

Asset risks are managed using Council's Enterprise Risk Management Framework, Policy and Process. AS/NZS ISO 31000 defines risks as events that may cause failure to achieve objectives. Risk management involves identifying risks, evaluating them and managing the risks. Mareeba Shire has completed initial network level risk assessments for each asset class and has used this to inform the development of the Project Prioritisation Tool.

In addition, for each capital project proposal, a basic risk assessment of the current situation to the Council and the community is completed. This shows the risk of 'doing nothing'. Risk is assessed by combining the likelihood of a risk occurring and the consequence of the risk should the event occur. This is consistent with the AS NZS ISO 31000:2009 Risk Management Standard.

Table 5 Summary of Council's Risk Management Process



(AS/NZS ISO 31000:2009)

Critical Assets

Critical assets are those which are the most important for delivering the required service, and/or have the highest consequences, but not necessarily a high likelihood, of failure (IPWEA, 2011). The failure impact factors currently considered in our risk management framework include Health and Safety, Environment, Financial, Service Delivery/IT, Infrastructure and Assets, Legal/Compliance and Political/Reputation (Mareeba Shire Council, 2019).

Critical assets are a primary focus of the individual asset management plans for prioritised risk treatment. For Mareeba Shire Council it is proposed that critical assets could include the assets identified in Table 6.

Table 6 Examples of Possible Critical Assets

Asset Class	Critical Assets	Likelihood of Failure	Consequence of Failure	Risk Rating
Transport	Bridges and Major Culverts	Rare	Catastrophic	Moderate
Water	Treatment Plants	Possible	Major	Significant
	Reservoirs	Possible	Major	Significant
	Trunk Mains	Possible	Major	Significant
Wastewater	Treatment Plants	Rare	Major	Moderate
	Pump Stations	Possible	Major	Significant
	Trunk Mains	Unlikely	Major	Moderate
Facilities	Aviation Facilities	Rare	Catastrophic	Moderate
Parks and Open Spaces	Playground Equipment	Unlikely	Major	Moderate
Waste	Mareeba Landfill	Unlikely	Major	Moderate

Operations and Maintenance Plans

"Maintenance includes all actions necessary for keeping an asset as near as possible to its original condition but excluding rehabilitation or renewal. Maintenance slows down deterioration and delays the need for rehabilitation or replacement. It ensures that Council can continue delivering the required level of service." (IPWEA, 2011)

Operations and Maintenance planning processes are tailored for each asset class to comply with relevant legislation and regulations. Operations and maintenance works are progressively being incorporated into the TechnologyOne Works Order module so that planned maintenance can be scheduled and tracked, and defects and unplanned maintenance can be recorded and analysed.

Capital Investment Decisions

MSC's Project Prioritisation Tool (PPT) is used to apply Council's adopted decision criteria to all potential projects. The PPT uses both a multicriteria analysis and risk assessment to inform capital investment decisions. This assessment is combined with remaining useful life, condition data and the LGIP Schedules of Works to form the basis of the 10 year works plan for each asset class. Projects are entered in the PPT from a variety of sources including condition assessments, asset register renewal data, community and Councillor requests. Council's initiative to verify asset data (see [Table 10 Strategy One: Develop our asset knowledge](#)) will improve the quality of information available to inform our capital investment decisions.

8. Financial Summary

"Financial and asset management should complement each other rather than there being a separation between the activities. Outputs from asset management strategies and activities should flow into financial management processes and vice versa. Much more financial information is typically required to properly manage assets than might be required to comply with regulatory or accounting standards" (IPWEA, 2011) .

Mareeba Shire's Long Term Financial Plan presents a point in time forecast, and whilst it complies with accounting standards and regulation, there is an identified opportunity to improve and ensure a seamless connection between the asset management strategies and activities and the long-term financial plan. The central component of this improvement process is to undertake asset data verification, and this has been committed to by Council in the annual Operational Plan.

The Water Capital Expenditure Forecast increase in 2032 is for planned upgrades to the Mareeba Water Treatment Plant and these are addressed in the Water Asset Management Sub Plan. Waste capital expenditure is on hold while the Regional Waste Plan is developed.

Table 7 Ten-Year Capital Expenditure Forecast (\$,000)

Asset Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Buildings	2,930	1,093	1,122	1,151	1,182	1,194	1,223	1,253	1,283	1,314
Plant & equipment	1,800	885	910	931	955	977	1,003	1,029	1,055	1,081
Roads, drainage & bridges	7,671	9,184	9,451	9,721	9,986	10,274	10,515	10,772	11,037	11,311
Parks and Open Spaces	2,020	1,237	79	81	83	85	87	89	5,311	778
Water	2,632	7,518	4,394	7,161	4,359	3,977	5,684	5,644	36,359	4,135
Wastewater	5,686	7,162	2,862	7,814	2,206	2,939	3,162	2,939	4,270	4,000
Waste⁵	-	-	-	-	-	-	-	-	-	-
Total	22,739	27,079	18,818	26,859	18,771	19,446	21,674	21,726	59,315	22,619

Table 8 Ten-Year Operational Expenditure Forecast (\$,000)⁶

Asset Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Buildings	4,415	4,525	4,639	4,754	4,873	4,995	5,120	5,248	5,379	5,514
Plant & equipment	2,441	2,502	2,565	2,629	2,694	2,762	2,831	2,902	2,974	3,048
Roads, drainage & bridges	10,459	10,720	10,988	11,263	11,545	11,833	12,129	12,432	12,743	13,062
Parks and Open Spaces	1,840	1,886	1,933	1,981	2,031	2,082	2,134	2,187	2,242	2,298
Water	5,806	5,951	6,100	6,252	6,409	6,569	6,733	6,902	7,074	7,251
Wastewater	3,926	4,024	4,125	4,228	4,334	4,442	4,553	4,667	4,783	4,903
Waste	4,014	4,114	4,217	4,323	4,431	4,541	4,655	4,771	4,891	5,013
Total	32,901	33,724	34,567	35,431	36,317	37,224	38,155	39,109	40,087	41,089

⁵ Waste capital expenditure is on hold until the Regional Waste Plan is developed.

⁶ Includes Depreciation Expense

9. Asset Management Maturity

Our Asset Management Continuous Improvement Process is outlined in [Figure 6 Asset Management Continuous Improvement Process \(IPWEA, 2018\)](#).

The first step is to assess asset management performance. Council officers assess and review our asset management processes and documentation on an annual basis and identify improvement actions. The annual maturity assessment is based on the core Asset Management Plan Structure in the International Infrastructure Management Manual and is consistent with the Institute of Public Works Engineering Australia (IPWEA) NAMS.PLUS guidelines. The second step is moderation by the relevant Senior Management Team members, and then reporting to EMT so that priorities and methodology for improvements can be agreed.

The maturity assessment and improvement actions are captured in the TechnologyOne Database, including historical information, so that progression and improvements can be tracked. Key priorities are included in the Operational Plan (step three), so that delivery of the improvements (step four) can be monitored through formal corporate processes by Council (step five).

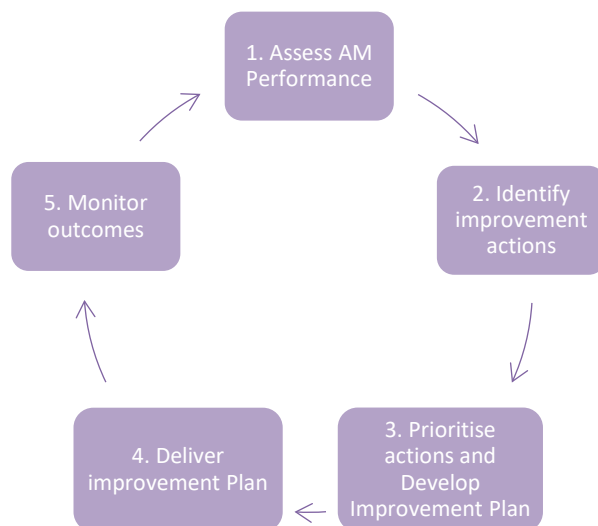


Figure 6 Asset Management Continuous Improvement Process (IPWEA, 2018).

Our goal is to work towards 'Core' asset management maturity, and strategies have been developed to commence this improvement progress. An Asset Management Plan at a 'Core' level of maturity contains asset data including: condition and performance information, description of services, service levels, critical assets, future demand forecasts, asset management processes, a ten-year financial forecast and a three-year improvement plan. This is considered the level of information needed to enable Council to meet the required level of service in the most cost-effective manner, through management of assets for present and future customers. It allows Council to look at the lowest long-term cost rather than short term savings when making decisions. (IPWEA, 2011)

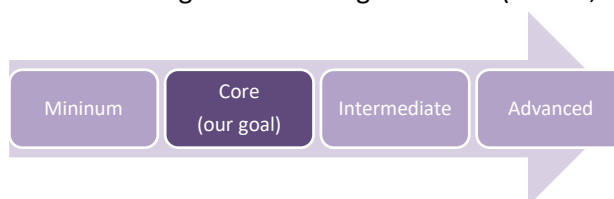


Figure 7 Asset Management Improvement Maturity Index (IPWEA, 2011)

The Asset Management Plan Structure is detailed in Table 8 (IPWEA, 2011) and questions have been developed to ascertain our progress.

Table 9 Asset Management Plan Structure and Maturity Review Questions

1. Levels of Service	
Customer research and expectations	<ul style="list-style-type: none"> Customer request (CR) history used? Community Plan information used?
Strategic and corporate goals	<ul style="list-style-type: none"> Do strategic and corporate goals reflect service delivery?
Legislative requirements	<ul style="list-style-type: none"> Referenced and being implemented?
Current levels of service (what we provide now)	<ul style="list-style-type: none"> Documented? Financial analysis complete? Target KPIs? Measured and reported?
Desired levels of service	<ul style="list-style-type: none"> Desired levels of service (what the community would like).
2. Future Demand	
Demand drivers	<ul style="list-style-type: none"> Considered? Documented?
Demand forecast	<ul style="list-style-type: none"> Are upgrades reactive or planned? Are PIP assets planned and budgeted?
Demand impact on assets	<ul style="list-style-type: none"> Demand analysis predicts changes in utilisation. Impacts of new & upgraded assets on existing assets considered?
Demand management plan	<ul style="list-style-type: none"> Any demand management processes in place or documented?
Asset programs to meet demand	<ul style="list-style-type: none"> Is there a long-term asset upgrade/new program identified to meet projected demand? Are any major projects identified formally or informally to meet expected demand increases?
3. Lifecycle Management	
Background Data	<ul style="list-style-type: none"> How current, reliable and complete is data (age, condition, capacity, performance, historical data). How easy is it to retrieve data in the format you require?
Risk Management Plan	<ul style="list-style-type: none"> Network level risk assessment complete? Critical assets and any other high-risk assets identified? Risk mitigation plan in place for these assets? Priority on critical assets for renewal over other asset renewals or upgrades?
Routine Operations and Maintenance Plan	<ul style="list-style-type: none"> Reactive or planned maintenance? Documented or captured in works orders? Maintenance cost forecasts informing the LTFP?
Renewal Plan	<ul style="list-style-type: none"> Has a 10-year forecast been prepared using: Asset useful lives checked against operational knowledge? Network level risk assessment informs asset renewals? Asset renewal plan documented? Or are renewals funded reactively (when they are failing)?
Creation/Acquisition/Upgrade Plan	<ul style="list-style-type: none"> Has a 10-year forecast been prepared based on demand analysis, condition assessment and risk management? Is the forecast optimised based on whole of life costing (including operating and maintenance expenditure), or are upgrades proposed in an ad-hoc manner? Is there any process in place to determine the cumulative consequences of asset growth?
Disposal Plan	<ul style="list-style-type: none"> Has an assessment of no longer required assets been completed and plans made to dispose or decommission?
Service Consequences and Risks	<ul style="list-style-type: none"> Have service consequences and risks associated with budget constraints (inability to complete identified projects) and been documented?
4. Financial Summary	
Financial Statements and Projections	<ul style="list-style-type: none"> Financial reporting shows historical trends and current position for operational / maintenance / renewal / upgrade / expansion costs.
Funding Strategy	<ul style="list-style-type: none"> Has 10-year renewal and upgrade forecast been matched to available funding? Have any methods of raising additional revenue or managing risks been identified for unfunded projects?
Valuation Forecasts	<ul style="list-style-type: none"> As per accounting standards.
Financial Assumptions	<ul style="list-style-type: none"> As per accounting standards.
Forecast Reliability and Confidence	<ul style="list-style-type: none"> Reviews of useful life, residual method and depreciation method are carried out and documented annually. All assets with remaining life of < 2 years are reviewed against forward works programs and useful/remaining life adjusted to recognise projected remaining life (in progress). Asset reporting functionality
5. Improvement and Monitoring	
Asset Management Maturity	<ul style="list-style-type: none"> Basic, core or advanced?
Improvement Program	<ul style="list-style-type: none"> Any informal or documented improvements in place?
Monitoring and Review	<ul style="list-style-type: none"> Are procedures monitored for compliance or reviewed for improvement?
Performance Measures	<ul style="list-style-type: none"> Are identified KPI's collected, monitored and used for improvements?

10. Asset Management Strategies

Two strategies have been developed to mature Mareeba Shire Council's asset management processes and implement an integrated risk-based plan that delivers an optimal balance between affordability and levels of service.

Table 10 Strategy One: Develop our asset knowledge

Improvement Action	Desired Outcome	Council's Current Commitments	Corporate Plan Goal - Line of Sight
1.1 Further develop and annually review individual Asset Management Plans across the organisation.	Individual asset management sub plans workshopped with Council.	Operational Plan Project to continue to review Asset Management Sub Plans across asset classes	FIN1 Long-Term Financial Plan that supports effective and sustainable financial management Maintain and enhance long-term financial plans. All decisions should support Council's strategic direction of financial sustainability.
1.2 Develop sustainable and fair levels of service and performance monitoring framework with a clear line of sight to Corporate Goals.	Ensure that service levels are written in terms the end user can understand and relate to.	Include in asset management sub plans referencing and informing Long Term Financial Plan and Forecast.	TCI1 Sustainable Infrastructure for the future Maintain Council infrastructure that sustains industry and development and supports future growth of the region. Where possible develop infrastructure to mitigate against future severe weather events.
1.3 Improve our ability to forecast, manage and plan for new assets to meet future demand.	Better utilisation of existing assets and reduction in capital expenditure where possible.	Include in asset management sub plans referencing and informing the Local Government Infrastructure Plan (LGIP).	TCI4 Public spaces and facilities Encourage partnerships with community, private sector and government to better utilise council facilities and spaces. EAE1 Environmentally responsible and efficient waste and wastewater management Promote the minimisation of waste the community creates.
1.4 Verify data in asset registers.	To maintain and improve confidence in asset register data.	Continue improving data verification.	TCI1 Sustainable Infrastructure for the future Maintain and enhance Asset Management Plans.
1.5 Progressively improve planned condition and defect inspection programs.	Improve understanding of the existing assets to facilitate better decision making.	Continue improving condition assessments and defect identification using TechnologyOne mobility and defect capture modules.	TCI1 Sustainable Infrastructure for the future Maintain and enhance Asset Management Plans Operate, maintain and renew existing Council infrastructure in accordance with Long Term Asset Management Plan. Maintain Council infrastructure that sustains industry and development and supports future growth of the region.
1.6 Review all asset classes to confirm and document critical assets and high-level business risks for all asset classes.	Allow Council to understand its overall risk exposure and plan to manage risk to acceptable levels.	Review and refine as asset management sub plans are developed.	GOV2 Strong focus on compliance and enterprise risk Enterprise risk management process is commonly understood across the organisation to manage risk identification and cost effectively control identified risks

Table 11 Strategy Two: Mature our Asset Lifecycle Management

Action	Desired Outcome	Actions	Corporate Plan Goal - Line of Sight
2.1 Increase use of whole of life costing and optimisation for capital investment decision making.	To ensure all aspects of financial sustainability are considered in the capital works planning process.	Continue including whole of life cost as a criterion in the Project Prioritisation Tool and as a focus for investments	FIN1 Long-Term Financial Plan that supports effective and sustainable financial management All decisions should support Council's strategic direction of financial sustainability
2.2 Review and improve capital project acceptance criteria, multicriteria analysis and risk-based decision framework in the Project Prioritisation Tool (PPT).	To continually improve decision making on all projects and to ensure the best outcome for the whole community is achieved.	Annually reviewed and adopted by Council prior to Capital Works proposal identification.	GOV2 Strong focus on compliance and enterprise risk Enterprise risk management process is commonly understood across the organisation to manage risk identification and cost effectively control identified risks.
2.3 Refine Operational Strategies.	Effective asset utilisation and readiness for incident response.	Ensure operational plans and processes are identified and included in asset management sub plans. Refine and develop new plans if gaps are identified for improvement.	TCI1 Sustainable Infrastructure for the future Operate, maintain and renew existing Council infrastructure in accordance with Long Term Asset Management Plan.
2.4 Refine Maintenance Strategies including Levels of Service and Intervention Levels, workplans for planned and unplanned maintenance.	To deliver the required functionality and performance by retaining an asset as near as practicable to its original condition (excluding rehabilitation and renewal).	Review and refine service levels when asset management sub plans are developed and reviewed, optimising with affordability, risk management and long term financial and infrastructure sustainability.	TCI1 Sustainable Infrastructure for the future Maintain Council infrastructure that sustains industry and development and supports future growth of the region.
2.5 Update the Long Term Financial Plan covering ten years incorporating asset management plan capital and operational/maintenance expenditure projections with a sustainable funding position.	Sustainable funding model to provide Council services.	Update the Long Term Financial Forecast annually with consideration to the updated capital and operational expenditure forecasts developed in each asset management sub plan.	FIN1 Long-Term Financial Plan that supports effective and sustainable financial management Maintain and enhance long-term financial plans
2.6 Ensure the Long Term Financial Plan continues to form the basis for the annual budgets.	Long term financial planning drives budget deliberations.	Implement annually during the budgeting process. Ongoing improvements to be included in the LTFF with new information from asset management sub plans.	FIN1 Long-Term Financial Plan that supports effective and sustainable financial management All decisions should support Council's strategic direction of financial sustainability

11. References

AS/NZS ISO 31000:2009. (n.d.). *AS/NZS ISO 31000:2009*.

IPWEA. (2011). *International Infrastructure Management Manual*.

IPWEA. (2018). *NAMS.plus3 Asset Management Plan*.

Jacobs Pty Ltd. (2018). *Local Government Infrastructure Plan*.

Mareeba Shire Council. (2019). *Risk Management Framework*.

Mareeba Shire Council. (2020). *Project Prioritisation Tool, Condition Criteria*.

Mareeba Shire Council. (2020). *Statewide Water Information Management*. Queensland Water Directorate.

Mareeba Shire Council. (2021). *Asset Register Report*.

Mareeba Shire Council. (2021). *Long Term Financial Plan*.

NAMS and IPWEA. (2011). *International Infrastructure Management Manual*. National Asset Management Steering Group (NAMS) and Institute of Public Works Engineers Australia (IPWEA).