Asset Management Plan

Stormwater Management Infrastructure 2025–2034

City of Norwood Payneham & St Peters

Contents

Cover Image: Trinity Valley Stormwater Drainage Upgrade – Stage 2 (Albermarle Avenue)

Executive summary

Asset Management Plans

The City of Norwood Payneham & St Peters' Asset Management Plans (AMPs), provide a comprehensive overview of the City's assets, including replacement value and condition of the assets, performance of the assets, service levels, and associated financial considerations. The primary aim of the AMPs is to ensure that the Council can deliver essential services, maintain assets, and achieve its strategic objective in a financially sustainable, appropriate and prudential manner over the short, medium, and long term.

The AMPs outline the management, inspection and replacement requirements associated with the prudent curation of assets, including projected annual expenditure over a ten-year planning horizon. The AMPs also set out the planned activities to align with the Council's strategic objectives, therefore ensuring continued services to the community.

Requirement under the Local Government Act 1999

Section 122 of the *Local Government Act 1999,* requires the Council to develop and adopt AMPs to guide the management and development of its infrastructure and major assets over a ten year planning horizon. This ensures that strategic asset management aligns with the Council's overarching strategic management plan (*CityPlan 2030: Shaping Our Future*) and the *Long-term Financial Plan* (LTFP), particularly in respect to asset renewal.

Image: Second Creek Gross Pollutant Trap & Linear Park Path Upgrade

The Council's AMPs are set out in four separate documents, namely:

Civil Infrastructure

Stormwater Management

Buildings

Recreation and Open Space

Asset Description

The City's Stormwater Management Infrastructure assets comprise of the following components:

- stormwater drainage infrastructure (inclusive of pits, pipes, culverts and open channels);
- waterways under vehicular bridges; and
- footbridges.

The Stormwater Management Infrastructure assets have a significant total renewal value currently estimated at $156,555,401.

Levels of Service

The Council's present funding levels are sufficient to continue to provide existing services at current service levels.

The main impacts of the Council's planned budget expenditure are:

- assets are replaced accordingly taking into account the condition of the asset and intended useful-life of the particular asset; and
- the standard of the assets in respect to compliance with the relevant standards, legislation and guidelines.

Future Demand

The main demands for new services are generated by:

- the impacts of climate change;
- increased run-off from historic and new development within catchments; and
- stormwater quality enhancements prior to discharging of stormwater into creeks and the River Torrens.

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 can also include a combination of non-asset solutions, insuring against risks and managing failures, including:

- monitoring of the condition of assets;
- undertaking community expectation surveys; and
- modelling the impacts of climate change and increased urban development.

Life-Cycle Management Plan

What does it Cost?

The forecast life-cycle costs necessary to provide the services covered by this AMP, includes operational maintenance, renewal, acquisition, and disposal of assets. Although the AMP may be prepared for a range of time periods, it typically informs a long-term financial planning period of ten years. Therefore, a summary output from the AMP is the forecast of total outlays over a ten year period which in respect to the Stormwater Management Infrastructure assets is estimated at $36,054,708 or $3,605,471 on average per year.

Asset Management Practices

The Council's systems that are used to manage assets include:

- the Council's asset management system;
- the Council's financial system; and
- the Council's strategic and planning documents.

Monitoring and Improvement Program

The next steps resulting from this AMP, in respect to improving asset management practices are to:

- formalise ongoing monitoring and reporting of improvement plan tasks and performance measures;
- establish formal condition rating process of drainage infrastructure;
- develop further the risk assessment and management planning;
- improve GIS data storage system integration with asset database;
- review resilience of critical infrastructure; and
- integrate climate risk assessment into asset management planning.

Financial Summary

What the Council will do

Estimated available funding for the ten year period (2024–2025 to 2033–2034) is $36,055,936 (or $3,605,594 on average per year) as set out in the Council's Long-term Financial Plan (LTFP). This is approximately 100% of the cost to sustain the current level of service at the lowest life-cycle cost.

In practice, only what is funded in the LTFP can be provided. The informed decision-making depends on the AMP emphasising the consequences of planned budgets on the service levels which are provided and the associated risks.

The anticipated planned budget for the City's Stormwater Management Infrastructure assets, results in a nil shortfall for the forecast life-cycle costs required to provide services in the AMP compared with the planned budget currently included in the LTFP. This is shown in Figure 1 below.

The Council plans to undertake the following in respect to the City's Stormwater Management Infrastructure assets:

- provision of operational maintenance and renewal works for existing assets to meet current service levels; and
- major renewal projects within the ten year planning horizon, which consists of improving the level of flood protection within catchments to provide the defined level of service through an integrated stormwater management approach. This includes opportunities for stormwater re-use and Water Sensitive Urban Design (WSUD) initiatives wherever possible within the project budget.

What the Council cannot do

Works and services that cannot be provided under present funding levels are:

- undertaking of major acquisition works which are not set out in Council's LTFP; and
- provision of operational maintenance and renewal works above the current service levels.

Managing the Risks

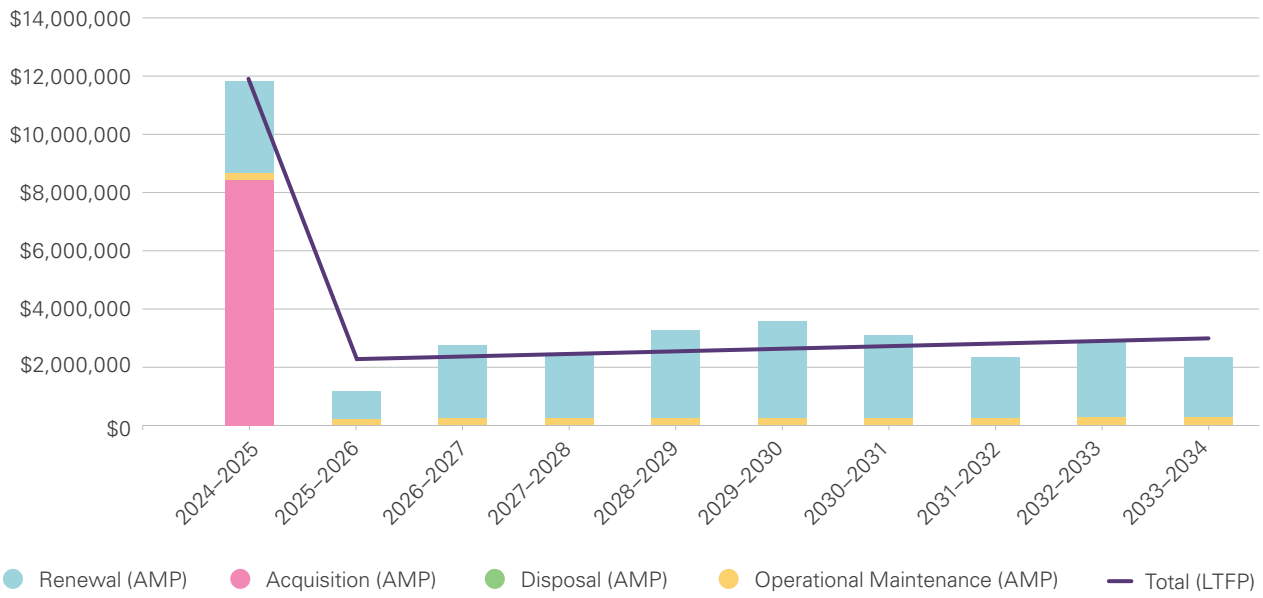
If there is forecast work (operational maintenance, renewal, acquisition or disposal) that cannot be undertaken due to insufficient financial resources, then this could result in service consequences for users. These include:

- frequency of flood events increasing due to increasing stormwater run-off;
- poor quality stormwater entering the receiving waters and wider environment; and
- community expectations not being met.

The Council will endeavour to manage these risks within the available funding allocation by:

- reacting to potential flood events with temporary mitigation measures;
- finding efficiencies within the current operational maintenance program; and
- prioritisation of renewal projects.

Figure 1: Forecast Life-Cycle Costs and Planned Budgets



Introduction

Background

This AMP sets out the requirements for the sustainable delivery of services through the management of assets, compliance with regulatory requirements and required funding to provide the appropriate levels of service over the long-term planning period.

The Council has a strong focus on asset management, with continuous improvements during the revision of the AMP. Integration of acquisition and renewal planning is undergoing continuous improvement to ensure the minimum required investment provides the greatest value outcomes.

This AMP is to be read in conjunction with the following key planning documents:

CityPlan 2030: Shaping Our Future

Long-term Financial Plan

Annual Business Plan

City-wide Floodplain Mapping and Long-term Drainage Program

Asset Management Policy

City of Norwood Payneham & St Peters Community Survey Outcomes

Trinity Valley Stormwater Drainage Upgrade – Stage 2

Strategic Direction

The Council's strategic direction is guided by four Outcomes or Pillars which contribute to the realisation of the Council's Vision and are based on the four Pillars of the Quadruple Bottom Line (QBL) framework. The four Outcomes are **Social Equity, Cultural Vitality, Economic Prosperity and Environmental Sustainability**.

For our City, adding the fourth Pillar of culture to the traditional Triple Bottom Line (TBL) approach to decision making of environmental, social and economic sustainability, highlights the importance of protecting and enhancing our City's unique character and strong 'sense of place'.

The Objectives set out in *CityPlan 2030: Shaping Our Future,* which outline the priorities for what needs to happen to achieve the four Outcomes, reflect the community's aspirations, the policy commitments which have been made by the Council and the likely trends and issues which the City will face in achieving the objectives set out in *CityPlan 2030.*

CityPlan 2030 plays a pivotal role in guiding the City of Norwood Payneham & St Peters towards the community's vision for the future. Achieving the objectives and strategies contained in *CityPlan 2030,* requires transparent and accountable governance structures and processes which are both flexible and responsive to the future opportunities and challenges that will present themselves.

It will also require a positive 'can-do attitude' and approach to ensure that the Council realises the future which we want for ourselves and the next generations, rather than just 'letting things happen'.

We exist to improve the Well-being of our citizens and our community, through:

Social Equity

Cultural Vitality

Economic Prosperity

Environmental Sustainability

Strategic Planning Framework

In working towards our vision, all of the programs, projects and services which the Council delivers are structured into four key outcome areas, referred to as the 'Four Pillars' of Community Well-being.

Key Stakeholders in the Asset Management Plan

Key Stakeholder Roles

Key stakeholders who have been involved in the preparation and implementation of this AMP are shown in Table 1 below.

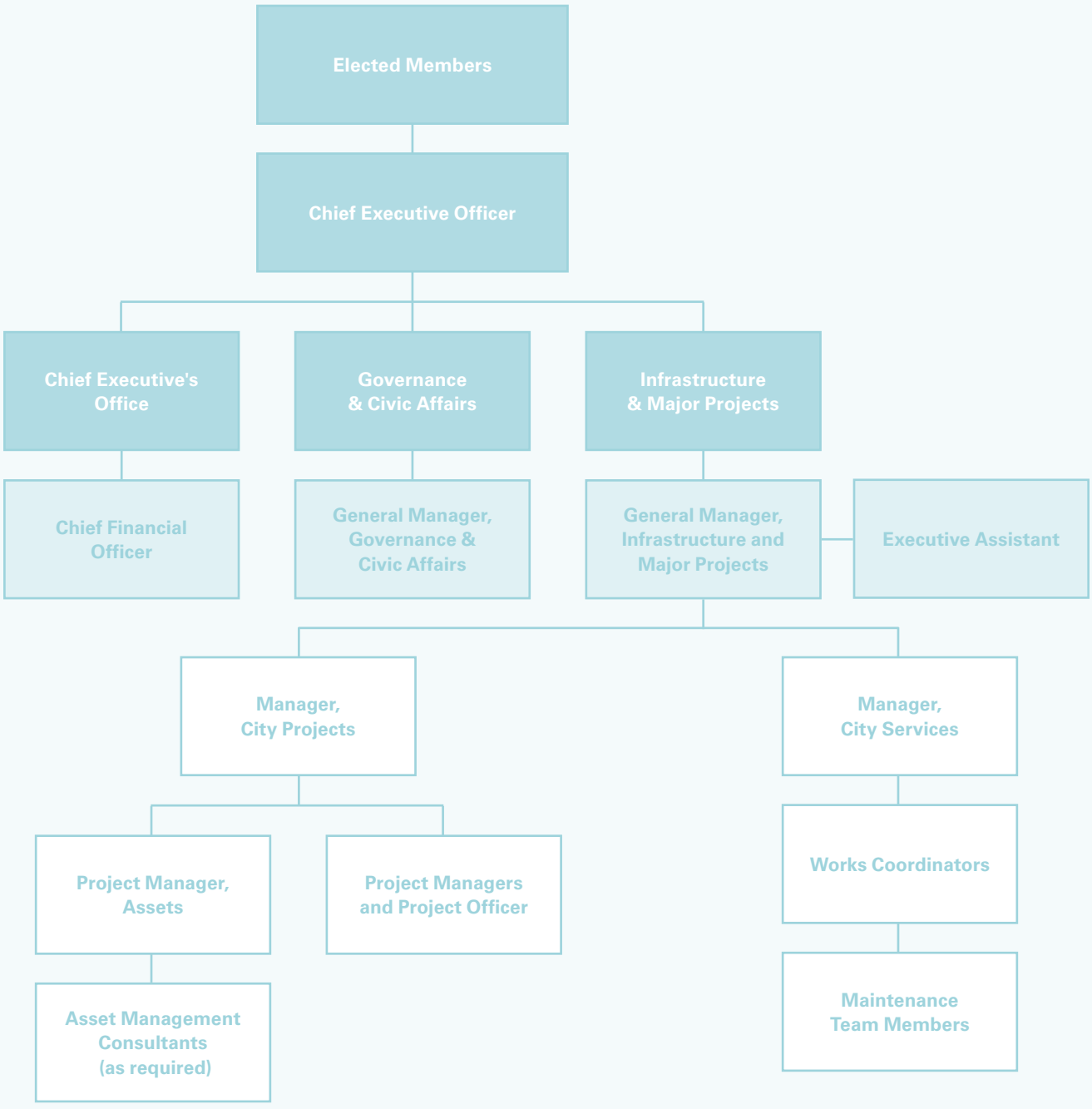
Table 1: Key Stakeholders and their Roles

Key Stakeholder	Role in AMP
Elected Members	Representing the needs of the community and stakeholders, decide on the allocation of resources to meet planning objectives in providing services while managing risks and ensure services are sustainable.
Chief Executive Officer	Endorse the development of the AMP and provide resources (as funded by the Council) required to complete the task.
General Manager, Infrastructure & Major Projects Manager, City Projects	Set high level priorities for asset management development and support the implementation of actions resulting from this AMP.
Chief Financial Officer, Chief Executive's Office General Manager, Governance & Civic Affairs	Develop supporting policies in respect to matters such as capitalisation and depreciation. Provide GIS applications and support.
Asset Management Consultants	Prepare asset sustainability and financial reports incorporating asset depreciation in compliance with current accounting standards. Host and consolidate asset register including updating valuations, capitalisation and disposals. Provide support for development of the AMP and the implementation of effective asset management principles. Independently endorse asset revaluation methodology.
Project Manager, Assets	Responsible for the overall development of the AMP. Coordinate input of other stakeholders into the AMP. Manage the periodic collection of asset condition data.
Project Managers and Project Officer	Assist the Project Manager, Assets in the development of the AMP.
Manager, City Services Works Coordinators Maintenance Team Members	Provide local knowledge level of detail of the assets. Describe the maintenance standards deployed and the ability to meet the technical and citizen levels of service.
External Parties	Citizens; Local Business Owners and Operators; Utilities; Developers; and Federal and State Governments.

Key Stakeholder Structure

The Council's organisational structure for the management and service delivery associated with infrastructure assets is detailed in Figure 2 below.

Figure 2: Key Stakeholder Structure



Third Creek Stormwater Upgrade

Goals and Objectives of Asset Ownership

The Council's objective in respect to the management of 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 citizens. 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 life-cycle 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 the LTFP 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;
- **future demand** – how this will impact on future service delivery and how this is to be met;
- **life-cycle 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 the Council manages the provision of the services;
- **monitoring** – how the AMP will be monitored to ensure objectives are met; and
- **asset management improvement plan** – how the Council increases asset management maturity.

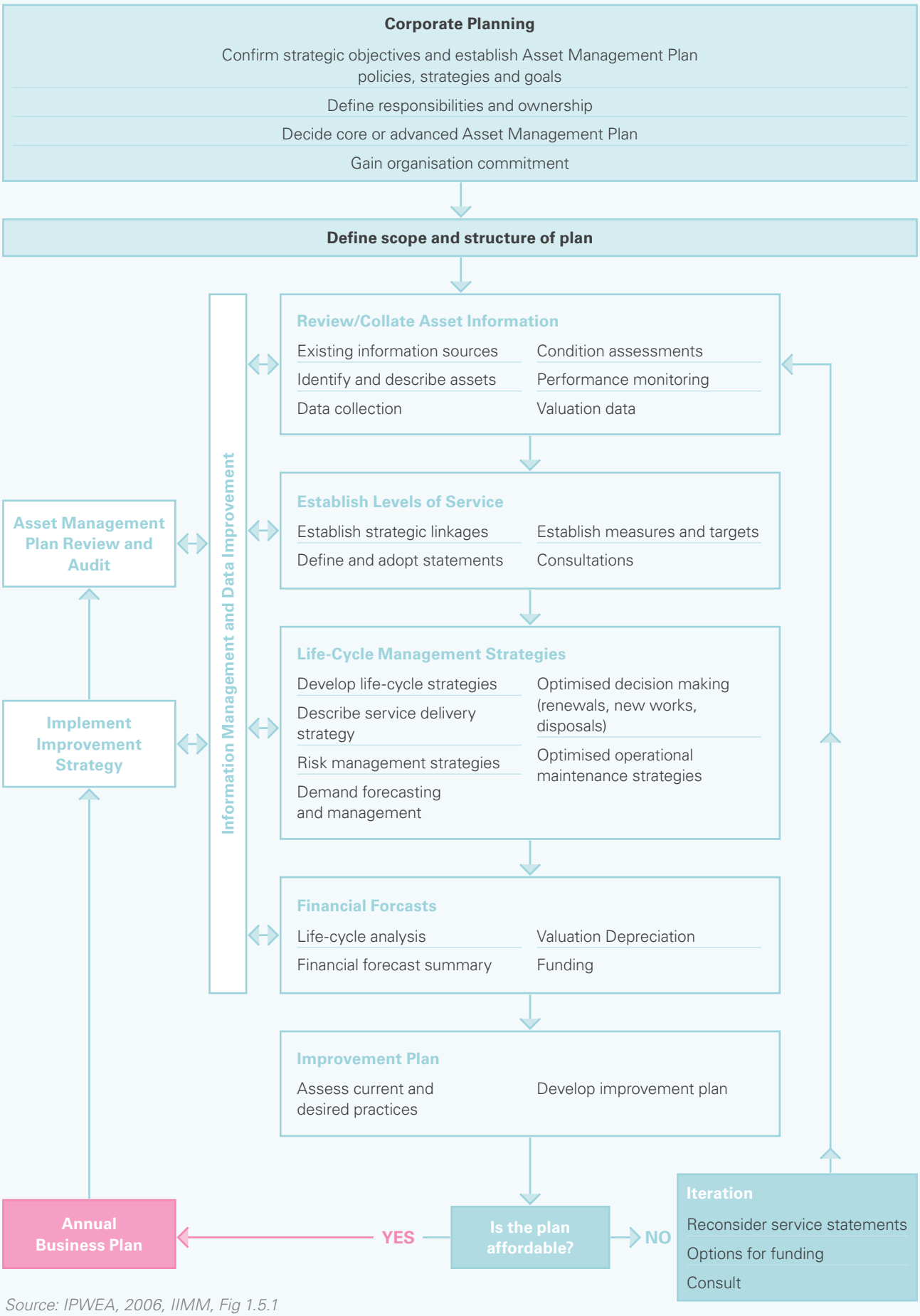
Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 [1]; and
- International Organisation for Standardisation (ISO) 55000 [2].

A road map used for preparing an AMP is shown in Figure 3 (page 13).

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

Figure 3: Road Map for Preparing an Asset Management Plan



Source: IPWEA, 2006, IIMM, Fig 1.5.1

Levels of Service

Research and Community Expectations

The Council conducts Biennial Community Surveys to establish how the Council is performing in a number of key indicators. Community Surveys have been conducted in 2009, 2011, 2013, 2017, 2019 and 2021, with the most recent survey undertaken in 2023.

The survey uses a 5-point scale to determine satisfaction levels, with 1 being Very Dissatisfied and 5 being Very Satisfied. The last version of the AMP included data up to 2019. Table 2 below summarises the results from the Council's Community Surveys.

Table 2: Resident Satisfaction Survey Levels

Performance Measure	Satisfaction Level						
	2023	2021	2019	2017	2013	2011	2009
Overall Infrastructure Satisfaction	3.8	3.9	3.8	3.8	4.0	4.0	3.6
Overall Environmental Management Satisfaction	3.5	3.8	3.4	3.7	3.9	4.0	3.7
Enhancing the Natural Environment	3.8	3.8	3.7	3.8	3.8	3.9	3.5
Managing Watercourses	3.8	3.7	3.4	3.6	3.6	3.6	3.2
Water, Management & Use	3.6	3.7	3.4	3.7	3.5	3.6	3.1
Undertaking Environmental Initiatives	3.4	3.7	3.4	3.5	3.2	3.2	3.0
Responding to Climate Change	3.1	3.3	3.0	N/A	N/A	N/A	N/A

Strategic and Corporate Goals

This AMP has been prepared in accordance with the Council's Vision, Mission, Goals and Objectives as set out in its Strategic Management Plan, *CityPlan 2030: Shaping our Future*.

Council's strategic objectives, and how these are addressed in this AMP, are summarised in Table 3 (page 15).

The Vision contained in *CityPlan 2030* is:

'A City which values its heritage, cultural diversity, sense of place and natural environment.

A progressive City which is prosperous, sustainable and socially cohesive, with a strong community spirit.'

Table 3: Objectives and how these are addressed in this Asset Management Plan

Mitigating and adapting to the impacts of climate change

***CityPlan 2030* Outcome**

Environmental Sustainability. A leader in environmental sustainability.

How Goals and Objectives are Addressed in the AMP

Development of flood protection service levels which are expected to be provided by the City's infrastructure and the balancing of this with the available funding and acceptable risk.

Identification of climate change impacts and transition risks to enable appropriate resources to be identified and provided.

Ensuring that assets and techinical design standards adjust to projected impacts of climate change.

Implement mechanisms to make better use of water resources including the harvesting and re-use of stormwater

***CityPlan 2030* Outcome**

Environmental Sustainability. Sustainable and efficient management of water, waste, energy and other resources.

How Goals and Objectives are Addressed in the AMP

Planning for water quality improvements upstream of existing stormwater harvesting infrastructure to increase the potential of harvesting the resource.

Planning to harvest stormwater for use in irrigation and public toilet flushing where available and in conjunction with renewal of open space and public toilet facilities.

Revegetate and restore natural watercourses

Improve the water quality in our City's watercourses

Encourage the capture and re-use of stormwater and reduce stormwater run-off

***CityPlan 2030* Outcome**

Environmental Sustainability. Healthy and sustainable watercourses

How Goals and Objectives are Addressed in the AMP

Planning for naturalisation of existing watercourses where feasible in conjunction with Recreation and Open Space projects.

Planning to develop Water Sensitive Urban Design initiatives as part of integrated stormwater management and streetscape projects.

Legislative Requirements

There are a number of legislative requirements relating to the management of assets. Legislative requirements that impact upon the delivery of the Stormwater Management Infrastructure assets are set out in Table 4 below.

Table 4: Legislative Requirements

Legislation	Requirement
Aboriginal Heritage Act 1988	An act to provide for the protection and preservation of the Aboriginal heritage, and for other purposes.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of transport assets.
Australian Standards	Council's infrastructure projects are undertaken in accordance with Australian Standards, or in the absence of, best practice techniques.
Building Code of Australia	Sets out minimum standards for construction of new assets. Also provides minimum standards for new properties.
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.
Environmental Protection Act 1993	Provides the regulatory framework to protect South Australia's environment, including land, air and water.
Highways Act 1926	An act to provide for the appointment of a Commissioner of Highways, and to make further and better provision for the construction and maintenance of roads and works and for other purposes.
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a Long-term Financial Plan supported by Asset Management Plans for sustainable service delivery.
Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices – Part 2 – Code of Technical Requirements	Defines legal requirements for the installation of traffic control devices.
Road Traffic Act 1961	Defines responsibilities pertaining to roadways and standards.
Roads (Opening & Closing Act) 1991	Allows for the formalisation of roadways status.
Work Health and Safety Act 2012	Provides minimum standards for health and safety of individuals performing works.

Citizen Values

Service levels are defined in three ways: Citizen Values, Citizen Levels of Service and Technical Levels of Service.

Citizens Values indicate:

- what aspects of a service is important to the citizen;
- whether they see value in what is currently being provided; and
- the likely trend over time based on the current budget provision.

A summary of the satisfaction measure being used, the current feedback and the expected performance based on the current funding level is set out in Table 5 below.

Table 5: Citizen Values

Citizen Values	Citizen Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Enhancing natural environment	Community Survey	Community Survey results indicate that: • this is the second most important factor which impacts upon overall satisfaction with environment management • satisfaction has improved compared to 2019 (i.e., when the AMP was last reviewed)	Likely to remain unchanged with limited opportunity within our dense urban environment.
Management of watercourses, including flooding	Community Survey	Community Survey results indicate that: • this is the fourth most important factor which impacts upon overall satisfaction with environment management • satisfaction has improved compared to 2019	Continued improvement of management of watercourses including reduced risk of flooding to private property.
Undertaking environmental initiatives, including water quality and re-use	Community Survey	Community Survey results indicate that: • this is the sixth most important factor which impacts upon overall satisfaction with environment management • satisfaction has remained consistent compared to 2019	Continued improvement with implementation of integrated stormwater management and streetscape projects.

Third Creek Stormwater Upgrade

Citizen Levels of Service

The Citizen Levels of Service are considered in terms of:

Quality: 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: Is the service over or under used?
Does the Council need more or less of these assets?

A summary of the performance measure being used, the current performance and the expected performance based on the current funding level is set out in Table 6 below.

Confidence levels of current performance and expected trend are set out in Table 6 below and are categorised as follows:

High: professional judgement supported by extensive data;

Medium: professional judgement supported by data sampling; or

Low: professional judgement with no data evidence.

Table 6: Citizen Levels of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Quality	Asset condition is *'fit for purpose'*	Community Survey on Managing Watercourses	Community Survey results indicate satisfaction has improved compared to 2019 (i.e., when the AMP was last reviewed)	No change, as expired assets are renewed as required
	Confidence level:		**High**	**Medium**
Function	Asset meets service needs	Community Survey on Enhancing Natural Environment	Community Survey results indicate satisfaction has improved compared to 2019	Likely to remain unchanged with limited opportunity within urban environment
	Confidence level:		**High**	**Medium**
Capacity	Capacity of assets to meet demands	Community Survey on Managing Watercourses	Community Survey results indicate satisfaction has improved compared to 2019	Improved performance is expected as a result of further drainage upgrade works
	Confidence level:		**High**	**Medium**

Technical Levels of Service

Technical Levels of Service refers to the performance standards that define how well Council's assets meet their intended function. These technical measures relate to the activities and allocation of resources to best achieve the desired community outcomes and demonstrate effective performance.

Burchell Reserve Stormwater Detention Tank Storage

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

Acquisition: the activities that are undertaken to provide a higher level of service or a new service that did not exist previously (e.g. construction of a new detention basin);

Operational Maintenance: the regular activities that are undertaken to retain an asset as near as practicable to an appropriate service condition (e.g. inspections and condition assessments);

Renewal: the activities that are undertaken to ensure the service capability is retained (e.g. straight replacement of pipeline); and

Disposal: the activities associated with the disposal of a de-commissioned asset including sale, demolition or relocation (e.g. redundancy of a pipeline network).

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[3]

Table 7 (page 21) sets out the activities expected to be provided under the current planned budget allocation and the forecast activity requirements being recommended in this AMP.

[3] *IPWEA, 2015, IIMM*

Table 7: Technical Levels of Service

Life-Cycle Activity	Purpose of Activity	Activity Measure	Current Performance (LTFP)	Recommended Performance (AMP)
Acquisition	Gifted or transferred infrastructure from developers / property owners	Incorporate into Asset Register upon receiving ownership	Occurs on an ad-hoc basis dependent on development	Occurs on an ad-hoc basis dependent on development
	Trinity Valley Stormwater Drainage Upgrade	Budget allocation	As budgeted within the LTFP (this is discussed further on page 30 under 'Acquisition Plan')	As per Council's City-wide Floodplain Mapping and Long-term Drainage Program
	Budget:		**$0 over ten years**	**$8,472,308 over ten years**
Operational Maintenance	Cleaning of side entry pits and trash racks	Frequency	Conducted on a programmed basis and upon request	Conducted on a programmed basis and on request
	CCTV inspection of underground assets	Frequency	Yearly inspection program of section of underground network	Yearly inspection program of section of underground network
	Drainage structures condition assessment	Frequency	Asset Condition Assessment undertaken once every five years	Asset Condition Assessment undertaken once every five years
	Budget:		**$2,620,104 over ten years**	**$2,691,249 over ten years**
Renewal	Renewal of asset	Renewal to requirements of asset register	As budgeted within the LTFP	Prioritise and undertake projects as per Council's City-wide Floodplain Mapping and Long-term Drainage Program
	Budget:		**$33,435,832 over ten years**	**$24,891,151 over ten years**
Disposal	Disposal of assets no longer in use	As identified in the AMP	No assets identified as no longer in use	No assets identified as no longer in use
	Budget:		**$0 over ten years**	**$0 over ten years**

It is important to regularly monitor the service levels provided by the Council as these will change. The current performance is influenced by work efficiencies and technology and community priorities will change over time.

Future Demand

Drivers of Demand

Drivers affecting demand include (but are not limited to), changes in population, legislation, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices and environmental awareness.

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 8 (page 23).

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 8 (page 23). Further opportunities will be developed in future revisions of this AMP.

Asset Programs to Meet Demand

The new assets required to meet demand may be acquired, donated or constructed and these assets are discussed on page 30 under 'Acquisition Plan'.

Acquiring new assets will commit the Council to increased ongoing operational 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 operational maintenance and renewal costs for inclusion in the LTFP (refer to page 26 under 'Life-Cycle Management Plan').

Second Creek Gross Pollutant Trap & Linear Park Path Upgrade

Table 8: Demand Management Plan

Demand Driver	Current Position	Projection	Impact on Services	Demand Management Plan
Climate change	Refer to page 24 under 'Climate Change and Adaptation'.			
Infill development	Minimise additional run-off to waterways through stormwater management controls set out in the Planning and Design Code	Increased stormwater run-off	Higher stormwater flow capacity demand on services during heavy rainfall events	Maintain and enhance development planning controls
Environmental management	Renewal program designed to enhance environmental outcome where possible	Increased water quality and re-use expectations	Increased requirement for Water Sensitive Urban Design infrastructure	Asset renewal and upgrade designs to consider an integrated stormwater management approach Maintain and enhance development planning controls

Climate Change and Adaptation

The impacts of climate change can have a significant impact on the assets which the Council owns and manages and the services which are provided. 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 the City's assets can vary significantly, depending on the location and the type of asset and services that are provided, as will the way in which the Council responds and manage these impacts.

As a minimum, the Council should consider both how to manage existing assets given the potential impacts of climate change and how to create resilience and adapt to climate change when undertaking any new works or acquisitions.

Opportunities which have been identified to date to manage the impacts of climate change on existing assets are shown in Table 9 below.

Table 9: Managing the Impact of Climate Change on Assets

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Storm intensity	Increased rainfall intensity	Increased demand to manage increased flows Inadequate capacity	Asset renewal and upgrade designs to consider flood modelling which accounts for climate change impacts
Rainfall	Reduced annual rainfall	Reduced availability for water re-use	Asset renewal and upgrade designs to optimise water re-use
Temperature	Higher maximum temperatures	Decreased lifespan of assets	While most assets are underground, the material used for exposed above-ground assets can be considered more closely with regards to this issue

St Peters Street Streetscape Upgrade – Water Sustainable Urban Design

The way in which the Council constructs new assets, should take into consideration the opportunity to build in resilience to the impacts of climate change. Developing resilience has a number of benefits including but not limited to:

- assets will be able to withstand the impacts of climate change;
- services can be sustained; and
- assets that can endure the impacts of climate change may potentially lower the life-cycle cost and reduce their carbon footprint

Table 10 below sets out some asset climate change resilience opportunities.

These initiatives are currently being implemented within Council projects where possible. However, it is acknowledged that the impact of climate change on assets is a complex and evolving issue, and further opportunities will be developed in future revisions of this AMP.

Table 10: Developing Asset Resilience to Climate Change

New Asset Description	Climate Change Impacts on Assets	Build Resilience in New Works
Water Sustainable Urban Design (WSUD)	Reduced annual rainfall	Higher quality stormwater more likely to be captured by Aquifer Storage Recovery and reused for irrigation
Stormwater detention assets	Increased rainfall intensity during rainfall events	Reduce requirement to increase the capacity of the existing pit and pipe network

Life-Cycle Management Plan

The Life-Cycle Management Plan details how the Council plans to manage and operate the assets at the agreed levels of service while managing life-cycle costs.

Background Data

Physical Parameters

The assets covered by this AMP are shown in Table 11 below and the age profile of the assets included in this AMP are shown in Figure 4 below.

Table 11: Assets Covered by this Asset Management Plan

Asset Category	Replacement Value ($)
Nodes (pits, outlets, chambers)	17,016,674
Pipes	88,510,260
Culverts	35,712,300
Channels	10,230,160
Waterways under vehicular bridges	2,525,953
Creek Protection	1,061,660
Footbridges	1,498,394
TOTAL	**156,555,401**

Asset Capacity and Performance

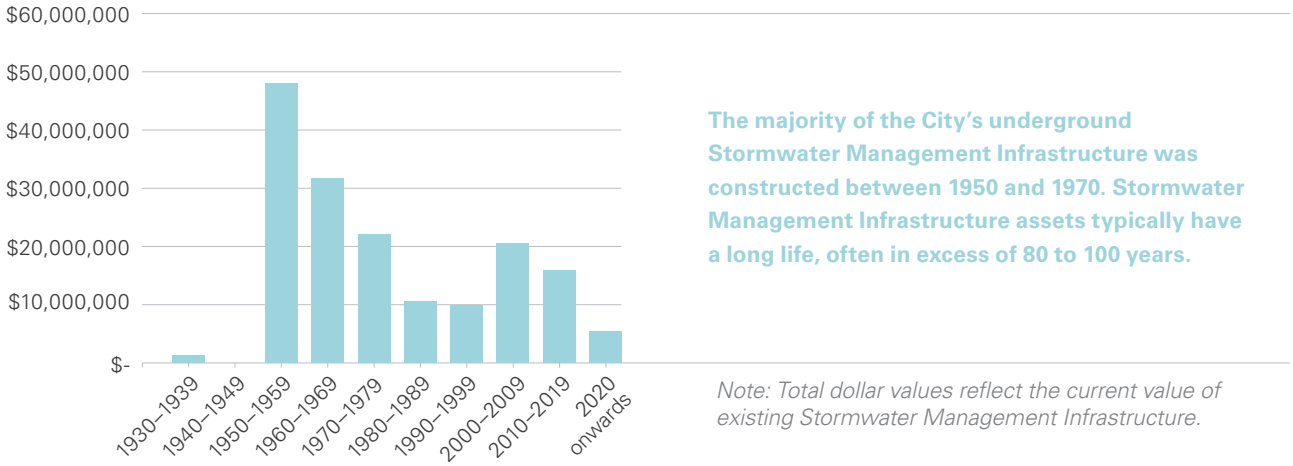
Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 12 below.

Table 12: Known Service Performance Deficiencies

Location	Service Deficiency
Trinity Valley	Insufficient capacity due to increasing stormwater run-off volumes caused by infill development and climate change.
Joslin Valley	
First Creek	

The above service deficiencies have been identified through the Council's City-wide Floodplain Mapping and Long-term Drainage Program, together with operational reports and historical data. The identified service deficiencies are addressed systematically through the annual works programs and operational maintenance works wherever feasible.

Figure 4:
Stormwater Management Infrastructure construction periods



The majority of the City's underground Stormwater Management Infrastructure was constructed between 1950 and 1970. Stormwater Management Infrastructure assets typically have a long life, often in excess of 80 to 100 years.

Note: Total dollar values reflect the current value of existing Stormwater Management Infrastructure.

Condition of Assets

The condition of assets should be monitored by undertaking a condition assessment of the Stormwater Management Infrastructure assets accessible from ground (e.g. pits and open channels) once every five years. Annual CCTV inspections of some inaccessible underground assets (e.g. pipes and culvert) should be completed to systematically monitor asset condition.

A formal condition rating has not been historically provided when undertaking an assessment of the City's Stormwater Management Infrastructure. The output has consisted of defects lists and associated maintenance requirements. The condition assessment rating system will be formalised prior to the next condition data collection (scheduled for the 2025–2026 financial year).

Operational Maintenance Plan

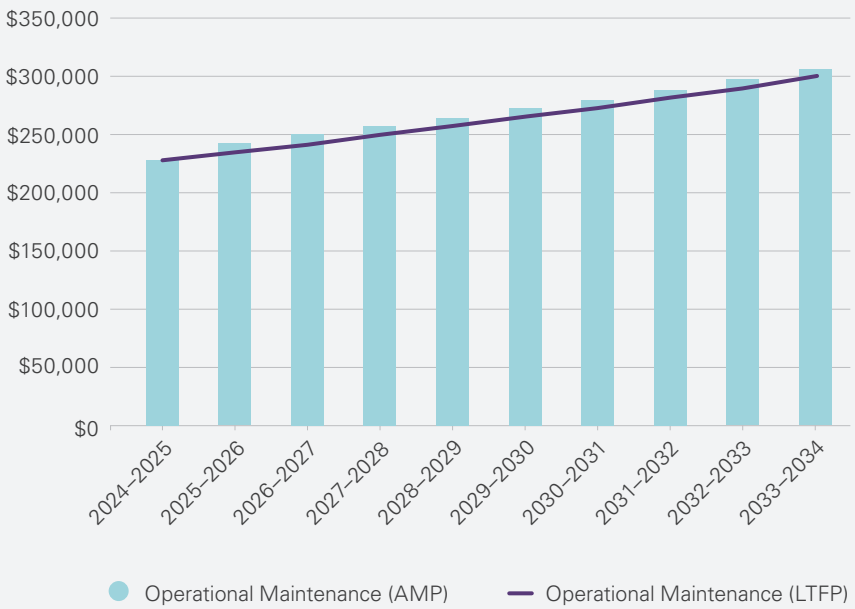
Operational maintenance works focus on the efficiency of assets to ensure the achievement of organisational objectives and the improvement of performance. They include all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating.

Examples of typical operational maintenance activities include asset inspections and patch repairs.

Summary of Forecast Operational Maintenance Costs

Forecast operational maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operational maintenance costs are forecast to increase. If assets are disposed, the forecast operational maintenance costs are expected to decrease. Figure 5 below shows the forecast operational maintenance costs relative to the proposed operational maintenance planned budget.

Figure 5: Operational Maintenance Summary



Operational maintenance costs remain consistent over the life of the AMP, as the costs associated with the Stormwater Management Infrastructure assets are relatively stable due to the nature and location of these assets.

Upon completion of the Trinity Valley Stormwater Drainage Upgrade Project, the resulting additional operational costs will need to be monitored and reflected onto the LTFP accordingly. However, this increase in operational maintenance costs, is forecast to be minor in respect to the total operational maintenance costs for the Stormwater Management Infrastructure assets.

Renewal Plan

Renewal involves 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 operational maintenance costs.

The typical 'useful lives' of assets used to develop projected asset renewal forecasts are shown in Table 13 below.

Renewal Ranking Criteria

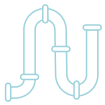
Asset renewal is typically undertaken to either:

- ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate; or
- to ensure the infrastructure is of sufficient quality to meet the service requirements. [4]

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 maintenance costs; and
- have potential to reduce life-cycle costs by replacement with a modern equivalent asset that would provide the equivalent service. [5]

Table 13: Useful Lives of Assets

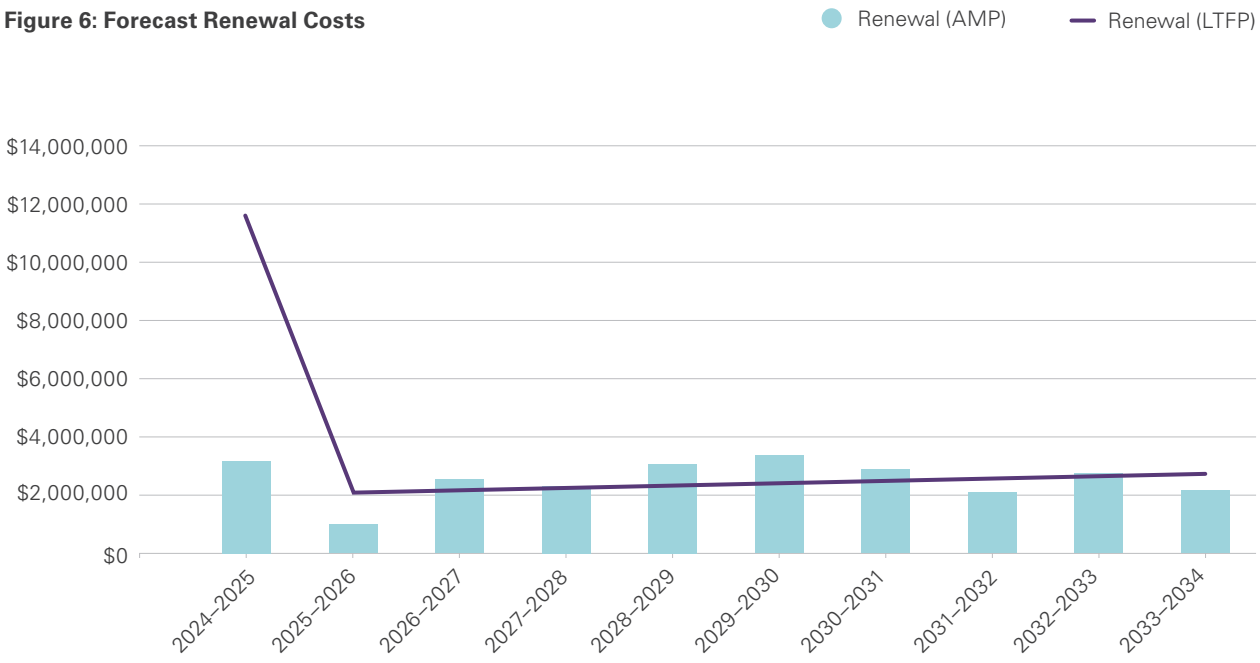
	Asset Category	Useful Life
	Stormwater pipes, culverts, inlets and junction boxes	80 to 100 years
	Footbridges	100 years
	Reno Mattress and Gabion Walls	70 years
	Pumps and Control Systems	10 to 20 years

[4] IPWEA, 2015, IIMM, Sec 3.4.4
[5] Based on IPWEA, 2015, IIMM, Sec 3.4.5

Summary of Future Renewal Costs

The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 6 below.

Figure 6: Forecast Renewal Costs



The scheduling of identified renewal proposals is guided by Council's City-wide Floodplain Mapping and Long-term Drainage Program. One of the major projects identified in the program is the Trinity Valley Stormwater Drainage Upgrade Project. Initially, the project entailed the renewal of existing assets within the Trinity Valley, as well as minor upgrades of a number of sections of the stormwater drainage system. Therefore, the construction costs associated with this project were identified as 'Renewal' and this is reflected in the Council's LTFP.

As the project progressed, it was deemed that major upgrade works are required to be undertaken to ensure that the project objectives are met. To accurately capture the nature of the works, the 'upgrade' component of the project has been identified as "Acquisition" within the AMP. In isolation, Figure 6 above and Figure 7 (page 30) illustrate a difference of totals between the AMP and LTFP numbers. However, when viewed holistically, the LTFP and AMP totals are approximately even, as illustrated in Figure 9 (refer to page 36 under 'Financial Statements and Projections').

Should there be financial resourcing issues, prioritisation of these renewals will need to be determined, with high-risk assets to be renewed when required and lower-risk assets being deferred.

Acquisition Plan

Acquisition reflects 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 Council.

The acquisition projects included in the AMP are projects that are identified within Council's strategies.

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised in Figure 7 below and shown relative to the proposed acquisition budget.

The variance between the acquisition AMP and LTFP numbers illustrated in Figure 7 below is discussed on page 29 under 'Summary of Future Renewal Costs'. It is important to note that, when viewed holistically, the LTFP and AMP totals are approximately even, as illustrated in Figure 9 (refer to page 36 under 'Financial Statements and Projections').

Within the City of Norwood Payneham & St Peters area, there are major waterways which are partially located on privately-owned land without Council easements, hence the ownership and responsibility of maintenance is of the owner of the private property.

This is a matter which requires further consideration, as a failure of a privately-owned section of a major waterway will significantly impact upon the stormwater drainage system. While the Council can assist with remediation of these issues within private land, the absence of easements adds a layer of complexity to resolving the issue.

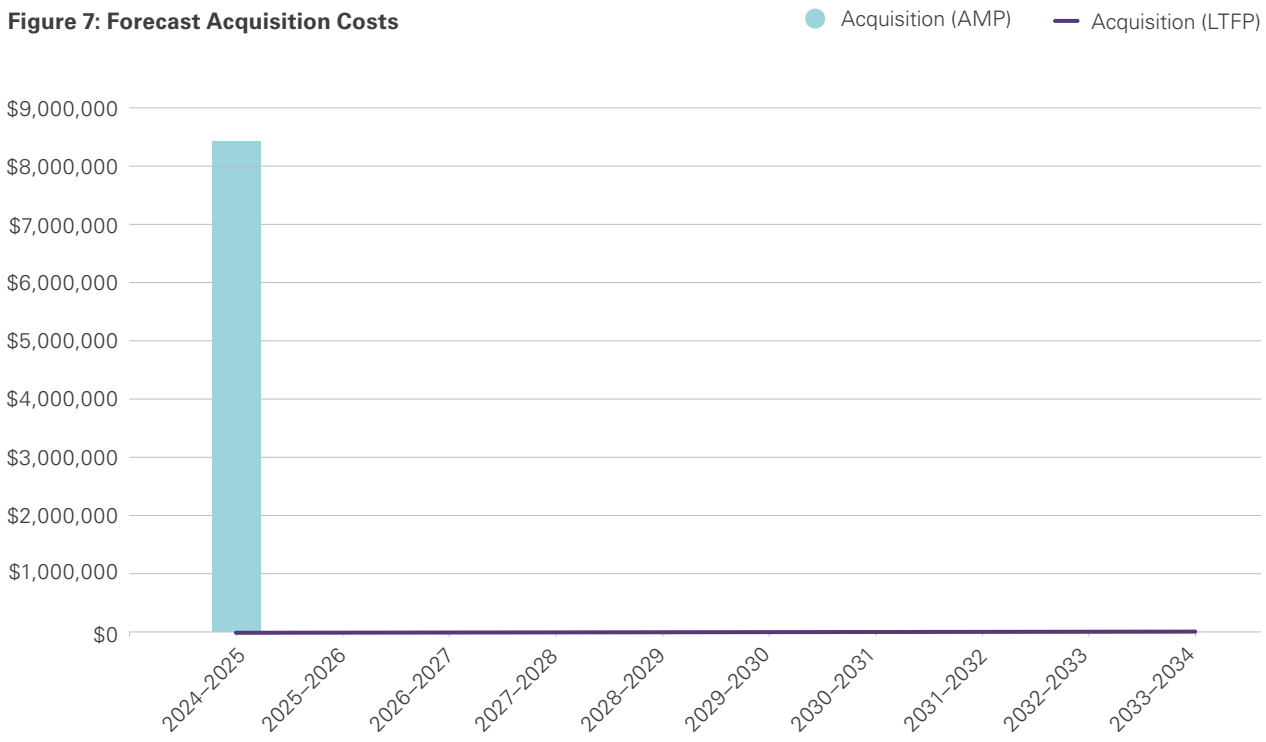
The Council should remain alert of opportunities to secure ownership of the land or easement over these sections of major waterways (e.g., as part of major development works).

Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation.

At this stage, there are no disposal costs forecasted in the next ten years.

Figure 7: Forecast Acquisition Costs



Risk Management Planning

The purpose of risk management associated with infrastructure assets 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'.[6]

An assessment of risks 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.

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 14 below.

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

Table 14: Critical Assets

Critical Assets	Failure Mode	Impact
Footbridges	Degradation, third party damage	Service interruption
Outlets	Embankment collapse	Increased flood risk
Major culverts	Blockage	Increased flood risk

[6] *ISO 31000:2009*

Risk Assessment

The risk management process used is shown in Figure 8.

The risk management process is an analysis and problem-solving technique that is designed to provide logical process for the selection of treatment plans and management actions toprotect the community against unacceptable risks.

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

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 unacceptable risks.

An assessment of risks 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. This is outlined in Table 15 below.

Figure 8: Risk Management Process – Abridged

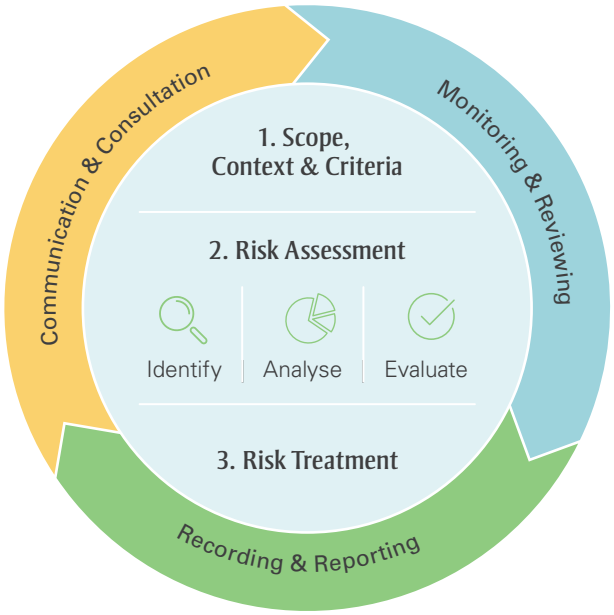


Table 15: Risks and Treatment Plans

Service or Asset at Risk	Risk Event	Impact Category	Risk Rating	Risk Treatment Plan	Residual Rating
Underground stormwater drainage assets	Potential for uninformed decision making, as a majority of assets are not visible	Service	Substantial (13)*	Update condition data through CCTV works and review renewal program	Medium (17)*
Side entry pits	Blockage due to debris and vegetation	Reputation	Substantial (13)*	Monitor suitability of maintenance schedule and adjust accordingly (e.g., increase maintenance and inspections during high leaf fall periods)	Low (21)*
Footbridges	Footbridge failure	Service / Reputation	Substantial (12)*	Undertake periodic inspection and maintenance works	Medium (16)*

** Refer to Risk Matrix in Table 16 (page 33).*

Table 16: Council's Risk Matrix

A 'risk rating'—sometimes known as the risk level—is obtained by applying the likelihood and consequence in the context of existing and proposed control measures to arrive at the level of risk, as per the Risk Matrix shown below.

	Catastrophic	Major	Moderate	Minor	Insignificant
Almost Certain	Extreme 1	Extreme 4	High 8	High 10	Substantial 15
Likely	Extreme 2	Extreme 5	High 9	Substantial 14	Medium 20
Possible	Extreme 3	High 7	Substantial 13	Medium 19	Low 23
Unlikely	High 6	Substantial 12	Medium 17	Low 21	Low 24
Very Unlikely	Substantial 11	Medium 16	Medium 18	Low 22	Low 25

Service and Risk Trade-offs

The decisions made when adopting this AMP have been based on the objective of achieving the optimum benefits from the available resources (financial and human).

What the Council cannot do

Works and services that cannot be provided under present funding levels are:

- undertaking of major acquisition works which are not set out in Council's LTFP; and
- provision of operational maintenance and renewal works above the current service levels.

Service Trade-off

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

- frequency of flood events increasing due to increasing stormwater run-off;
- poor quality stormwater entering the receiving waters and wider environment; and
- community expectations not being met.

Risk Trade-off

The forecast works not being undertaken due to insufficient resources may sustain or create risk consequences.

These risk consequences include:

- loss of service; and
- loss of the Council's reputation.

The Council will endeavour to manage these risks within the available funding allocation by:

- reacting to potential flood events with temporary mitigation measures;
- finding efficiencies within the current operational maintenance program; and
- prioritisation of renewal projects.

Infrastructure Resilience Approach

The resilience of the Council's critical infrastructure is vital to the ongoing provision of services to the community. To adapt to changing conditions, the Council needs to understand its capacity to 'withstand a given level of stress or demand' and to respond to possible disruptions to ensure continuity of service.

Resilience is built upon aspects such as response and recovery planning, financial capacity, climate change and crisis leadership.

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

Financial Summary

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

Financial Statements and Projections

Asset Valuations

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

Current (Gross) Replacement Cost	$156,555,401
Depreciable Amount	$156,555,401
Depreciated Replacement Cost	$74,593,523
Depreciation during the 2022–2023 Financial Year	$1,705,839

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that have been considered in developing this AMP, namely:

- Asset Renewal Funding Ratio (proposed LTFP renewal budget for the next ten years / forecast AMP renewal costs for next ten years); and
- medium term forecast costs / proposed budget (over ten years of the planning period).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio	134.33%

The **Asset Renewal Funding Ratio** is an important indicator and illustrates that over the next ten years, the Council expects to have 100% of the funds that are required for the optimal renewal of assets.

The variance between the renewal AMP and LTFP numbers is discussed on page 29 under 'Summary of Renewal Costs'. It is important to note that when viewed holistically, the LTFP and AMP totals are approximately even, as illustrated in Figure 9 (page 36).

Additionally, between 2025–2026 and 2033–2034, the total AMP renewal figure is approximately $21.76 million and the LTFP renewal figure is approximately $21.83 million. This results in an Asset Renewal Funding Ratio of 100.33% for those nine years, which is within the target range for this Ratio of 90% to 110%.

The forecast renewal work together with the proposed renewal budget is illustrated in Appendix C (page 43).

[7] Also reported as Written Down Value, Carrying or Net Book Value.
[8] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6.

Medium Term – Ten Year Financial Planning Period

This AMP identifies the forecast operational maintenance and renewal costs that are required to provide an agreed level of service to the community over a ten year period. This provides input into ten 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 ten year period to identify any funding shortfall.

The forecast AMP operational maintenance and renewal costs over the ten year planning period is $2,758,240 on average per year.

The LTFP operational maintenance and renewal funding is $3,605,594 on average per year, resulting in nil funding shortfall. This indicates that 100% of the forecast costs needed to provide the services documented in this AMP are accommodated in the proposed budget.

Similar to the above, the variance between the AMP and LTFP numbers is discussed in on page 29 under 'Summary of Renewal Costs'. Additionally, the ratio is approximately 100.01% for the remaining nine years of the AMP timeframe.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to achieve a financial indicator of approximately 100% for the first years of the AMP and ideally over the ten year life of the LTFP.

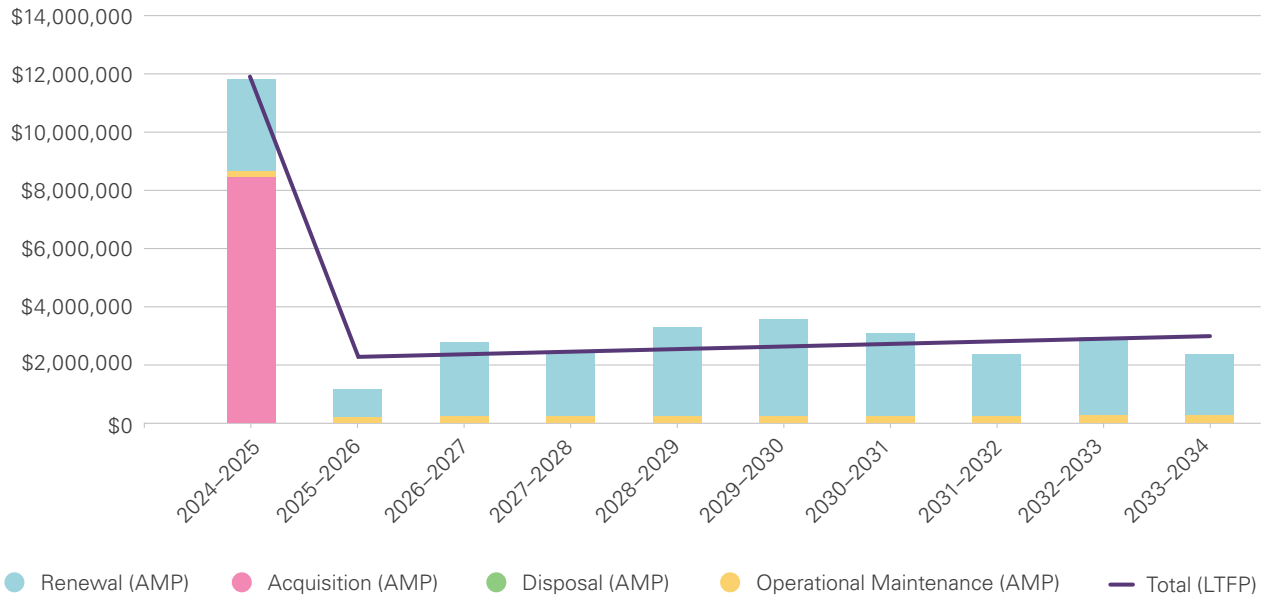
Forecast Costs (outlays) for the LTFP

A summary of the anticipated AMP forecast life-cycle costs compared with the LTFP planned budget are shown in Table 17 below and Figure 9 on the following page.

Table 17: Forecast Life-Cycle Costs and Planned Budgets

Year	Acquisition (AMP) ($)	Operational Maintenance (AMP) ($)	Renewal (AMP) ($)	Disposal (AMP) ($)	Total Budget (LTFP) ($)
2024–2025	8,472,308	228,553	3,136,151	0	11,837,012
2025–2026	0	243,315	987,500	0	2,328,278
2026–2027	0	250,377	2,537,500	0	2,442,755
2027–2028	0	257,651	2,287,500	0	2,525,113
2028–2029	0	265,143	3,037,500	0	2,609,733
2029–2030	0	272,861	3,327,500	0	2,703,137
2030–2031	0	280,809	2,832,500	0	2,782,002
2031–2032	0	288,996	2,087,500	0	2,862,338
2032–2033	0	297,429	2,552,500	0	2,941,846
2033–2034	0	306,115	2,105,000	0	3,023,722

Figure 9: Forecast Life-Cycle Costs and Planned Budgets



Funding Strategy

The proposed funding for the acquisition, renewal, operational maintenance and disposal of assets is outlined in the Council's Annual Budget and LTFP.

The Council's financial strategy outlines how funding will be provided, whereas the AMP sets out how and when this will be spent, together with the service and risk consequences of various service alternatives.

Valuation Forecasts

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

Additional assets will generally add to the operational 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.

Key Assumptions Made in Financial Forecasts

In preparing this AMP, it has been necessary to make some assumptions. This section details the key assumptions that have been made in the development of this AMP and provide an understanding of the level of confidence in the data that has been used to calculate the financial forecasts.

Key assumptions made in this AMP are:

- renewal costs have been based on previous projects undertaken by the Council; and
- forecasted operational maintenance costs are based on previous expenditure for the same service levels.

Forecast Reliability and Confidence

The forecast costs, proposed budgets and valuation projections in this AMP, are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on an A to E level scale[9] in accordance with Table 18 (page 37).

[9] *IPWEA, 2015, IIMM, Table 2.4.6*

Table 18: Data Confidence Grading System

Grade	Confidence Grade	Description
A	Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment.
B	Reliable	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.
C	Uncertain	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.
D	Very Uncertain	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.
E	Unknown	None or very little data is held.

The estimated confidence level for and reliability of data used in this AMP is shown in Table 19 below.

Table 19: Data Confidence Assessment for Data Used in Asset Management Plan

Data	Confidence Assessment	Comment
Demand drivers	C	Based on development application trends, climate change data
Growth projections	C	Based on development application trends
Acquisition forecast	B	Future iterations of the AMP may incorporate opportunities to achieve additional acquisition through grant funding to enhance service level provision
Operational maintenance forecast	B	In line with previous years
Renewal forecast		
- Asset values	B	As per approved methodology
- Asset useful lives	B	Current estimates from asset register
- Condition modelling	C	Methodology and data capture to be updated
Disposal forecast	E	No disposal of assets anticipated

The estimated confidence level for and reliability of data used in this AMP is considered to be reliable.

Plan Improvement and Monitoring

Status of Asset Management Practices

Accounting and Financial Data Sources

The Council uses Authority and Conquest as its financial management and accounting IT systems. These systems have the capability to report on the full life-cycle of assets, providing full transparency from acquisition to disposal.

Asset Management Data Sources

The Council uses Conquest as its asset management system, and Spectrum Spatial as its geographical information system. There are plans to improve integration between the GIS data with the asset management register to provide a live and amalgamated asset data system.

Improvement Plan

It is important that the Council recognises areas of the AMP and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AMP is the following:

Task 1: Formalise ongoing monitoring and reporting of improvement plan tasks and performance measures

Responsibility: Project Manager, Assets
Resources Required: Manager, City Project
Timeline: 1 year

Task 2: Establish formal condition rating process of drainage infrastructure

Responsibility: Project Manager, Assets
Resources Required: Asset Consultants
Timeline: 1 year

Task 3: Develop further the risk assessment and management planning

Responsibility: Project Manager, Assets
Resources Required: Project Officer, Assets and Asset Consultants
Timeline: 2 years

Task 4: Improve GIS data storage system integration with asset database

Responsibility: Project Manager, Assets
Resources Required: Project Officer, Assets and Asset Consultants
Timeline: 3 years

Task 5: Review resilience of critical infrastructure

Responsibility: Project Manager, Assets
Resources Required: City Assets and Asset Consultants
Timeline: 4 years

Task 6 : Integrate climate risk assessment into asset management planning

Responsibility: Project Manager, Assets
Resources Required: City Assets and Asset Consultants
Timeline: 4 years

Trinity Valley Stormwater Drainage Upgrade – Stage 3

Monitoring and Review Procedures

This AMP will be reviewed and updated annually to ensure that it represents the current service level, asset values, forecast operational maintenance, renewals, acquisition and disposal costs and proposed budgets. These forecast costs and proposed budget are incorporated into the LTFP or will be incorporated into the LTFP once completed.

The AMP has a maximum life of four years and is due for complete revision and updating within two years of each Local Government election.

Performance Measures

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

Forecast costs identified in this AMP are incorporated into the LTFP;

Short-term detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the AMP; and

The Asset Renewal Funding Ratio achieving the Organisational Target (between 90% and 110%).

References

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM;
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- IPWEA, 2012 LTFP Practice Note 6 PN Long-Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney;
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines;
- *CityPlan 2030: Shaping Our Future;*
- Long-term Financial Plan;
- Annual Business Plan;
- City-wide Floodplain Mapping and Long-term Drainage Program;
- Asset Management Policy; and
- City of Norwood Payneham & St Peters Community Survey Report.

Appendices

Appendix A

Acquisition Forecast

A.1 – Acquisition Forecast Assumptions and Source

The scheduling of identified acquisition projects is guided by Council's City-wide Floodplain Mapping and Long-term Drainage Program.

A.2 – Acquisition Forecast Summary

Year	Acquisition (AMP) ($)	Acquisition (LTFP) ($)
2024–2025	8,472,308	0
2025–2026	0	0
2026–2027	0	0
2027–2028	0	0
2028–2029	0	0
2029–2030	0	0
2030–2031	0	0
2031–2032	0	0
2032–2033	0	0
2033–2034	0	0

Appendix B

Operational Maintenance Forecast

B.1 – Operational Maintenance Forecast Assumptions and Source

The operational maintenance forecast has been based on previous expenditure for the same service levels.

B.2 – Operational Maintenance Forecast Summary

Year	Operational Maintenance (AMP) ($)	Operational Maintenance (LTFP) ($)
2024–2025	228,553	228,553
2025–2026	243,315	235,410
2026–2027	250,377	242,472
2027–2028	257,651	249,746
2028–2029	265,143	257,238
2029–2030	272,861	264,956
2030–2031	280,809	272,904
2031–2032	288,996	281,091
2032–2033	297,429	289,524
2033–2034	306,115	298,210

Appendix C

Renewal Forecast Summary

C.1 – Renewal Forecast Assumptions and Source

The scheduling of identified renewal proposals is guided by Council's City-wide Floodplain Mapping and Long-term Drainage Program.

C.2 – Renewal Forecast Summary

Year	Renewal (AMP) ($)	Renewal (LTFP) ($)
2024–2025	3,136,151	11,608,459
2025–2026	987,500	2,092,868
2026–2027	2,537,500	2,200,283
2027–2028	2,287,500	2,275,367
2028–2029	3,037,500	2,352,495
2029–2030	3,327,500	2,438,181
2030–2031	2,832,500	2,509,098
2031–2032	2,087,500	2,581,247
2032–2033	2,552,500	2,652,322
2033–2034	2,105,000	2,725,512

Appendix D

Disposal Summary

D.1 – Disposal Forecast Assumptions and Source

No disposals have been forecast over the AMP period.

D.2 – Disposal Forecast Summary

Year	Disposal (AMP) ($)	Disposal (LTFP) ($)
2024–2025	0	0
2025–2026	0	0
2026–2027	0	0
2027–2028	0	0
2028–2029	0	0
2029–2030	0	0
2030–2031	0	0
2031–2032	0	0
2032–2033	0	0
2033–2034	0	0

Further Information

For information on the Council's *Asset Management Plan: Stormwater Management Infrastructure 2025–2034,* please visit www.npsp.sa.gov.au or phone 8366 4555.

You can also visit the Council's Customer Service Centre at the Norwood Town Hall, 175 The Parade, Norwood.

Additional Copies

The *Asset Management Plan: Stormwater Management Infrastructure 2025–2034* can be viewed online at www.npsp.sa.gov.au

Additional copies may also be obtained by:

- visiting Norwood Town Hall
- visiting any of the Council's Libraries
- emailing townhall@npsp.sa.gov.au
- contacting the Council on 8366 4555
- writing to the Council at PO Box 204, Kent Town SA 5074

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