ASSET MANAGEMENT PLAN

Cloncurry Shire Council

Sewer Infrastructure

Cloncurry Shire Council

Document Control	Asset Management Plan				
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V1.12	Nov 2022	Draft Plan for IPWEA Pro Cert Course	PK	PK	
V1.13	Nov 2022	Renewal data updated	PK	PK	
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V1.15	Mar 2025	Update and align to ISO55000:2024 Update in line with 2024-25 LTFF and 30.06.24 valuations	AR BC PK	PK	Council

The entity can choose either template to write/update their plan regardless of their level of asset management maturity and in some cases may even choose to use only the Executive Summary.

The illustrated content is suggested only and users should feel free to omit content as preferred (e.g. where info is not currently available).

This Asset Management Plan may be used as a supporting document to inform an overarching Strategic Asset Management Plan.

Contents

1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

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

1.2 Asset Description

This plan covers the infrastructure assets that provide wastewater collection, treatment and release to land services.

The wastewater network comprises:

- Sewerage Treatment Plant (including civil, mechanical, electrical) with a replacement value of **$15,611,462**
  - Cloncurry: **$14,777,046**
  - Dajarra: **$834,416**
- Pump Stations in Cloncurry and Dajarra with a replacement value of **$3,704,846**
  - Cloncurry: **$3,441,621**
  - Dajarra: **$263,225**
- Sewer mains in Cloncurry and Dajarra with a replacement value of **$15,551,825**
  - Cloncurry: **$14,307,542**
  - Dajarra: **$1,244,283**
- Manholes in Cloncurry and Dajarra with a replacement value of **$3,216,955**
- Fencing, irrigation and other sewer infrastructure with a replacement value of **$673,026**

The above infrastructure assets have replacement value estimated at **$38,758,114.**

1.3 Levels of Service

Sewerage services are largely governed and regulated by the State government. Statutory requirements set the framework for minimum levels of service required, which is complemented by Cloncurry Shire Council's Water & Wastewater Customer Service Standards.

This Plan provides an outline of Customer and Technical levels of service. These levels of service are focused on maintaining regulatory standards and service response times. Current levels of service are used as the baseline in developing the operational, maintenance, renewal and upgrade/ new funding requirements outlined in this Plan.

The allocation in the planned budget is sufficient to continue providing existing services at current levels for the planning period, subject to Council being able to access external grant funding to complete major renewal projects. Historically, this has not been an issue.

The main service consequences of the Planned Budget are:

- Council has some short-term renewal/replacement requirements for sewer pump stations in Cloncurry and Dajarra to complete in order to meet is obligations as a provider of wastewater services. These replacement projects are only partially covered by the existing budget and renewals forecast but should be fully covered if Council can attract external funding.
- Council is able to maintain the provision of wastewater services to the townships of Cloncurry and Dajarra over the long-term

1.4 Future Demand

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

- Population growth (in-fill and new subdivisions in Cloncurry, mining accommodation in Dajarra)
- Extension of sewage collector network in Cloncurry to capture existing properties
- Climate change and natural disaster

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 includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the 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 Council's wastewater assets is estimated as $18,304,700 or $1,830,470 on average per year.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10 year period is $13,134,853 or $1,313,485 on average per year as per the Long-Term Financial plan or Planned Budget. This is **71.76%** 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. The 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 wastewater assets leaves a shortfall of **$-516,985** 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.

Forecast Lifecycle Costs and Planned Budgets

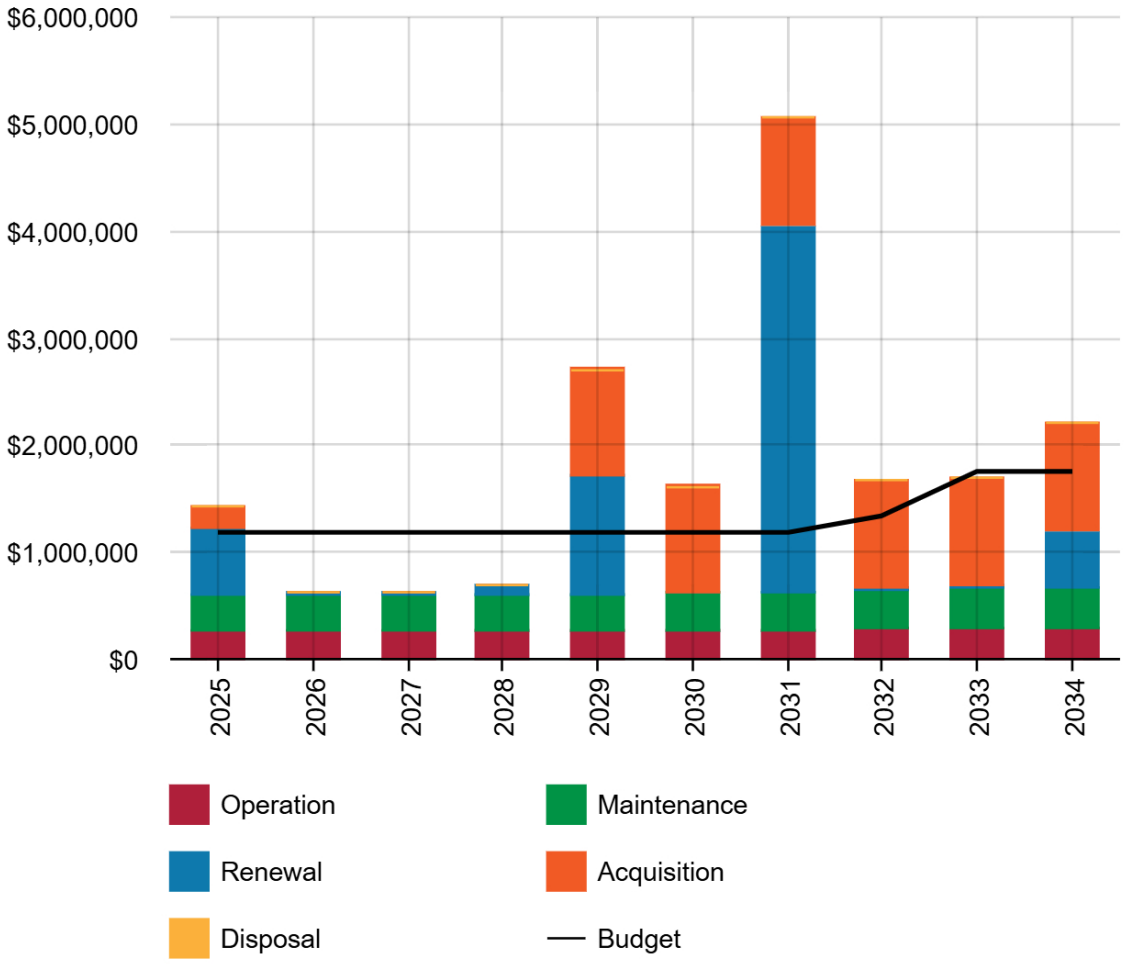


Figure Values are in current dollars.

We plan to provide wastewater services for the following:

- Operation, maintenance, renewal and acquisition of **wastewater assets** to meet service levels set by Council in annual budgets.
- Renewals/replacements of sewage pump stations and underground assets, and the acquisition and integration of SCADA within the 10-year planning period.

1.6.2 What we cannot do

Council is reliant on grant funding to progress major capital projects.

Our present budget levels are sufficient to continue to manage risks in the medium term, provided Council is able to continue accessing external grant funding (NWGF, LGGSP, BOR, Works 4 Queensland etc.) to off-set costs for major renewals.

The main risk consequences are:

- Geopolitical impacts on costs and supply chains
- Staff turnover and loss of corporate knowledge and capability to roll out medium-, to long-term projects
- Climate change and natural disaster impacts on wastewater operations

- Failing to attract sufficient levels of grant funding to deliver major renewals and acquisitions

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

- Procuring strategically (e.g., principal-supplied materials etc.)
- Building long-term relationships with key stakeholders: Regulator, QWRAP / regional councils, suitable engineering and environmental consultancies and so forth.
- Building appropriate resiliency into wastewater assets to best mitigate/manage risks posed by climate change and natural disaster
- Maintaining quality grant submission practices and relationships with relevant Departments

1.7 Asset Management Planning Practices

Key assumptions made in this AM Plan are:

- The timing and value of capital renewals is based on the asset register (applied by adding the useful life to the year of acquisition or year of last renewal).
- The Asset Register method was used to forecast the renewal lifecycle costs for this AM Plan. The Asset Register is based on the valuation as at 30 June 2024 (desktop review).

This AM Plan is based on a mix of reliable and uncertain 'level of confidence' information.

1.8 Monitoring and Improvement Program

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

Task	Task	Responsibility	Resources Required	Timeline	Status
1	Review Council's Customer Service Standards for Water & Wastewater Services	Manager Infrastructure	Staff time	Mar 23	Reviewed but no updated
2	Scope and deliver 3 x SPS replacement projects	Operations Projects	$360,000 Staff time	Nov 23	Nov 25
4	Adopt monthly reporting on key SWIM data as this relates to wastewater assets	Manager Infrastructure	Staff time	Sep 23 Mar 24	In place
5	Report on Queensland's Urban Potable Water & Sewerage Benchmarking Report when released	Director Infrastructure & Environment	Staff costs	Nov (annual)	In place
6	Update website to provide relevant information on Council's wastewater treatment services	Operations Media & PR	$5,000	Mar 23	In place
7	Complete lagoon de-sludging project in Cloncurry and Dajarra	Manager Infrastructure	$50,000	Dec 23 Ongoing	Cloncurry: ongoing Dajarra: not commenced
8	Maintain trend data on release to land parameters and report to Council / DES	Manager Planning & Environment	$10,000 Staff Time	Monthly	Implemented

Task	Task	Responsibility	Resources Required	Timeline	Status
9	Release to land at Equestrian Centre operational (irrigation, agreements, baling etc.)	Director Inf & Environment	$50,000 (asset, legal, procure)	Dec 23	Not progressed
10	Complete detailed inspection / valuation of all wastewater assets (except underground assets)	Operations Corporate Services	~$30K (portion of comp asset valuation)	Jun 23	Completed June 2023
11	Operational/Maintenance checklists are entered into Reflect (daily, weekly, monthly etc.) and monthly reporting generated	Manager Infrastructure	$20,000 (Civica) Staff time	Dec 23	Completed
12	Accurate and accessible GIS database of wastewater infrastructure	Asset Engineer Projects	$20,000 Staff time	Jun 23	In progress
13	Complete detailed inspection of all remaining underground wastewater assets in Cloncurry	Manager Infrastructure	$90,000	Dec 24	30% completed
14	Complete inspection of underground wastewater assets in Dajarra	Manager Infrastructure	$45,000	Dec 25	Not commenced
15	Progressive replacement of underground wastewater assets	Manager Infrastructure	Unknown	TBC	Planning via QWRAP

2.0 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 a range of other documents. This should include the Asset Management Policy and Asset Management Strategy, where developed, along with other key documents:

- Corporate and Operational Plans
- Cloncurry Shire Council's annual SWIM data submission
- Council's Environmental Authority for operating the sewerage treatment schemes in Cloncurry and Dajarra

The infrastructure assets covered by this AM Plan include wastewater assets in Cloncurry and Dajarra: reticulated/collector network, treatment facilities and so forth. For a detailed summary of the assets covered in this AM Plan refer to Table in Section 5.

These assets are used to provide wastewater collection, treatment and release to land services.

The infrastructure assets included in this plan have a total replacement value of **$38,758,114**

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
Elected Members	▪ Represent needs of community/shareholders, ▪ Allocate resources to meet planning objectives in providing services while managing risks, ▪ Ensure service sustainable.
CEO	▪ Manage the delivery of the organisation's objectives
Directors	▪ To ensure that the asset management policy and strategy are being implemented. ▪ To ensure that financial, asset and community sustainability are embedded in decision making in relation to asset acquisitions, replacements, renewals, disposals and any relevant operational/maintenance programs.
Infrastructure & Environment	▪ Develop annual and medium-term operation and maintenance programs ▪ Seek continual improvement in asset maintenance and operations ▪ Key stakeholder in asset acquisition, renewal, replacement and disposal decisions. ▪ Provide regular reporting on the compliance of services ▪ Provision of reporting on the performance of the service against budget ▪ Complete SWIM reporting ▪ Manage relationship with Regulator
Projects	▪ Coordinate CapEx prioritisation processes ▪ Deliver CapEx projects in line with Project Assessment Framework and Project Management Framework
Procurement	▪ To ensure Asset Management principles are embedded into RFQ and RFT processes for asset acquisitions, replacements, renewals, disposals and any relevant operational/maintenance arrangements. ▪ Work with Infrastructure and Environment to maintain inventory of critical spares
Corporate Services	▪ Coordinate and provide assistance with budgetary processes ▪ Provide assistance and guidance on monthly reporting
Work Health & Safety	▪ Provide oversight and guidance in relation to fulfilling PCBUs WHS obligations
External consultancies	▪ Engineering/environmental: provide subject matter expertise where required to inform asset management processes, practices and decisions. ▪ Engineering/environmental: provide advice, support and/or oversight of SCADA ▪ Rates: provide guidance and advice on setting utility pricing ▪ Laboratories: provide testing

Our organisational structure for service delivery of wastewater infrastructure is **NOT incorporated here**.

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, and
- 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 – identifying risks and risk mitigation opportunities
- Future demand – how this will impact on future service delivery and how this is to be met,
- Lifecycle management – how to manage its 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:

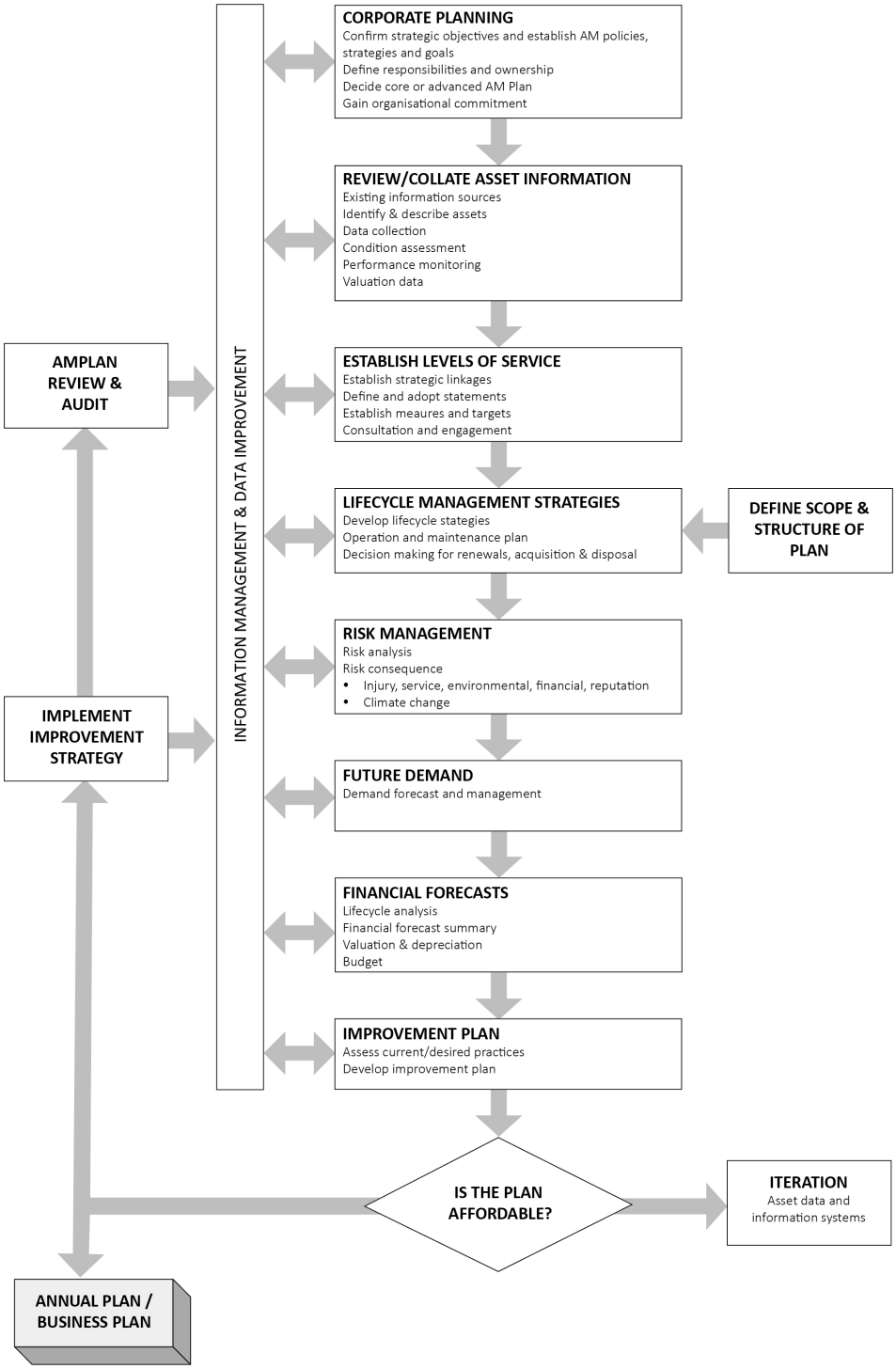
- ISO 55000:2024 Asset Management – Vocabulary, overview, and principles
- International Infrastructure Management Manual 2015 [1]
- ISO 55000[2]

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

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

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11



3.0 LEVELS OF SERVICE

3.1 Customer Research and Expectations

This AM Plan is prepared with reference to our regulatory obligations as a registered wastewater services provider and with reference to Council's Customer Service Standards.

3.2 Strategic and Corporate Goals

This AM Plan is prepared under the direction of the Cloncurry Shire Council vision, mission, goals and objectives.

Our vision is:

Cloncurry: a growing Shire renowned for its friendliness and prosperity, for its outstanding communities, lifestyle, and endless opportunities.

Strategic goals have been set by the Cloncurry Shire Council. The relevant goals and objectives and how these are addressed in this AM Plan are summarised in Table 3.2.

Table 3.2: Corporate Plan Goals related to wastewater

FOCUS	ACTIVITY	MEASURE	STATUS
3. Building and Maintaining Our Infrastructure KSA3: Our infrastructure is strategically planned and well maintained to ensure the delivery of quality services to our community and to facilitate growth opportunities where viable.			
3.1 Asset management framework and capabilities	Council develops, implements, and maintains an effective and compliant asset management framework.	• Asset Management Plans in place and updated for all asset classes	In place
3.2 Asset investments: transport, utilities, buildings, sport and recreation, plant, and fleet	Council manages, maintains, renews, and upgrades assets in line with relevant plans, policies, strategies, budgets and in line with relevant funding program requirements.	• Whole of Life Costing embedded in all asset investment decisions. • Operating surplus ratio	In place. Council in operating surplus. Sewer not in operating surplus
3.4 Efficient and effective services	Council invests in projects and initiatives that improve efficiencies in service delivery while achieving the same or a higher level of service.	• Operating Surplus Ratio	Council in operating surplus. Sewer not in operating surplus.
4. Valuing Our Environment KSA4: Our natural resources are valued, our cultural heritage is protected, and our landscape amenity is improved.			
4.4 Utilities	Council's utility services are efficient, effective, and compliant with the Environmental Authorities and other regulatory instruments that govern these services	• Compliance with EA – Wastewater • OpEx cost of service per capita	Generally compliant

FOCUS	ACTIVITY	MEASURE	STATUS
5. Effective & Inclusive Governance KSA5: Council decision-making processes are efficient, effective, transparent, and inclusive. Decision-making promotes and balances the long-term sustainability of our community, our environment, our assets, and our finances. As an organisation, we are committed to quality customer service and continuous improvement.			
5.4 Sustainability	Council's budgeting and investment decisions ensure Council's continued financial sustainability	• Financial sustainability ratios	2023-24: OK, noting that the delay in receipt of the FA Grant impacted some ratios.

3.3 Legislative Requirements

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

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 2009	Adherence to local government principles, including: (a) transparent and effective processes, and decision-making in the public interest; and (b) sustainable development and management of assets and infrastructure, and delivery of effective services
Local Government Regulation 2012	Section 168 A local government's long-term AM 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.
Water Supply (Safety and Reliability) Act 2008	1) The purpose of this Act is to provide for the safety and reliability of water supply. 2) The purpose is achieved primarily by – (a) Providing for – i. a regulatory framework for providing water and sewerage services in the State, including functions and powers of service providers; and ii. a regulatory framework for providing recycled water and drinking water quality, primarily for, - protecting public health; - regulation of referable dams; and - flood mitigation responsibilities and protecting interests of customers of service providers.
Environmental Protection Act 1994	Provides for the granting of environmental authorities for sewage treatment activities (ERA 63). These activities must address the regulatory requirements set out in the Environmental Protection Regulation 2008 and the standard criteria contained in the EP Act.
Public Health Act 2005	The object of this Act is to protect and promote the health of the Queensland public.

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 is 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

Table 3.4: Customer Values

Service Objective:			
Customer Values	**Customer Satisfaction Measure**	**Current Feedback**	**Expected Trend Based on Planned Budget**
No Odour	No odour-based complaints at release to land areas – cemetery, equestrian centre etc. (<2 per annum)[3]	No complaints in previous 12 months at release to land sites. Recent issues with odour in STP lagoons logged and fixed.	Level of satisfaction may be impacted by volumes of treated effluent released to different sites.
No Overflow	No. of incidents and complaints about sewer overflow (<5 per annum)[4]	No complaints in previous 12 months	May increase in short-term due to condition of sewage pump stations in Cloncurry and Dajarra
Incident response timeframes	Time to respond to sewerage incidents:[5] ▪ 98% of incidents responded to within 24 hours ▪ 98% of emergency incidents responded to within 1 hour	Timeframes being met.	Council anticipates meeting response timeframes in the Planning Period
Value for Money	Council rates equal to or lower than Cohort / Statewide benchmark[6]	Council sewer rates are lower than cohort.	Trend to continue

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 measures 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.

[3] https://www.cloncurry.qld.gov.au/downloads/file/805/supporting-doc-6-cloncurry-shire-council-water-customer-service-standardspdf
[4] Ibid.
[5] Ibid.
[6] Sewerage CapEx per connection: Less than State and Cohort media value; Sewerage Operating Cost per connection: Above State and Cohort median value;

These are measures of fact 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
Condition / Quality (what is the condition or quality of the service?)	Condition of wastewater infrastructure does not lead to service interruptions	Sewerage mains breaks / chokes per 100km sewer main (SWIM AS39)	Very few issues registered	Trend likely to continue
	Condition and/or management of wastewater infrastructure does not cause environmental nuisance	Number of sewerage service complaints per 1,000 connections (SWIM CS11)	Very few complaints registered	Trend likely to continue
	Condition and/or management of wastewater network has no negative impact on natural water courses, groundwater, community health		Very few issues registered	Trend likely to continue
	Value for Money	Benchmarking of annual residential sewer bill is less than state-wide median value	Lower than cohort	Trend likely to continue
	Confidence levels		Medium - High	Medium - High
Function (is it the right service?)	Wastewater infrastructure / network is fit for purpose	Benchmarking of annual residential sewer bill is less than state-wide median value	Lower than cohort	Trend likely to continue
	Wastewater infrastructure / network is fit for purpose	Operating Costs per sewerage connection (SWIM FN12)	Favourable to Cohort and Statewide benchmark	Trend likely to continue
	Confidence levels		Medium - High	Medium - High
Capacity (do we need more or less?)	Wastewater infrastructure capable of meeting demands placed on it by users	Monthly testing of release to land parameters for treated effluent	Conforming	Conforming
	Confidence levels		Medium	Medium
Condition / Quality (what is the condition or quality of the service?)	Condition of wastewater infrastructure does not lead to service interruptions	Sewerage mains breaks / chokes per 100km sewer main (SWIM AS39)	Very few issues registered	Trend likely to continue

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. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).
- **Operation** – the regular activities to provide services (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc.
- **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. road patching, unsealed road grading, building and structure repairs),
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[7]

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

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	Installation and integration of SCADA for the wastewater network in Cloncurry	Completed on time and within budget Fit for purpose reporting from SCADA operations	Stage 1 of project delivered: installation of new SCADA in SPS and integration with SCADA at STP.	Monitor system performance.
	Installation of irrigation infrastructure at the Cloncurry Equestrian Centre	Completed on time and within budget (if not installed by external operator)	EOI to be released Q3 2024-25.	Scoping of projects is completed and procurement progressed
		Budget	$129,115	$620,200

[7] IPWEA, 2015, IIMM, p 2|28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
Operation	Wastewater service meets user needs	Average response time for sewerage incidents including mains breaks / chokes	Meeting target	Meeting target
	Wastewater service represents value for money	Sewerage operating cost per connection	Below cohort and Statewide benchmark (refer Queensland's Urban Potable Water & Sewerage Benchmarking Report Feb 2020)	Aim to remain below Cohort and Statewide benchmark (refer Statewide benchmark in Urban Portal Water & Sewerage Benchmarking Report Feb 2020)
	Wastewater service meets requirements of Environmental Authority	Treated effluent release to land parameters met No major compliance breaches	Release to land: conforming Lagoons: free-boarding levels maintained. Vegetation management of lagoons maintained.	Conformance close out being achieved via annual DES inspection (lagoon issues excepted)
		Budget	$260,123	$271,391
Maintenance	Wastewater infrastructure is appropriately maintained	Total sewerage mains breaks and chokes per 100km of mains <20	Meeting performance benchmarks	Meeting performance benchmarks
		Budget	$335,549	$350,181
Renewal	Renewal of Sewage Pumps Stations	Sewage Pump Stations renewed in line with renewal program	Complete comprehensive review / inspection of SPS to generate a works program for maintenance and renewals.	Benchmark renewals per capita against cohort. CSC benchmark may exceed in the short-term based on
	Renewal of reticulated sewer mains	Reticulated network is renewed in line with renewal program	No existing renewal program for reticulated mains	Renewal program to be developed 2025-26.
		Budget	$588,698	$588,698
Disposal	Asset disposal	Wastewater assets disposed of in line with disposal plan	No current disposals plan	Establish a Disposal Plan for the Planning Period based on outcome of condition assessments
		Budget	$0	$0

Note: * Current activities related to Planned Budget.

** Expected performance related to forecast lifecycle costs. These figures are generated by the NAMS+ model following data inputs (Asset Register information + current cash allocations to the relevant asset class).

- Information on benchmarking of water and sewer bills can be accessed via: https://qldwater.com.au/reporting Cloncurry is in the "Medium, Large, Extra Large" cohort of service providers.
- Information on current and historical rates can be found on Council's website in the Financial Management Documents section: https://www.cloncurry.qld.gov.au/council/governance/financial-management-documents

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.

4.0 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, environmental awareness, etc.

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 Plan

The impact 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
Renewal/Replace-ment of assets at end of useful life	At least 3 x SPS require replacement New treatment facility won't require major renewals within Planning Period (10 years)	Scope SPS replacement projects in 2022-23 for delivery in 2023-24 Develop renewals program for reticulated network in 2023-24.	Overall performance	Progress renewals through Council's Project Assessment Framework / Budget Prioritisation process. Aim to access LGGSP or BoR funding or similar
Population growth - Cloncurry	2021 Census indicates population growth of 616 since 2016.	Mild population projected by Council (and now by ABS or QGSO)	Additional services may be required May require additional release to land area in EA for Cloncurry	Increase release to land area in Environmental Authority. Installation of additional release to land irrigation networks
Population Growth / Fluctuation - Dajarra	Phosphate mining activity in Dajarra potentially leading to substantial population fluctuations	+70 persons in Dajarra over the next 1-10 years	Manageable increase in pressure on sewer services	Impact to be monitored.

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 the Cloncurry Shire 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).

4.5 Climate Change Adaptation

The impacts of climate change may have a significant impact on the assets we manage and the services they provide. In the context of the Asset Management Planning process climate change can be considered as both a future demand and a risk.

How climate change impacts on assets will vary depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.[8]

As a minimum we consider how to manage our existing assets given potential climate change impacts for our region.

Risk and opportunities identified to date are shown in Table 4.5.1

Table 4.5.1 Managing the Impact of Climate Change on Assets and Services

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Increased severity and frequency of storm events	Increase in number of declared disaster events	Impact on release to land programming	Increase release to land area and/or increase uses for treated effluent
		Shorter useful life of assets.	Invest in increased asset resilience where appropriate.
		Increased service disruption due to power outages and flood inundation.	Commitment to planned and preventative maintenance.

Additionally, the way in which we construct new assets should recognise that there is opportunity to build in resilience to climate change impacts. Building resilience can have the following benefits:

- Assets will withstand the impacts of climate change;
- Services can be sustained; and
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint

Table 4.5.2 summarises some asset climate change resilience opportunities.

[8] IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

Table 4.5.2 Building Asset Resilience to Climate Change

New Asset Description	Climate Change impact These assets?	Build Resilience in New Works
Release to land infrastructure	Increased inflow and bypass requirements	Increasing the number and size of release to land areas will mitigate issues associated with increased flows, should this be an issue. Increase release to land parameters in the Environmental Authority.

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this AM Plan.

5.0 LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Cloncurry Shire 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

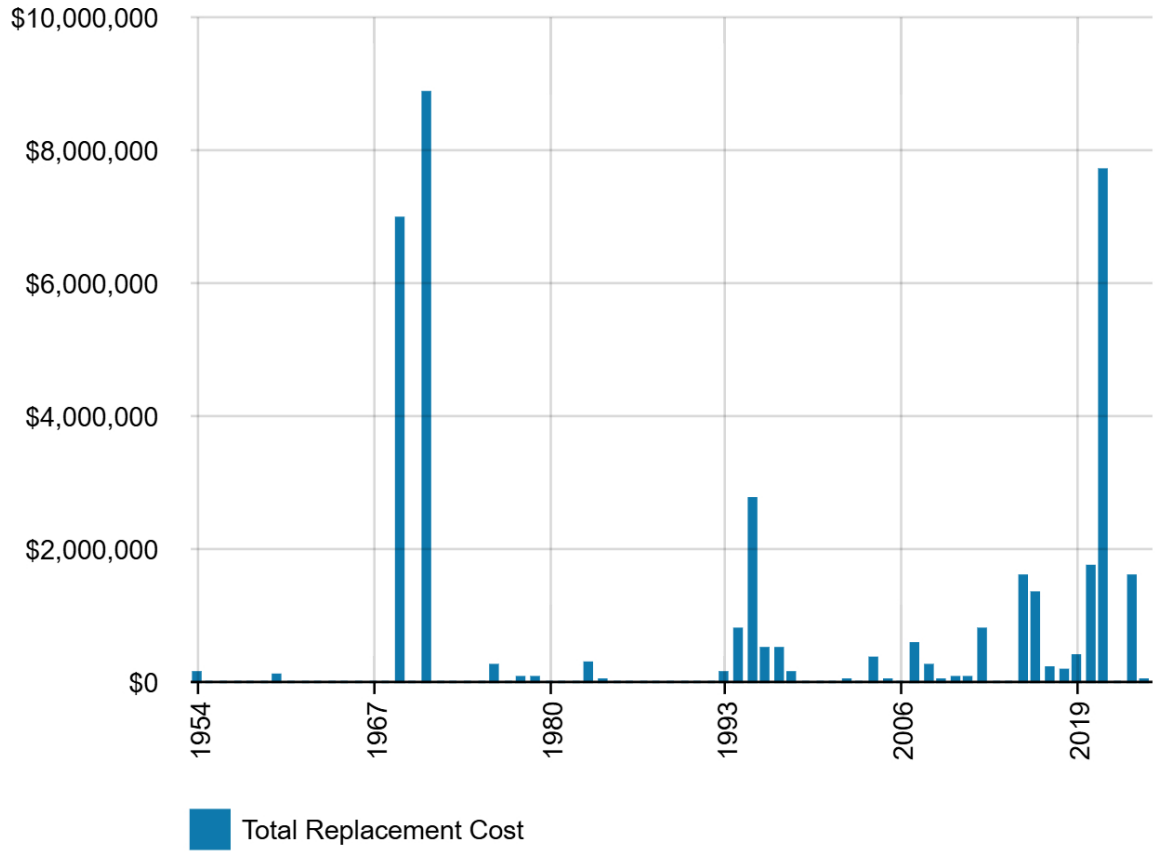
The assets covered by this AM Plan are shown in Table 5.1.1.

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

Table 5.1.1: Assets covered by this Plan[9]

Asset Category	Dimension	Replacement Value
STP (civil, mechanical, electrical) and lagoons	STP + lagoons in CNC Lagoons in DAJ	**$15,611,462**
Sewage Pumps Stations	CNC and DAJ	**$3,704,846**
Sewer mains	CNC and DAJ	**$15,551,825**
Manholes	CNC and DAJ	**$3,216,955**
Other (fencing, irrigation etc.)	CNC and DAJ	**$673,026**
TOTAL		**$38,758,114**

[9] Figures taken from 2021-22 Asset Register prepared by Australis and reviewed by Council.



All figure values are shown in current day dollars.

Add discussion about the age asset profile. Outline how past peaks of investment that may require peaks in renewals in the future. Comment on the overall age versus useful lives of the assets.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there is 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
Alice Street Pump Station	Higher levels of maintenance required to maintain operations
Scarr Street Pump Station	Higher levels of maintenance required to maintain operations
Isley Street Pump Station	Higher levels of maintenance required to maintain operations

The above service deficiencies were identified from Officer feedback and current performance levels.

5.1.3 Asset condition

Condition is currently monitored via routine and specific asset condition assessments.

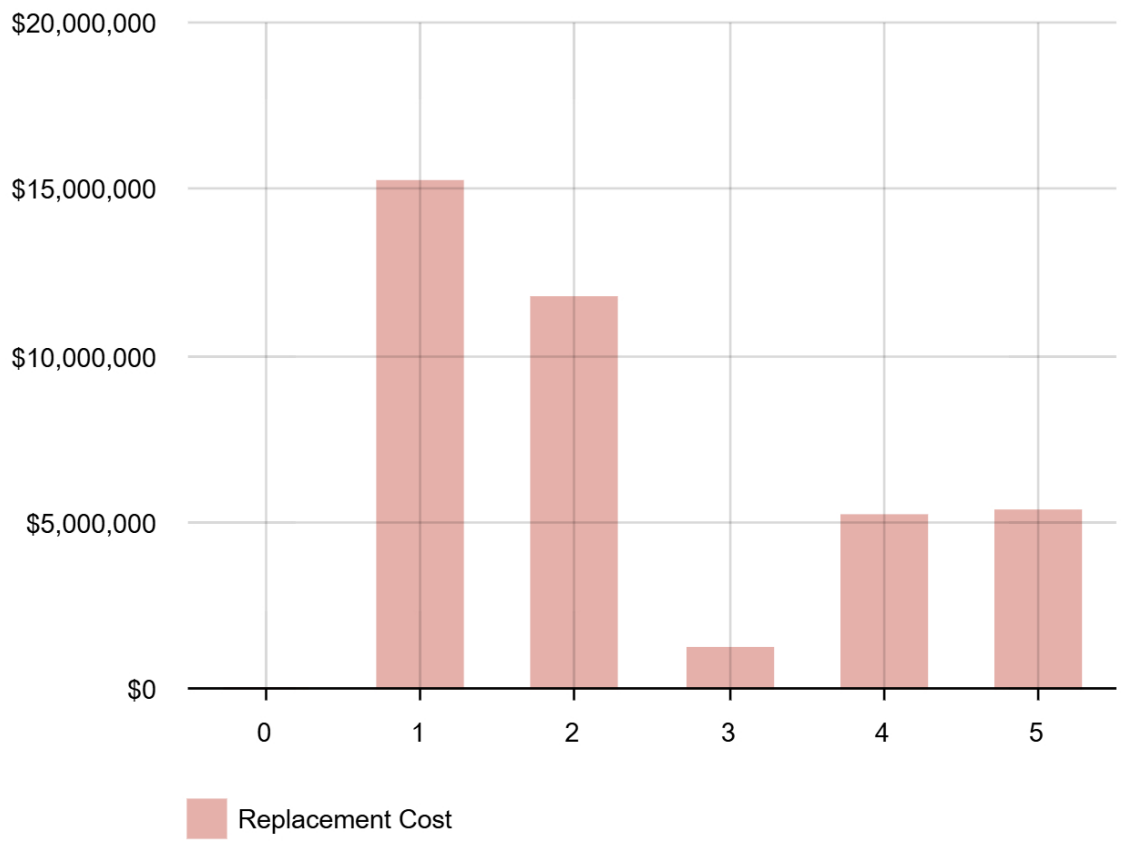
Condition is measured using a 1 – 5 grading system[10] as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

Condition Grading	Description of Condition
1	**Very Good**: free of defects, only planned and/or routine maintenance required
2	**Good**: minor defects, increasing maintenance required plus planned maintenance
3	**Fair**: defects requiring regular and/or significant maintenance to reinstate service
4	**Poor**: significant defects, higher order cost intervention likely
5	**Very Poor**: physically unsound and/or beyond rehabilitation, immediate action required

The condition profile of our assets is shown in Figure 5.1.3.

Figure 5.1.3: Asset Condition Profile



[10] IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

Council has invested significant dollars into lagoon infrastructure (including the new 17ML emergency storage lagoon) and upgrades to its treatment plant in the last five years. For this reason, the value of Condition 1 assets is high. Council has less information around the balance of its underground sewer assets.

All figure values are shown in current day dollars.

5.2 Operations and Maintenance Plan

Operations include regular activities to provide services. Examples of typical operational activities include cleaning, street sweeping, asset inspection, and utility costs.

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 repairs, asphalt patching, and equipment repairs.

The trend in maintenance budgets are shown in Table 5.2.1.

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget $
2023-24	$375,000
2024-25	$335 549
2025-26	$335 549

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.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The service hierarchy is shown is Table 5.2.2.

Table 5.2.2: Asset Service Hierarchy

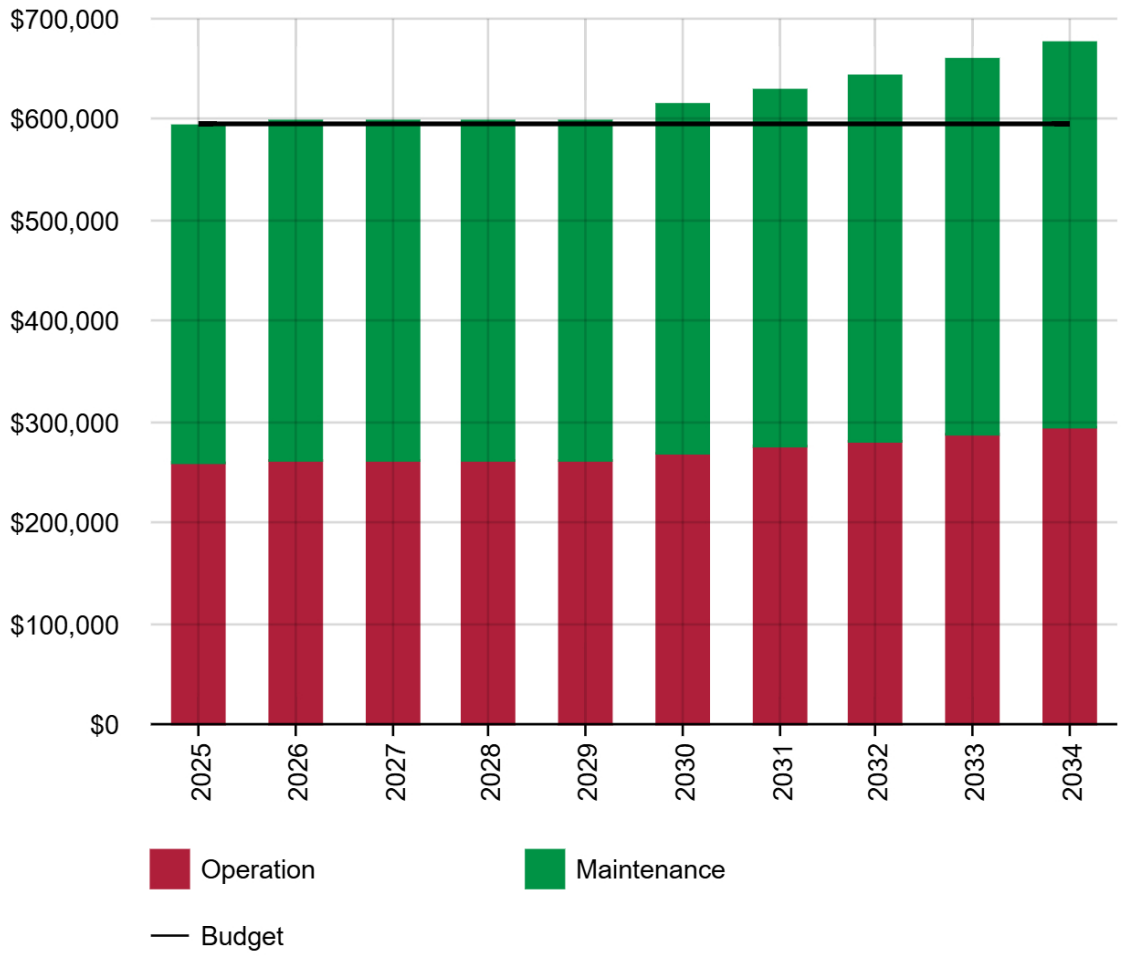
Service Hierarchy	Service Level Objective
Collector network (includes SPS)	Sewer collected efficiently, few chokes/blockages/overflows
Treatment infrastructure	Efficient, effective, reliable, safe
Release to Land	EA parameters satisfied

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 figure values are shown in current day dollars.

The forecast maintenance and operational costing trends should be sufficient provided that Council attends to its renewal program for SPS and underground assets. Higher levels of servicing will be required if assets are operated at a condition rating of 4-5**.**

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 original service potential is considered to be an acquisition resulting 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 2022.

Table 5.3: Useful Lives of Assets

Asset (Sub)Category	Useful life
Sewer Mains	Sewer Mains @ 60-80 Gravity Mains @ 180
Sewage Pump Stations	20-30
Treatment Plant	Various for civil, mechanical, electrical
Manholes	80
Lagoons	500

The estimates for renewals in this AM Plan were based on the **Asset Register**.

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 bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playground).[11]

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.[12]

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

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Asset condition	10-30%
Asset criticality	10-30%
Impact on operating costs(whole of life costs)	10-30%
Impact on service level commitments	10-30%

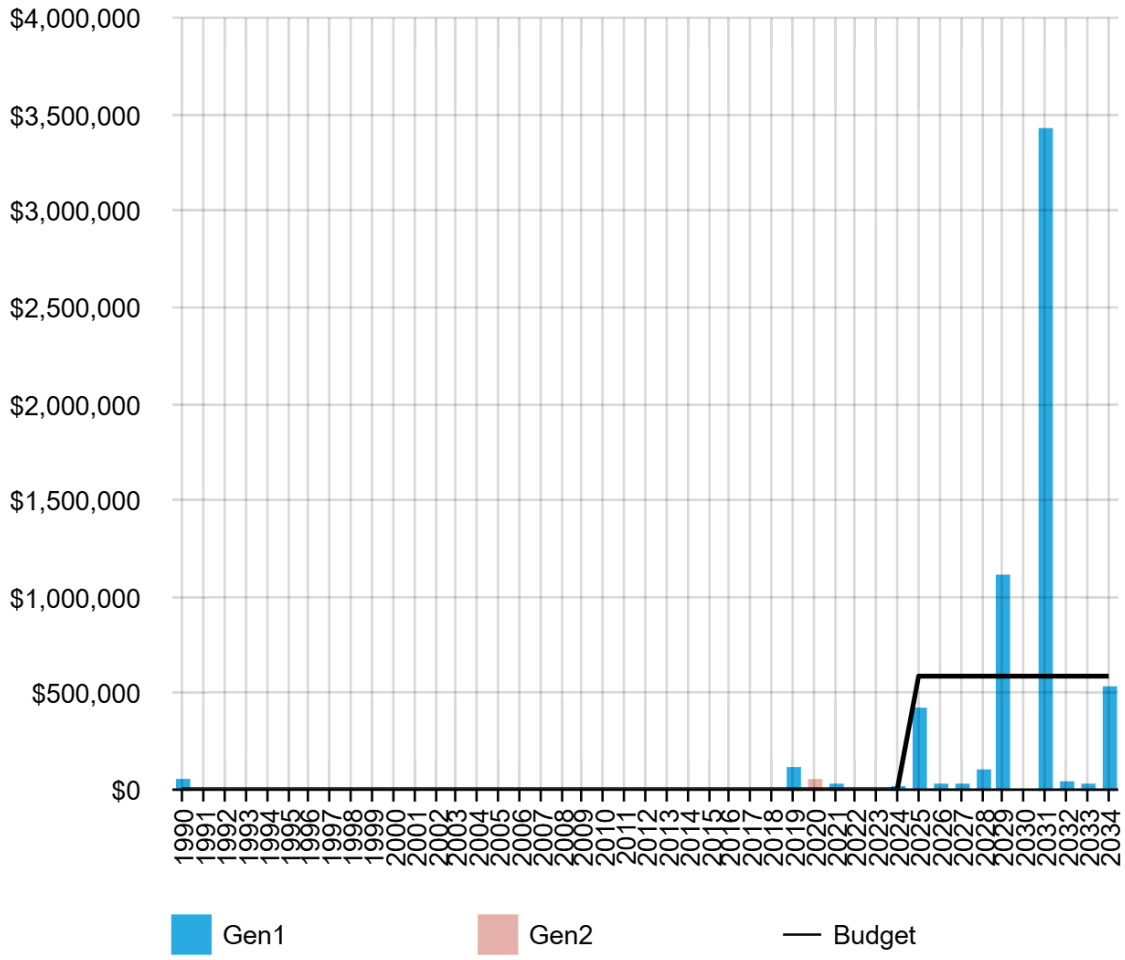
[11] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.
[12] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

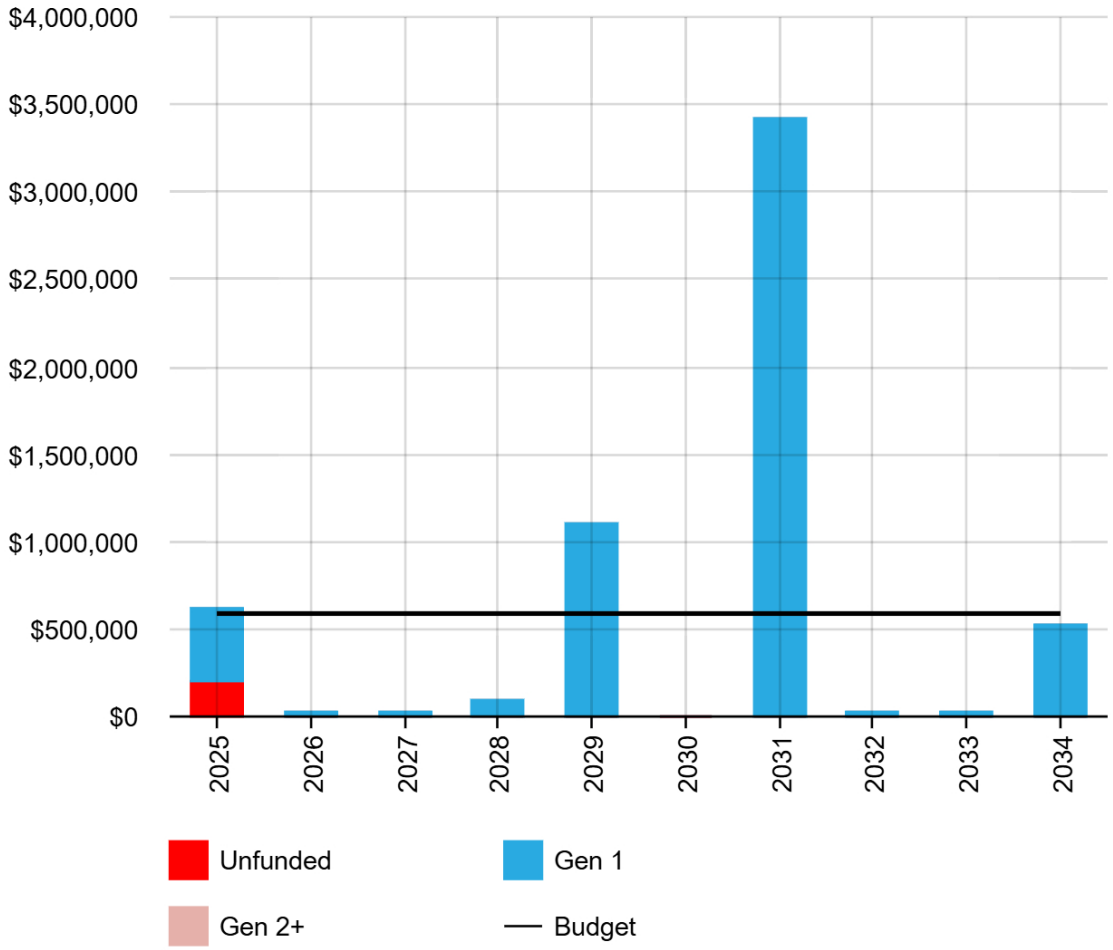
Criteria	Weighting
Availability of grant funding	10-30%
Total	**100%**

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. A detailed summary of the forecast renewal costs is shown in Appendix D.

Figure 5.4.1: Forecast Renewal Costs





All figure values are shown in current day dollars.

Council will need to commence planning for the renewal of underground sewer assets in the next few years to ensure it is prepared to secure external funding to assist in this renewal program.

5.5 Acquisition Plan

Acquisition reflects are 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 the Cloncurry Shire 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 upgrade and new works should be reviewed to verify that they are essential to the Entities needs. Proposed upgrade 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 is detailed in Table 5.5.1.

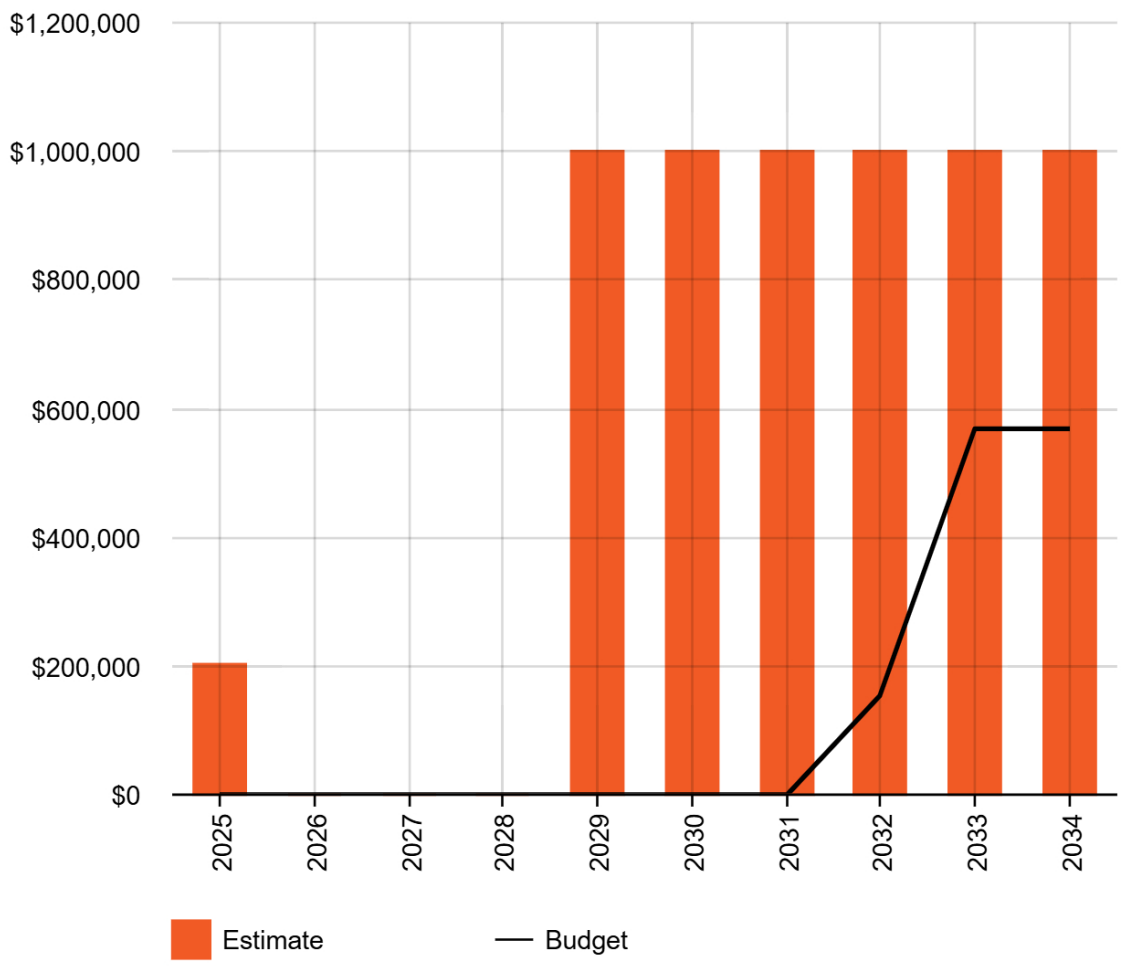
Table 5.5.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Impact on operating costs / asset sustainability ratio	50%
Impact on town growth	25%
Impact on economic development	25%
Total	**100%**

Summary of future asset acquisition costs

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

Figure 5.5.1: Acquisition (Constructed) Summary

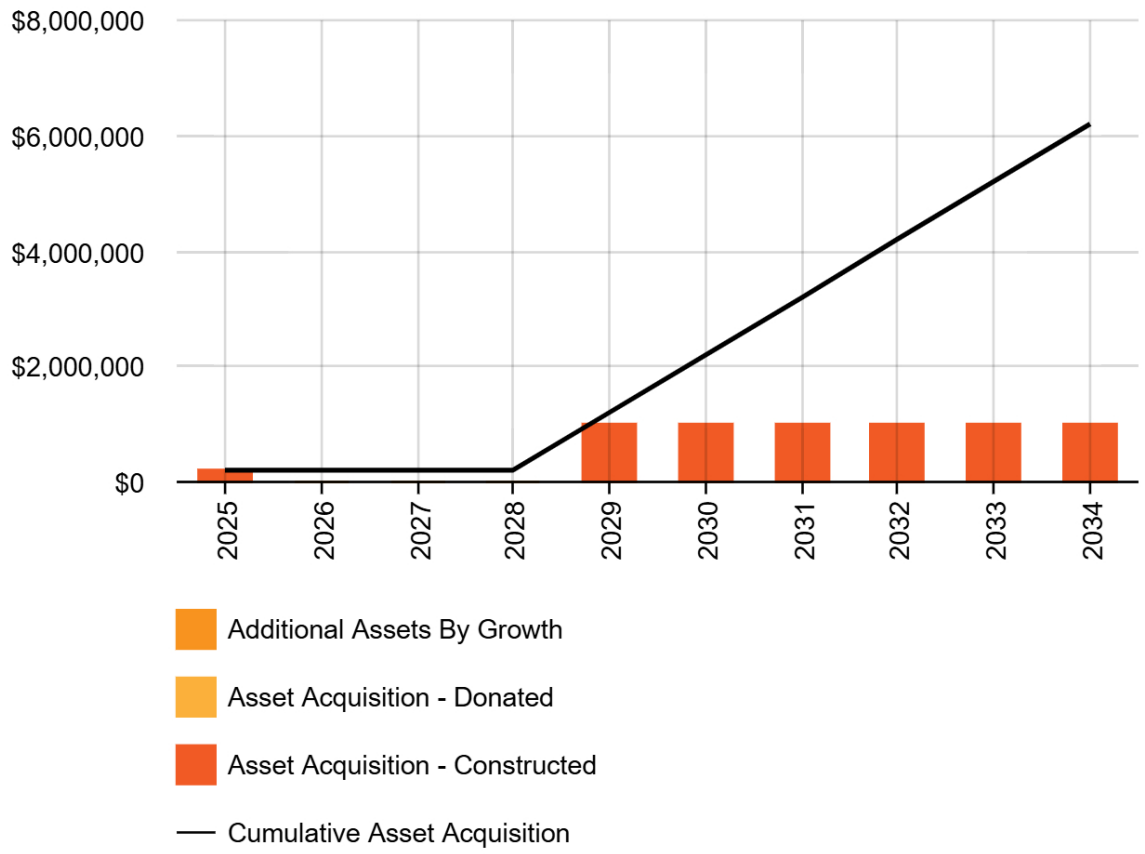


All figure values are shown in current day dollars.

When an Entity commits to new assets, they must be prepared to fund future operations, maintenance and renewal costs. They 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 the Entity. The cumulative value of all acquisition work, including assets that are constructed and contributed shown in Figure 5.5.2.

Figure 5.5.2: Acquisition Summary



All figure values are shown in current 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.

The forecast acquisition costs are currently based on 1st year values where 1st year values are linked to design/planning costs. These costs will be updated as Council determines how/whether it will progress extensions to the wastewater network (e.g., to service the new Curry Kids Centre, new residential areas, providing services to houses between Railway Street and Musgrave Street etc.).

5.6 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposing of the assets are also outlined in Table 5.6. Any costs or revenue gained from asset disposals is included in the long-term financial plan.

Table 5.6: Assets Identified for Disposal

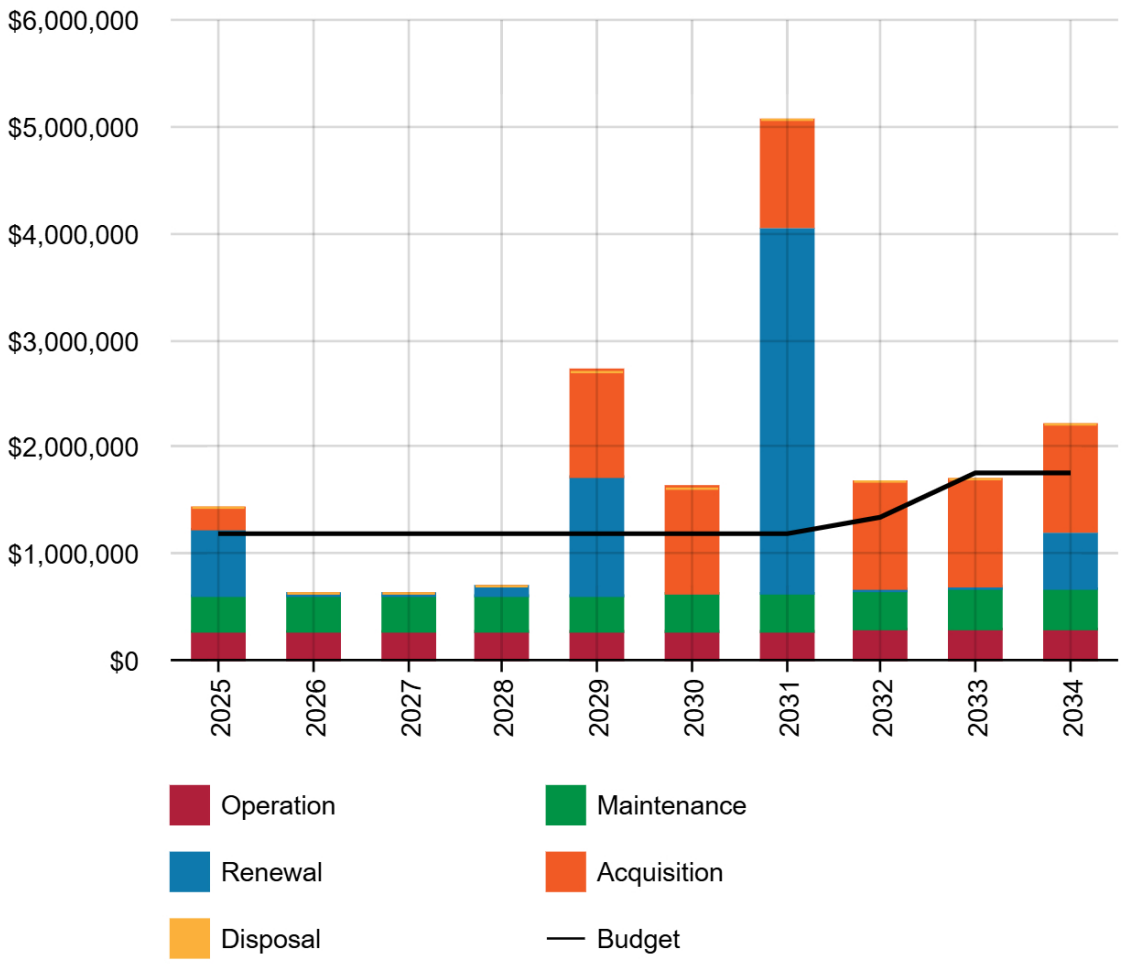
Asset	Reason for Disposal	Timing	Disposal Costs	Operations & Maintenance Annual Savings
No current disposals planned				

5.7 Summary of asset forecast costs

The financial projections from this asset 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 figure values are shown in current day dollars.

Council needs to plan for the renewal of its underground wastewater assets to ensure Council is able to secure external grant funding to progress these renewals.

6.0 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'[13].

An assessment of risks[14] 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. 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.

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, are summarised in Table 6.1. Failure modes may include physical failure, collapse or essential service interruption.

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Cloncurry STP	Natural Disaster / Flood	Sewerage treatment services cannot be delivered. Breach of Environmental Authority
Cloncurry SPS network	Lack of investment in infrastructure renewals leads to failure	Choke/overflow leading to nuisance/environmental impact
Dajarra SPS network	Lack of investment in infrastructure renewals leads to failure	Choke/overflow leading to nuisance/environmental impact
Reticulated network	Lack of investment in renewals leads to multiple failures	Choke/overflow leading to nuisance/environmental impact

By identifying critical assets and failure modes an organisation 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 below.

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 process is based on the fundamentals of International Standard ISO 31000:2018.

[13] ISO 31000:2009, p 2

[14] Cloncurry Shire Council, Corporation Plan 2021-26.

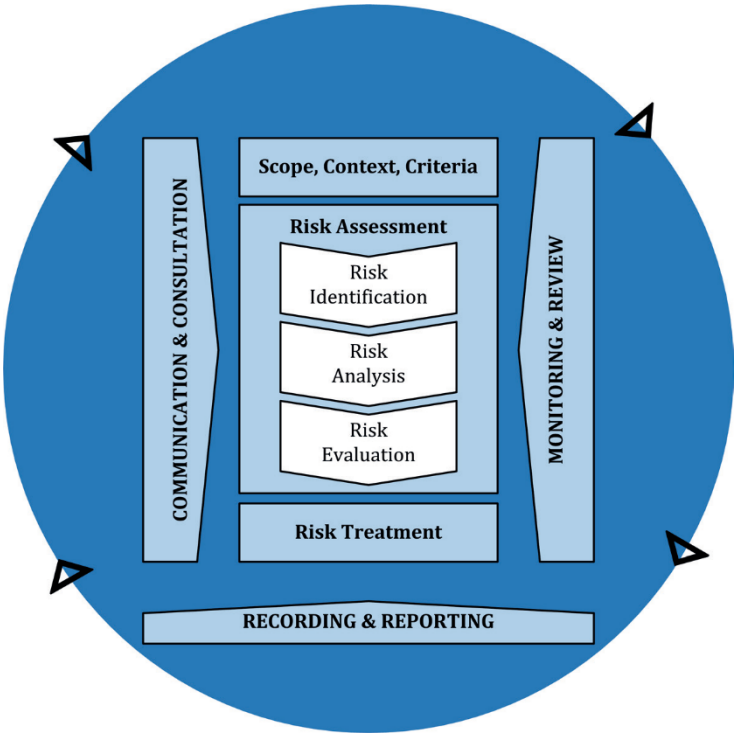


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for non-acceptable risks.

An assessment of risks[15] 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.

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 is shown in Table 6.2. It is essential that these critical risks and costs are reported to management and Council.

[15] Cloncurry Shire Council, Corporation Plan 2021-26.

Table 6.2: Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Wastewater treatment services	Non-compliance with EA licensing conditions leading to environmental harm and fines	H	Keep DES fully informed of any non-compliances Address / rectify deficiencies identified by DES.	M	Current operational / maintenance budget
Wastewater reticulation	Failure of underground assets due to lack of renewal investment	H	Review any gaps and/or risks identified in CCTV inspection	M	Current operational / maintenance budget Additional budget where gaps in condition assessment identified
Sewage pump station failure	Failure of sewage pump stations due to lack of maintenance and/or renewal expenditure	H	Replacement of Condition 5 pump stations.	L	2022/3 – 2023/4: $360,000
Wastewater lagoons	Failure to de-sludge lagoons	H	De-sludge program for lagoons	L	Current operational / maintenance budget
All assets	Organisational instability (high turnover rate) or insufficiently qualified personnel impacting on ability to deliver operations, maintenance, renewal programs	H	Ongoing issue to be addressed through recruitment process, remuneration and conditions etc.	M-H	Current operational / maintenance budget + any additional incentives required to attract and retain

Note * The residual risk is the risk remaining after the selected risk treatment plan is implemented.

6.3 Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

We do not currently measure our 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:

- Council is well positioned to deliver required operation and maintenance activities

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:

- Any service trade-off linked to operations and maintenance is most likely to be derived from organisational instability as opposed to financial shortfalls.
- Any capital shortfall would be linked to insufficient planning / design to attract external funding to renew Council's underground wastewater assets.

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:

- More odour complaints
- More chokages/blockages
- More complaints associated with the above

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

7.0 FINANCIAL SUMMARY

This section contains the financial requirements resulting from the information presented in the 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
- medium term forecast costs/proposed budget (over 10 years of the planning period).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[16] **67.9**%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have **67.9**% of the funds required for the optimal renewal of assets. **We plan to make up this difference through accessing external grant funding.**

The forecast renewal work along with the proposed renewal budget, and the cumulative shortfall, is illustrated in Appendix D.

Medium term – 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.

The forecast operations, maintenance and renewal costs over the 10 year planning period is $1,227,916 average per year.

The proposed (budget) operations, maintenance and renewal funding is **$1,071,091** on average per year giving a 10 year funding **shortfall** of **$-156,825** per year. This indicates that **87.23%** 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 7.1.3 shows the forecast costs (outlays) required for consideration in the 10 year long-term financial plan.

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).

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

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.

Forecast costs are shown in 2021-22 dollar values.

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

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2025	0	260123	335549	588698	0	1184370
2026	0	260123	335549	588698	0	1184370
2027	0	260123	335549	588698	0	1184370
2028	0	260123	335549	588698	0	1184370
2029	0	260123	335549	588698	0	1184370
2030	0	260123	335549	588698	0	1184370
2031	0	260123	335549	588698	0	1184370
2032	153769	260123	335549	588698	0	1338139
2033	568692	260123	335549	588698	0	1753062
2034	568692	260123	335549	588698	0	1753062

7.2 Funding Strategy

The proposed funding for assets is outlined in the Entity's budget and Long-Term financial plan.

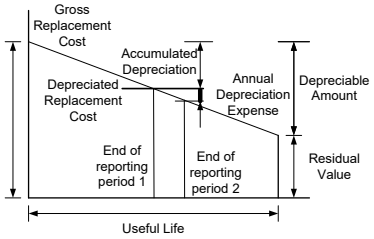
The financial strategy of the entity determines how funding will be provided, whereas the AM Plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3 Valuation Forecasts

7.3.1 Asset valuations

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

Replacement Cost (Current/Gross)	$30,438,439
Depreciable Amount	$30,438,439
Depreciated Replacement Cost[17]	$20,390,030
Depreciation	$544,127.0



7.3.2 Valuation forecast

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

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.

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

Key assumptions made in this AM Plan are:

- Asset renewal costs are based on asset valuation data rather than estimates derived from recent work or detailed designs. Getting this data and these costings is an Improvement Item.
- Council's ability to fund asset renewals is based on the assumption that funding programs such as / similar to LGGSP, W4Q and Building Our Regions continue and that Council is successfully able to access this funding.
- Operational and maintenance expenditure should remain relatively static over the Planning Period.

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 a A - E level scale[18] 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	None or very little data held.

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

[18] 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	Medium – High	Population anticipated to be stable/slight growth
Growth projections	Medium – High	QGSO figures yet to be updated (15.10.2022)
Acquisition forecast	Low – Medium	Potential network expansionreviewed.
Operation forecast	Medium – High	Based on historical costs – fairly reliable indicator
Maintenance forecast	Medium – High	Based on historical costs – new STP shouldn't require much maintenance in Planning Period
Renewal forecast - Asset values	Low – Medium	Replacement costs based on asset valuation rather than engineering / QS assessment
- Asset useful lives	High	No issues with asset lives. Will need to be reviewed following any major renewal process
- Condition modelling	Medium – High	CCTV inspection semi-recent. STP recently commissioned.
Disposal forecast	Low – Medium	No current disposal plan or program.

The estimated confidence level for and reliability of data used in this AM Plan is considered to be **MEDIUM**.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices[19]

8.1.1 Accounting and financial data sources

This AM Plan utilises accounting and financial data. The source of the data is SynergySoft/Altus.

8.1.2 Asset management data sources

This AM Plan also utilises asset management data. The source of the data is SynergySoft/Altus, Reflect/Recover.

8.2 Improvement Plan

It is important that an entity recognise areas of their 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	Status
1	Review Council's Customer Service Standards for Water & Wastewater Services	Manager Infrastructure	Staff time	Mar 23	Reviewed but no updated
2	Scope and deliver 3 x SPS replacement projects	Operations Projects	$360,000 Staff time	Nov 23	Nov 25
4	Adopt monthly reporting on key SWIM data as this relates to wastewater assets	Manager Infrastructure	Staff time	Sep 23 Mar 24	In place
5	Report on Queensland's Urban Potable Water & Sewerage Benchmarking Report when released	Director Infrastructure & Environment	Staff costs	Nov (annual)	In place
6	Update website to provide relevant information on Council's wastewater treatment services	Operations Media & PR	$5,000	Mar 23	In place
7	Complete lagoon de-sludging project in Cloncurry and Dajarra	Manager Infrastructure	$50,000	Dec 23 Ongoing	Cloncurry: ongoing Dajarra: not commenced
8	Maintain trend data on release to land parameters and report to Council / DES	Manager Planning & Environment	$10,000 Staff Time	Monthly	Implemented
9	Release to land at Equestrian Centre operational (irrigation, agreements, baling etc.)	Director Inf & Environment	$50,000 (asset, legal, procure)	Dec 23	Not progressed
10	Complete detailed inspection / valuation of all wastewater	Operations Corporate Services	~$30K (portion of comp asset valuation)	Jun 23	Completed June 2023

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

Task	Task	Responsibility	Resources Required	Timeline	Status
	assets (except underground assets)				
11	Operational/Maintenance checklists are entered into Reflect (daily, weekly, monthly etc.) and monthly reporting generated	Manager Infrastructure	$20,000 (Civica) Staff time	Dec 23	Completed
12	Accurate and accessible GIS database of wastewater infrastructure	Asset Engineer Projects	$20,000 Staff time	Jun 23	In progress
13	Complete detailed inspection of all remaining underground wastewater assets in Cloncurry	Manager Infrastructure	$90,000	Dec 24	30% completed
14	Complete inspection of underground wastewater assets in Dajarra	Manager Infrastructure	$45,000	Dec 25	Not commenced
15	Progressive replacement of underground wastewater assets	Manager Infrastructure	Unknown	TBC	Planning via QWRAP

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 5 years and is due for revision and updating **every two years**.

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 1-3 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 the Strategic Planning documents and associated plans,
- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 90 – 100%).

9.0 REFERENCES

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
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- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
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10.0 APPENDICES

Appendix A Acquisition Forecast

A.1 – Acquisition Forecast Assumptions and Source
Council has currently allocated $60,000 per annum to planning for future acquisition. Council doesn't anticipate any donated assets.

A.2 – Acquisition Project Summary
No current projects, only planning for potential projects are included.

A.3 – Acquisition Forecast Summary
Recommend using NAMS+ Outputs Summary for Acquisition

Table A3 - Acquisition Forecast Summary

Year	Constructed	Donated	Growth
2025	202000	0	0
2026	0	0	0
2027	0	0	0
2028	0	0	0
2029	1000000	0	0
2030	1000000	0	0
2031	1000000	0	0
2032	1000000	0	0
2033	1000000	0	0
2034	1000000	0	0

Appendix B Operation Forecast

B.1 – Operation Forecast Assumptions and Source
The operations budget is based on historical and current service levels.

B.2 – Operation Forecast Summary
NAMS+ Outputs Summary for Operation

Table B2 - Operation Forecast Summary

Year	Operation Forecast	Additional Operation Forecast	Total Operation Forecast
2025	260123	1353	260123
2026	260123	0	261476
2027	260123	0	261476
2028	260123	0	261476
2029	260123	6700	261476
2030	260123	6700	268176
2031	260123	6700	274876
2032	260123	6700	281576
2033	260123	6700	288276
2034	260123	6700	294976

Appendix C Maintenance Forecast

C.1 – Maintenance Forecast Assumptions and Source

The maintenance budget is based on historical and current service levels. These appear to be adequate. The key challenge relates to organisational stability and the ability to roll out programmed maintenance activities.

C.2 – Maintenance Forecast Summary

NAMS+ Outputs Summary for Maintenance

Table C2 - Maintenance Forecast Summary

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2025	335549	1757	335549
2026	335549	0	337306
2027	335549	0	337306
2028	335549	0	337306
2029	335549	8700	337306
2030	335549	8700	346006
2031	335549	8700	354706
2032	335549	8700	363406
2033	335549	8700	372106
2034	335549	8700	380806

Appendix D Renewal Forecast Summary

D.1 – Renewal Forecast Assumptions and Source
The current renewal forecast is derived from asset condition and remaining useful life in the asset register.

D.2 – Renewal Project Summary
The project titles included in the lifecycle forecast are **not** included here.

D.3 – Renewal Forecast Summary
Data from NAMS+ Renewal Forecast

Table D3 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2025	621793	588698
2026	28588	588698
2027	22646	588698
2028	99309	588698
2029	1108499	588698
2030	0	588698
2031	3422621	588698
2032	33103	588698
2033	26894	588698
2034	523530	588698

D.4 –Renewal Plan
Detailed output from NAMS+ Report for the Register Method not included @ 1,600 lines

Appendix E Disposal Summary

E.1 – Disposal Forecast Assumptions and Source
Council currently has no Disposals Plan for wastewater assets.

E.2 – Disposal Project Summary
Council currently has no Disposals Plan for wastewater assets.

E.3 – Disposal Forecast Summary
Council currently has no Disposals Plan for wastewater assets but has allocated a provisional $20,000 per annum to this function.
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Table E3 – Disposal Activity Summary

Year	Disposal Forecast	Disposal Budget
2025	0	0
2026	0	0
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0

Appendix F Budget Summary by Lifecycle Activity

Maintenance and Operations based on historical actuals.
Renewals based primarily on asset register.

Table F1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2025	0	260123	335549	588698	0	1184370
2026	0	260123	335549	588698	0	1184370
2027	0	260123	335549	588698	0	1184370
2028	0	260123	335549	588698	0	1184370
2029	0	260123	335549	588698	0	1184370
2030	0	260123	335549	588698	0	1184370
2031	0	260123	335549	588698	0	1184370
2032	153769	260123	335549	588698	0	1338139
2033	568692	260123	335549	588698	0	1753062
2034	568692	260123	335549	588698	0	1753062