

STORMWATER ASSET MANAGEMENT PLAN

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ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset Management Plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour

GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases Council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the Council's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the

whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately

maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

(a) use in the production or supply of goods or services or for administrative purposes; or

(b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Cost to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are

greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Source: DVC 2006, Glossary

Note: Items shown * modified to use DA instead of CRC

Additional glossary items shown **

1. EXECUTIVE SUMMARY

What Council Provides

The Town of Gawler is one of South Australia's largest and most significant historic towns.

Gawler was established as a township in 1839 and has the notoriety as being South Australia's first country town and the only country town designed by William Light.

During 2007, the Town of Gawler celebrated 150 years of local government involvement – since 9th July 1857 - in South Australia.

It is a community of 21,000 residents, with a current growth rate of approximately 1.9% per annum. It comprises of 7,000 households, and covers an area of 41 square kilometres. The population within its catchment area is estimated at up to 80,000 people, who in some way make use of the Town of Gawler facilities and services. The main industries in the area are education, retail, light industrial, manufacturing, agriculture, viticulture and tourism.

Gawler provides its residents with the benefits of country living, town services and easy access to central metropolitan facilities while residing in an area combining heritage and modern amenities.

Gawler is a regional centre located 42 km north of Adelaide and on the northern boundary of the Adelaide Metropolitan area. It is the interface/crossroads between expanding suburbs, and is bounded by intensive horticultural areas of the Northern Adelaide Plains and the viticulture of the Barossa Valley, and agricultural districts of Roseworthy and Kapunda. Gawler is bounded on the north by the District Councils of Light and The Barossa Council; and in the south by the City of Playford.

The State Government's 30 Year Plan for Greater Adelaide defines considerable future growth (3.3%) and development within the Town of Gawler area.

The Gawler Council is custodian of an extensive range of community assets that it provides to facilitate delivery of its services to the community.

The local stormwater network assets incorporate approximately 82 kilometres of pipes, 3157 pits and 2 major drainage channels (1068) metres. Department of Planning Transport and Infrastructure maintain 22.5 kilometres of roads within the Council area including associated stormwater assets.

Council 2012/2013 Stormwater Maintenance Operations budget is \$574,875, of which \$497,357 is for depreciation, and 2012/2013 Capital Renewal/Upgrade Budget is \$260,000.

Council provides a Stormwater network in partnership with Department for Planning, Transport and Infrastructure to ensure effective stormwater disposal throughout the Council area.

Stormwater network assets include:

- Pipes
- Pits
- Channels

What does it Cost?

There are two key indicators of cost to provide the stormwater service.

- The life cycle cost being the average cost over the life cycle of the asset, and
- The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long term financial plan.

The life cycle cost to provide the stormwater service is estimated at \$568,561 per annum. Council's planned life cycle expenditure for year 1 of the Asset Management Plan is \$89,874 which gives a life cycle sustainability index of 0.16.

The total maintenance and capital renewal expenditure required to provide the stormwater service the in the next 10 years is estimated at \$2,381,490. This is an average of \$238,149 per annum.

Council's maintenance and capital renewal expenditure for year 1 of the Asset Management Plan of \$179,050 giving a 10 year sustainability index of 0.75.

The sustainability index indicates the degree of work required to manage the delivery of services and achieve a balance between expenditure and available funding.

Plans for the Future

Council plans to operate and maintain the Stormwater network to achieve the following strategic objectives.

1. Ensure the stormwater network is maintained at a safe and functional standard as set out in this Asset Management Plan.
2. Ensure stormwater network is maintained at a level of service that is acceptable and which the community can afford.
3. Manage the stormwater infrastructure in a sustainable manner.
4. Maintain and develop stormwater assets in accordance with adopted standards and practices and/or relevant Australian Standards.

Measuring our Performance

Quality

Stormwater assets will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired. Levels of service that the Council will be delivering on behalf of the community are determined by considering the needs and desires of those affected by stormwater assets. These levels of service and a comprehensive risk assessment determined the inspection regimes and maintenance and renewal strategies. Key performance measures are used to enable Council to assess and monitor the sustainability of assets. Asset Management Plan also identifies growth issues and trends in the demand for services.

The financial implications of the Asset Management Plan define the long-term financial requirements for the management of this asset class.

The Plan includes an improvement program to continually refine stormwater management practices and processes.

Function

Our intent is that an appropriate Stormwater network is maintained in partnership with other levels of government and stakeholders to develop performance measures and targets that will provide objectives for stormwater disposal, that must consider not only community/customer expectation; strategic goals; and legislative requirements, but technical standards and Council's ability to allocate sufficient resources to meet measures and targets.

Stormwater asset attributes will be maintained in a reasonably usable condition and associated signage and equipment be provided as needed. We need to ensure key functional objectives are met:

- Level of Service
Review current levels of service and assess development requirements.
- Demand Management
Examining factors and trends influencing demand for an asset and the impact on its management and utilisation.
- Lifecycle Management Plan
A strategy for the management of the asset from planning/creation, to disposal including maintenance and renewal requirements.
- Financial Summary
Details financial commitments to facilitate lifecycle management to the existing levels of service.
- Asset Management Practices
This details information systems and processes utilised in the decision on management of assets.
- Plan Improvement and Monitoring
Details performance measures for the plan; the improvement program; and monitoring and review procedures.

Safety

Council inspect all Stormwater regularly and prioritise and repair defects in accordance with our inspection schedule to ensure they are safe for stormwater users.

The Next Steps

Council will review this Plan as part of the continuous improvement process to further develop and refine this Plan. Actions resulting from the development of this Asset Management Plan are:

- Current levels of service to be developed.
- Desired levels of service to be developed.
- Review of development needs associated with the rate and location of growth.
- Demand management summary table to be reviewed.
- Continue to collect and update asset data.
- Asset capacity and performance table to be reviewed.
- Risk management plan to be developed.
- Maintenance response levels of service to be developed.
- Renewal priority criteria to be developed.
- Asset priority ranking criteria to be reviewed.
- Carry out consultation to ascertain the community's service needs and preferences and confirm target levels adopted.
- Review of the customer request reports available in Authority.
- Review of legislative requirements to ensure Council's compliance with the latest legislations and regulations.
- Undertake condition assessment of stormwater assets to enable improved information for future planning and development of maintenance and capital programs.
- Review of useful life of all stormwater assets based on real time assessment of asset deterioration.
- Review capital expenditure threshold values for stormwater assets.
- Review of financial reporting systems to determine whether any changes are required to meet statutory requirements.
- Review of current asset management systems for improvement, systems integration and expansion.
- Completing the improvement plan by November 2016.

2. INTRODUCTION

2.1 Background

This Asset Management Plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding required to provide the required levels of service.

The Asset Management Plan is to be read with the following associated planning documents:

- Strategic Plan 2010-18
- Adopted Budget - Business 2012-13
- Long Term Financial Plan 2011 - 2020
- Development Plan 2012

This Asset Management Plan covers the following infrastructure assets:

The local stormwater network assets incorporate approximately 82 km of pipes, 3157 pits and 2 major drainage channels.

Table 2.1. Assets covered by this Plan

Asset category	Dimension	Replacement Value (\$M)
Pipes	82 Kilometres	34.312
Pits	3157 nos	8.840
Channel	2 nos – 1068 metres	2.803
TOTAL		49.064

Key stakeholders in the preparation and implementation of this Asset Management Plan are:

Stakeholder	Role
Elected Members	Approval of the Asset Management Plan and Framework
Community	Service level expectations
Council Administration	Allocate required funds for the implementation of this Asset Management Plan

Council Engineering Staff	Programming capital and maintenance works and making application for funds to meet standards set, within budget constraints,
Council Operation Staff	Implementing programmed and reactive maintenance works.
Department of Planning, Transport and Infrastructure	Interface agreement with the State road network
ETSA	Interface agreement with power distribution network
SA Water / United Water	Interface agreement with the Water Supply Network
Telstra / NBN	Interface agreement with the Communication Network
Developers	Investing of new assets
Contractors	Design approvals, protection of assets (permit to work)
Public Transport Providers	Selection and changes to routes, Works coordination

2.2 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', by contract, construction by Council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. Stormwater assets contribute to the economy and health and safety of the communities by providing for the orderly and efficient disposal of stormwater runoff throughout the Council area.

The key elements of infrastructure asset management are:

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Implementing a program of inspections and monitoring activities to assess asset condition and performance,
- Sustainable use of physical resources,

- Undertaking a risk based approach to identify operational, maintenance, renewal and capital developments needs, and applying economic analysis techniques to select the most cost effective work program,
- Consider all options available to meet funding gaps,
- Continuous improvement in asset management practices.¹

The specific purpose of this plan is to:

- Improve understanding of service level standards and options,
- Better understand and forecast asset related management options and costs and ability to even out peak funding demands,
- Clearly justify forward works programs,
- Managing risks associated with asset failures,
- Improve decision making based on costs and benefits of alternatives,
- Improve customer satisfaction and organisational image.

This Asset Management Plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

Gawler is a regional town with a separate identity and a unique character – defined by its wonderful heritage, landscape, architecture, and people. Our community is diverse, informed, prosperous, friendly, safe, healthy, democratic, and sustainable.

Council's mission is:

The Council has a critical role in nurturing, enhancing and guiding the Gawler community towards its Vision for the future. We deliver local governance, services and facilities to:

- enhance the quality of life of residents;
- preserve a unique heritage;
- achieve a balance between sustainable economic development, community development, and the environment;
- stimulate economic activity to generate investment and employment;
- build social capital and strengthen the community; and
- engage in quality planning and initiatives to seek the best outcomes.

¹ IIMM 2011 – Section 4.6 – Continuous Improvement

Relevant Council goals and objectives and how these are addressed in this Asset Management Plan are:

Table 2.2. Council Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in IAMP
Manage Natural and Built Environment	Sustainable Asset Management	Stormwater service assets are maintained at a level of service that is acceptable and which community can afford.
Manage Natural and Built Environment	A Better Environment	Minimise water use. Water sensitive urban design (WSUD) principles in new developments and existing areas.
Organisation Excellence	Sustainable Financial Management	Balance service demand with available resources.
A Strong Community	A Safe Community	Stormwater hazards reduced for the community.

2.3 Plan Framework

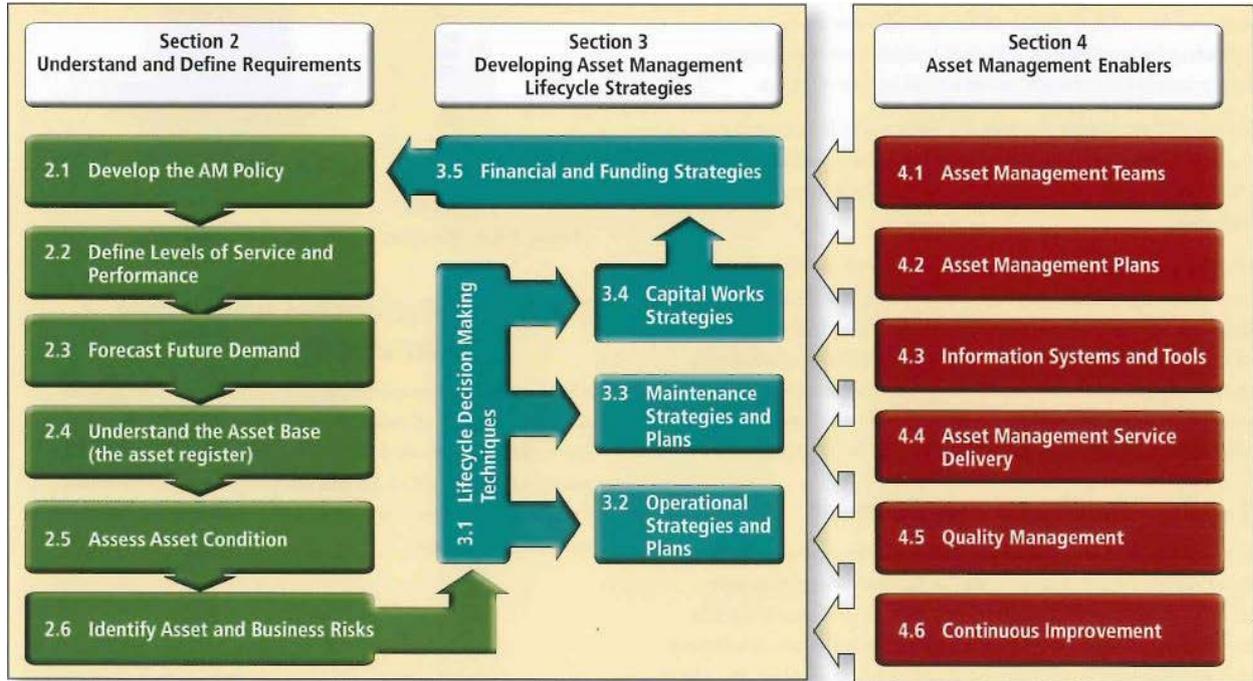
Key elements of the plan are

- Levels of service – specifies the services and levels of service to be provided by Council.
- Future demand – how this will impact on future service delivery and how this is to be met.
- Life cycle management – how Council will manage its existing and future assets to provide the required services
- Financial summary – what funds are required to provide the required services.
- Asset management practices
- Monitoring – how the plan will be monitored to ensure it is meeting Council's objectives.
- Asset management improvement plan

A road map for preparing an Asset Management Plan is shown below.

Road Map for preparing an Asset Management Plan

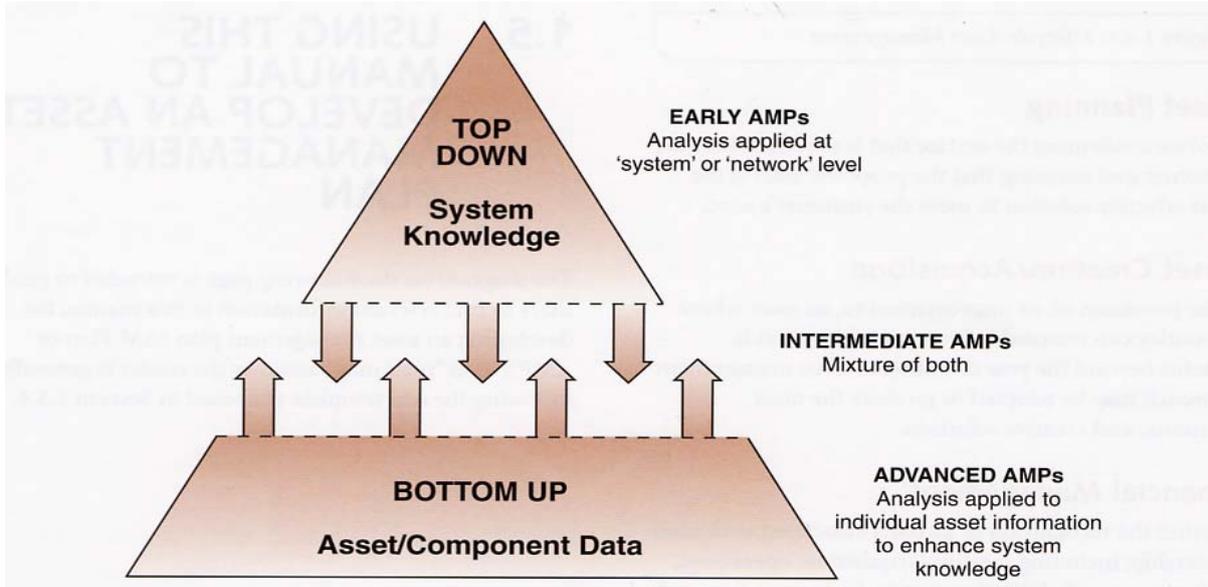
Source: IIMM 2011 Fig 1.3.1, p 1/9



2.4 Core and Advanced Asset Management

This Asset Management Plan is prepared as a 'core' Asset Management Plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this Asset Management Plan will gather asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.



3. LEVELS OF SERVICE

Level of Service can be defined as the service quality for a given activity.

Service levels may relate to:

- Reliability of Service
- Quality of Service
- Quantity of Service
- Safety/Risk/Security

Service Levels provide the basis of the life cycle management strategies and capital works programs identified within the Asset Management Plan. They encapsulate the Council's strategic goals and are based on statutory requirements, customer expectations and corporate goals. Service Levels should be refined over time to match the expectations of customers. This will require a clear understanding of customer needs, expectations, preferences and their willingness (or not) to pay for any increase in the levels of service.

3.1 Customer Research and Expectations

Council has not carried out any research on customer expectations. This will be investigated for future updates of the Asset Management Plan. Typically the community surveys will uncover community expectation of the services and the community need for assets such as new playgrounds, roads, public amenities, access trails and other similar community assets.

In developing the levels of service as documented in this Asset Management Plan, Council has given due regard to the strategic goals and objectives in the 2010-2018 Strategic Plan which sets out the strategic direction of Council to implement its Asset Management Plan over the following four years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer requests and expectations.

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
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.
Local Government (Financial Management and Rating) Amendment Act 2005	Impetus for the development of a Strategic Management Plan, comprising an (Infrastructure) Asset Management Plan and Long-term Financial Plan.
Civil Liability Act 1936	Have consideration of, adhere to and fulfil the requirements for liability of road authorities – Section 42, May 2004 inclusion in the Act to provide a replacement for the nonfeasance defence consequent to May 2001 High Court judgement.
Development Act 1993	Provides for planning and regulate development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate.
Work Health and Safety Act 2012 and WHS Regulations 2012	Have consideration of, adhere to and fulfil the requirements to provide for the health, safety and welfare of persons at work and for other purposes.
Environmental Protection Act 1993	Have consideration of, adhere to and fulfil the requirements for protection of the environment from any activities relating to stormwater assets.
Native Vegetation Act 1991	Provides incentives and assistance to landowners in relation to be preservation and enhancement of native vegetation; to control the clearance of native vegetation: and for other purpose.
Natural Resources Management Act 2004	Have consideration of, adhere to and fulfil the requirements to promote sustainable and integral management of the State's natural resources; to make provision for the protection of the State's natural resources and for other purposes.
Australian Standards (AS)	Follow various standards which give the necessary guidelines and specifications for Stormwater Assets.

3.3 Current Levels of Service

Growth in development and a more aware community has resulted in a demand for increased services, and consequently, the expectations of the Gawler community are predicted to rise.

These expectations and the community's perception of Council's ability to provide existing services are impacted significantly by issues related to resource allocation and funding.

The issue of deterioration of the assets resulting from inadequate allocation of resources to infrastructure maintenance must be considered against the level of revenue Council is able to raise from rates, charges and grants. Limited revenue growth could be reflected in a further deterioration of assets and infrastructure as well as a reduction in other services and service levels.

The development of performance measures and targets for stormwater assets service criteria is required, and must consider not only community expectations, strategic goals, and legislative requirements, but also technical standards and Council's ability to allocate sufficient resources to meet measures and targets.

Note: At present there are issues relating to the quality and quantity of stormwater discharge which impacts on community and natural environments. Council is aware of the flood plain areas and is in the process of developing policies, guidelines and plans to address flood mitigation and erosion control, have risks due to lack of flood mitigation measures.

Effect of climate change is well documented, however at this stage Council is not cognisant of the localised impact and effect this will have on its assets and community. In addressing climate issue, a common approach through LGA would be useful.

When deciding desired level of service, due consideration will be given for above issues.

Table 8.2: The Improvement Plan of the Stormwater Asset Management Plan Task 1 and 2 addresses timelines for this improvement.

Also noteworthy, Council is in the process of finalising the Gawler Water Reuse Scheme (GWRS). This scheme will provide 800ML of recycled water and address water harvesting, stormwater mitigation and quality issues.

Council has defined service levels in two terms.

- Community Levels of Service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.
- Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria

Quality
Quantity
Availability
Safety

Technical measures may relate to

Safe clean drains, free of hazards
Sufficient capacity to convey up to 5 year ARI flow
A system nearby for land to dispose stormwater
Number of injury accidents

Service levels can be documented as detailed in Table 3.3 but performance targets have not yet been agreed for any of the stormwater assets. Until these are agreed then performance against target cannot be measured. This will be completed in future updates of this plan.

Table 3.3. Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Provide efficient method of collection and disposal of stormwater.	Customer requests in regards to flooding or stormwater nuisance.	TBA	TBA
Function	Ensure Stormwater system meets community expectations.	Customer requests relating to buildings not flooded by up to 1:100 year ARI event.	TBA	TBA
Safety	Provide stormwater system that is low risk to the community.	Number of injuries / property damage.	TBA	TBA

TECHNICAL LEVELS OF SERVICE				
Condition	Condition of network is in a sound to maintain function without obstruction.	Regular street sweeping Regular SEP cleaning Routine clearing of drains.	TBA	TBA
Function	Ensure stormwater system has appropriate design capacity.	Number of building inundation events, less than 1:100 ARI event.	TBA	TBA
Cost Effectiveness	Provide cost effective stormwater system.	Cost / metre.	TBA	TBA
Safety	Minimise flooding to buildings from Council drainage network.	Buildings protected from a 100 year average recurrence interval storm.	TBA	TBA

3.4 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including the most recent LGASA Customer Satisfaction survey, residents' requests, feedback to Councillors and staff, service requests and correspondence. Council has yet to quantify desired levels of service. This will be done in future revisions of this Asset Management Plan.

4. FUTURE DEMAND

4.1 Demand Forecast

The challenges affecting Council into the future are based on a review of the 30-Year Plan for Greater Adelaide, Council Strategic Plan 2010-2018, Draft Strategic Directions Report, emerging trends and includes factors such as population change, changes in demographics, income and distribution, labour force, vehicle ownership as well as residential, commercial and industrial land supply.

The impact of these trends/factors needs to be regularly examined and demand management strategies are recommended as a technique to modify demand without compromising community expectations.

It is anticipated that as a result of Council's predicted population increase over the next 15-25 years, the demand for physical infrastructure and other community services is likely to increase significantly. This increase in demand will place pressure on Gawler's natural and built environments and its sense of identity. At the same time, this increased population can contribute to greater community and commercial vitality and support existing businesses and services. The increasing population, if not well managed may lead to the intensification of land use conflicts, such as that between rural and residential areas.

It is important that the attributes which define Gawler's unique character are conserved through the introduction of land use planning policies that appropriately balance the needs of a growing community with the existing land uses that define Gawler's natural and built environments.

4.1.1 Population

The population of Gawler, as recorded in the 2011 Australian Bureau of Statistics Census (ABS), increased from 17,800 in 2001 to 21,041 persons in 2011, which represents an Annual Average Growth Rate of 1.3 per cent for the period between 2001 and 2011. This increase in population is faster than the South Australian average but slightly lower than Australia as a whole.

The population of Gawler is expected to continue to increase with the South Australian Government predicting it will reach 32,858 persons by 2026, which implies an Annual Average Growth Rate of around 3.28 per cent. This is in line with the 30-Year Plan for Greater Adelaide prepared by the Department of Planning and Local Government.

4.1.2 Demographic

In terms of Gawler demographic breakdown, Gawler has a greater number of residents aged between 0-19 years and over the age of 65 years than Greater Adelaide. In fact, 25.60% of Gawler's population is under 20 years old, which is higher than Greater Adelaide (24.43%) but lower than that of Australia (25.72%) as a whole. In addition, approximately 44.35% of Gawler's population is over the age of 45, which is much higher than Greater Adelaide (41.15%) and Australia (39.33%). In addition, Gawler has a significantly lower proportion of residents aged between 20-44 years old at 30.05%. This figure can be compared to Greater Adelaide at 34.155 and 34.96% Australia wide.

4.1.3 *Dwelling Size, Type and Densities*

According to the ABS Census 2011, Gawler has a slightly lower dwelling-occupancy rate than its surrounding areas, with an average of 2.39 persons per dwelling. This is slightly lower than Greater Adelaide (2.49), South Australia (2.47) and Australia (2.66).

In addition, Gawler has a higher proportion of detached dwellings (85.4%) when compared to Greater Adelaide (76.6%), South Australia (79.1%) and Australia (74.2%) as a whole. In addition, Gawler also has a much lower proportion of flats, units or apartments (3%) compared to Greater Adelaide (10.8%), South Australia (9.2%) and Australia (14.3%) as a whole.

4.1.4 *Income and Distribution*

The ABS Census 2011 shows that the median weekly personal income for people aged 15 years and over in Gawler is \$516. This is significantly lower than the median weekly personal income for Greater Adelaide (\$534) and Australia (\$577). Similarly, the median family and household incomes for Gawler (\$1,254 and \$960 respectively) are also significantly lower than South Australia (\$1,330 and \$1,044) and Australia (\$1,481 and \$1,234). In 2011, 9.4% of Gawler's households earned more than \$2,500 per week, which is significantly lower than Australia (17.7%), South Australia (12.2%), and Greater Adelaide (13.5%).

4.1.5 *Labour Force*

The unemployment rate in Gawler remained relatively stable between 2006 and 2010, rising from 5.3% to 5.5% in June 2010, whilst the national unemployment rate rose from 5.1% in 2006 to 5.5% in 2013. However, the labour force status according to the Census in 2006 shows a higher unemployment rate for Gawler (5.7%) than Greater Adelaide (5.2%). Moreover, Gawler has a relatively smaller percentage of people working compared to Greater Adelaide.

The major industry employer is Retail Trade (1,392) followed by Health & Community Services (849), Education (604), Cultural and Recreational Services (171), Personal and Other Services (237) and Accommodation, Cafes and Restaurants (314).

4.1.6 *Motor Vehicles*

Despite having a high proportion of households within the low-income cohort, Gawler has a relatively high number of motor vehicles per dwelling. This is likely to be related to the distance between Gawler and Greater Adelaide's employment hubs and other essential services, and the level of available public transport.

4.1.7 *Residential Land Supply*

A large amount of "green-field" land has recently been rezoned from rural to Residential and Deferred Urban. This land was identified in the State Governments Planning Strategy (30-Year Plan for Greater Adelaide) as Planned Urban Lands to 2038, with the Housing and Employment Land Supply Program Report 2010 suggesting the urban land supply identified for Gawler was considered unlikely to meet the projected demand over a 15 year period. While the Global Financial Crisis did slow Gawler's residential growth rate in 2011 with only 158 new dwellings approved, dwelling approves in 2012 increased by 58% to 268, which is comparable with the residential growth rate anticipated in the Housing and Employment Land Supply Program Report 2010.

Gawler has approximately 350ha of “green-field” land zoned Residential and 100ha of land zoned Deferred Urban. This land has been earmarked for potential residential development and represents the next logical step in delivering orderly and sequential development in the Evanston Gardens/Hillier area. All of this land is required to meet Gawler’s predicted growth.

4.1.8 Commercial/Retail Space

Gawler has a number of existing commercial/retail precincts including Cheeky, Evanston Park, Town Centre, Gawler Park, Hewett, Prasads , Willaston and Main North Road (66,880 squares metres of retail floor space) and a number of planned commercial/retail precincts including Gawler East, Racecourse, Evanston Gardens and Trinity (20,900 squares metres of retail floor space). It is considered that Gawler has an appropriate amount of retail floor space in order to meet Gawler’s expected population growth.

4.1.9 Industrial Land Supply

A desktop analysis of industrial land indicates that Gawler has approximately 140,000 square metres of land zoned General Industry and approximately 180,000 square metres of land zoned Light Industry. While there appears to be a number of vacant allotments in the General Industry Zone the number of green fill sites in the Light Industry zone is substantially less.

Table 4.1 Demand Factors, Projections and Impact on Services

<i>Demand Factor</i>	<i>Present position</i>	<i>Projection</i>	<i>Impact on services</i>
Population	Increased from 17,800 in 2001 to 21,041 persons in 2011.	Expected to continue to increase with the South Australian Government predicting it will reach 32,858.	Demand for residential land will need to be monitored into the future to ensure those areas of the council earmarked for residential growth are brought onto the market in an organised and timely manner, which is based on demand.

Demographics	Average annual growth rate of 1.3% per between 2001-2011	Projected average annual growth rate of 3.28% until 2026. However, any future growth rate will be dependent on the take-up of existing greenfield land, as well as the rezoning/servicing of land currently zone Deferred Urban located at Evanston Gardens.	As a result of Council's predicted population increase over the next 15-25 years, the demand for physical infrastructure and other community services is likely to increase significantly. This increase in demand will place pressure on Gawler's natural and built environments and its sense of identity.
Residential Development	Limited by residential land supply, existing Urban Growth Boundary and Council boundaries.	The future expansion of existing communities in Gawler East, Evanston Gardens, Evanston South and Hillier.	Significant augmentation of existing and new infrastructure (roads, stormwater management, effluent disposal, electricity)
Rural Living	Rural living allotments are currently limited to 4 hectare allotments.	Viability and manageability of lots will result in pressure to reduce allotment sizes.	Additional infrastructure provision – electricity, roads, stormwater management.
Industrial Development	Gawler has approximately 140,000 square metres of land zoned General Industry and approximately 180,000 square metres of land zoned Light Industry	Future expansion in existing estates and well as other significant industrial parks located in neighbouring council areas.	Road infrastructure, heavy vehicles transport access routes, electricity and water supply/drainage.

Agriculturally productive areas	Rural land use and infrastructure investigation to be undertaken in 2013 – identification of key rural lands and the determination of the value of primary productive areas.	Production affected by fragmented and small land holdings, as well as the availability of water.	Encroachment of residential and rural living activities - conflicting land uses resulting in interface and buffer issues. Additional infrastructure (water, electricity and stormwater management)
Commercial Development	Gawler has a number of existing and planned commercial/retail precincts – approximately 43,300 square metres.	No significant additional demand (based on envisaged approvals – however, this could change based on projected developments)	<p>Eastern connector and a north-eastern connector will be required to manage traffic demands.</p> <p>Murray Street is already operating at or close to capacity - eastern connector and a north-eastern connector will be required to manage traffic demands.</p> <p>There is parking pressure within the core of the Town Centre. While there are underutilised car parking areas at the outer edge of the centre.</p>

4.2 Changes in Technology

Technology changes are forecast to have little effect on the delivery of services covered by this plan.

Table 4.2. Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Operations	Documented processes for key service delivery will be developed to identify any possible shortcomings which will include improved contractor specifications, eliminating possible rework and identify efficiencies in Council's operations.
Education	Need to provide information to the community based on service delivery cost and asset management strategies adopted in this plan.
New Asset Management System	Improvement in extending the life of assets with greater ability to manage the assets through maintenance, capital works programming and modelling.
Regulation	Compliance with Environmental Protection Authority Standards.

4.3 Demand Management Plan

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 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 Asset Management Plan.

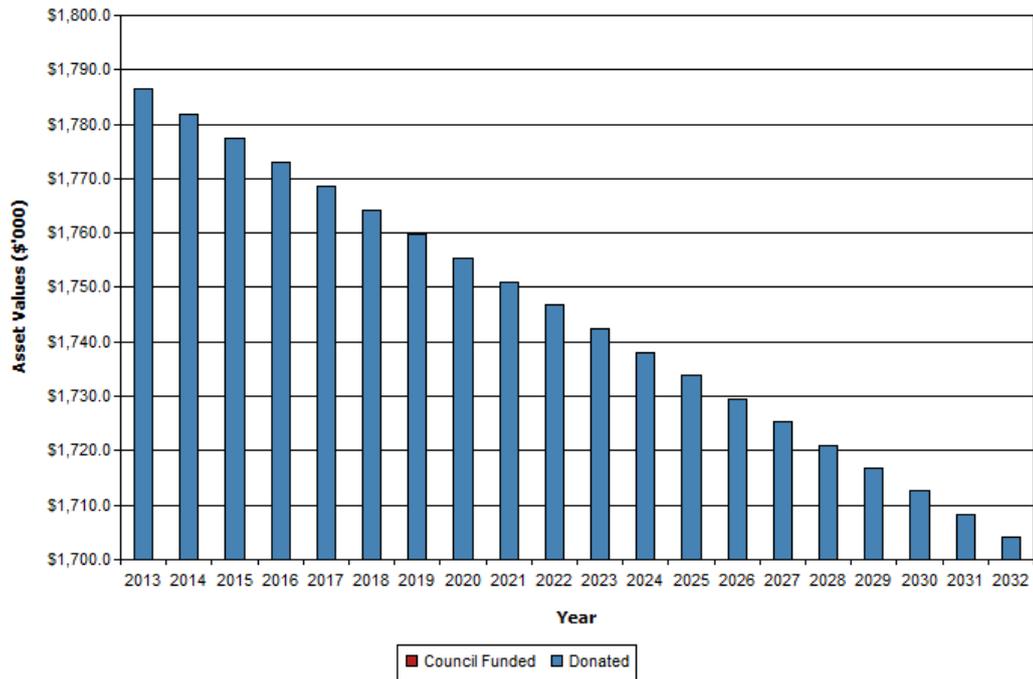
Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Capital Works	Schedule long-term capital works program. New initiatives for funding will be assessed with a balance between competing demands for investment to renew existing assets as well as providing for new assets to meet growing service delivery demands.
To develop a Maintenance Management System (MMS).	<p>Obtain required resources</p> <p>Planned regular inspections, documenting defects.</p> <p>Prioritisation of works.</p> <p>Provide maintenance schedules.</p> <p>Recording of maintenance performed and materials used.</p>
Flood Hazard Mapping	Study to identify any flood hazard areas in Gawler for a 100 year ARI storm using a modelling by a consultant and jointly funded by Council and the Stormwater Drainage Subsidy Scheme.
Stormwater Network Capacity	Requirement for new developments to detain/retain stormwater on site.
Stormwater Network Condition	Inspect and evaluate the condition of the stormwater network and compile replacement program.

4.4 New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by Council. The new asset values are summarised in Fig 1.

Fig 1. Town of Gawler - New Assets from Growth - Stormwater



It is noted that this graph is a straight line. The timing of the actual assets from growth will vary from this as land becomes available for development.

Acquiring these new assets will commit Council to fund ongoing operations and maintenance 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 operating and maintenance costs.

5. LIFECYCLE MANAGEMENT PLAN

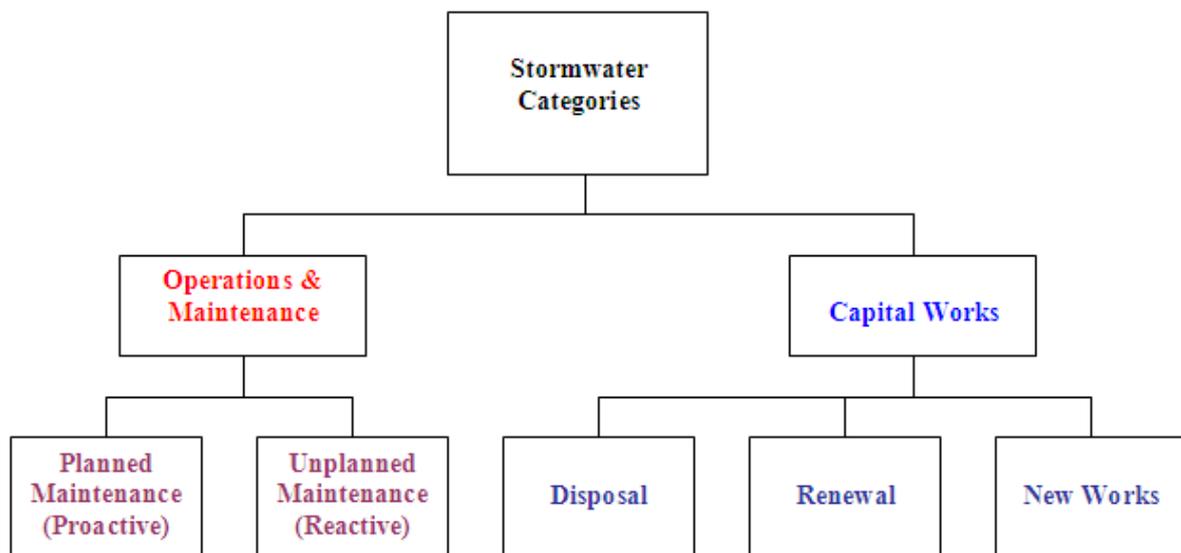
Initial capital cost constitutes a significant up-front cost and often dominate the decision-making process when acquiring new assets. However the ongoing recurrent expenditures (including depreciation) usually represent a high portion of the total life-cycle costs of many assets. It is important that they be included in the financial analysis undertaken to evaluate asset investment options.

There may also be substantial costs associated with disposal at the end of an assets service life (e.g. clean up or demolition costs).

The way an asset is acquired or created may have a great impact on its future operation, maintenance, or even disposal.

The Town of Gawler, as custodians of the Local Stormwater Network and infrastructure, are charged with the responsibility to ensure that the asset continues to function and meet the community needs and expectations as well as maintaining the asset in a usable condition within a reasonable duty of care.

In all cases, the asset functionality and asset maintenance targets need to be clearly defined with the community (Users) and the asset service provider (Council) to determine the “fit for purpose” having regard to practicality and economics. That is, a level of service provided within a reasonable duty of care in an affordable financial sustainable manner that considers community expectations in regard to safety, flood protection, access and overall condition of the local stormwater network.



Asset functionality as a “level of service” to the community must take into consideration such factors as destinations, vehicles per day, type of traffic, life cycle, capability and capacity, risk management and strategic compliance to the needs and expectations of the overall community.

Asset maintenance “levels of service” provide for the day - to - day maintenance programs to ensure that the asset presentation is safe within practical constraints, maintained to perform targets for day - to day - use and is managed and maintained to minimise risk to the user.

5.1 Background Data

5.1.1 Physical parameters

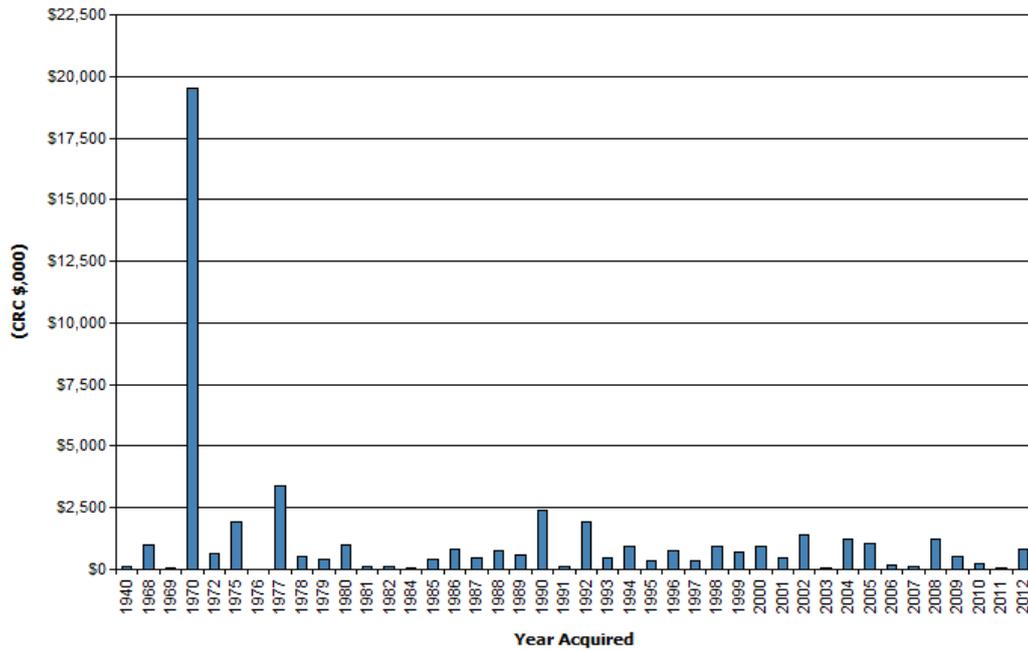
The assets covered by this Asset Management Plan are shown below.

Category	Sub Category	Dimension
Pipes	Circular – SRC	69.7 Kilometres
Pipes	Circular – UPVC	10.3 Kilometres
Pipes	Circular - Other	1.1 Kilometres
Pipes	Rectangular – SRC	0.8 Kilometres
Pits	Grated Pit	211
Pits	Grated SEP	118
Pits	Gross Pollutant Trap	17
Pits	Headwall	189
Pits	Junction Pit	744
Pits	Lot Drain Unit	314
Pits	Outlet Structure	26
Pits	Side Entry Pit	1529
Pits	Trash Barrier	3
Pits	Trash Rack with Bags	6
Channel	Concrete	2 – 1068 metres

Of Council's stormwater system 70% by value is pipes.

The age profile of Council's assets is shown below.

Fig 2. Town of Gawler - Asset Age Profile - Stormwater



As can be seen from this graph the majority of Council's stormwater network was initially constructed in the 1970s. Due to the long anticipated life of stormwater assets it is therefore anticipated that renewal of these assets will not be a major challenge facing Council over the term of this Asset Management Plan.

Note: When an asset has an unknown construction date, a common practice and consistent with asset management techniques as adopted by Council staff, is to nominate a fixed asset installation/ construction date based on its condition and estimated useful life. Road conditions are reviewed periodically and remaining life is updated which is critical for the management of the assets. However another condition assessment review could adjust the estimated construction date of the assets.

5.1.2 Asset capacity and performance

Council's services are generally provided to meet design standards where these are available.

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
Pipe Network	The physical condition of the stormwater asset may have deteriorated and will not achieve its service potential and remaining life.
Capacity	The pipe network may be under capacity resulting in over topping and risk to adjoining assets (residential properties).
Open Channel	To avoid silting and debris blockages regular inspection schedule needs to be established.
Asset Management System	Minimal condition data.

The above service deficiencies were identified from inspections undertaken by Town of Gawler staff.

5.1.3 Asset condition

The condition profile of Council's assets has not been completed and will be inserted in future updates of this Asset Management Plan.

Condition will be measured using a 1 – 5 rating system¹.

Rating	Description of Condition
1	Excellent condition: Only planned maintenance required.
2	Very good: Minor maintenance required plus planned maintenance.
3	Good: Significant maintenance required.
4	Average: Significant renewal/upgrade required.
5	Poor: Unserviceable.

5.1.4 Asset valuations

The value of assets as at 30 June 2012 covered by this Asset Management Plan is summarised below. Assets were last re-valued at 30 June 2012. Assets are valued at Brownfield rates.

Current Replacement Cost	\$47,486,458
Depreciable Amount	\$47,486,458
Depreciated Replacement Cost	\$33,846,383
Annual Depreciation Expense	\$478,687

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Consumption	1.00 %
Asset renewal	0%
Annual Upgrade/expansion	1.76%

5.2 Risk Management Plan

An assessment of risks² associated with service delivery from infrastructure assets will identify critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action will be identified in the infrastructure risk management plan.

A separate Infrastructure Risk Management Plan will be prepared for all asset types.

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

5.3.1 Maintenance plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Maintenance expenditure trends are shown in Table 5.3.1

¹ IIMM 2011, Section 2.5 – Assessing Asset Condition

² Town of Gawler - Infrastructure Risk Management Plan

Table 5.3.1. Maintenance Expenditure Trends

Year	Maintenance Expenditure		
	Reactive	Planned	Cyclic
2010/2011	\$38,475	\$60,314	\$0
2011/2012	\$32,522	\$57,352	\$0

Planned maintenance work is 62% of total maintenance expenditure.

Maintenance expenditure levels are considered to be inadequate to meet required service levels. Future revision of this Asset Management Plan will include linking required maintenance expenditures with required service levels.

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

Reactive maintenance will be carried out in accordance with response levels of service. These will be prepared in future revisions of this Asset Management Plan and shown in Appendix A.

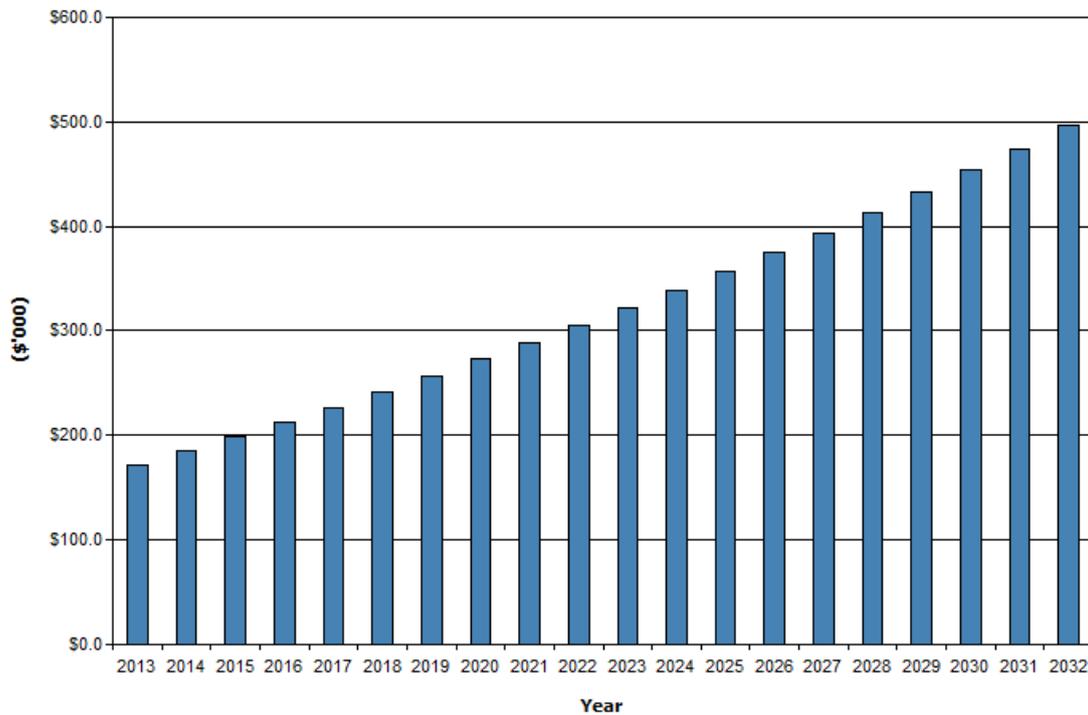
5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

- Various Australian Standards
- Australian Rainfall and Runoff – Institution of Engineers, Australia.

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 4. Note that all costs are shown in current 2013 dollar values.

Fig 4. Town of Gawler - Planned Maintenance Expenditure - Stormwater

Deferred maintenance, ie works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's operating budget and grants where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity 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 upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register worksheets on the '*Planned Expenditure template*'. Candidate proposals are inspected to verify accuracy of remaining life estimate and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria will be detailed in future updates of this plan.

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

Examples of low cost renewal will be detailed in future updates of this plan.

5.4.2 Renewal standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- Various Australian Standards
- Australian Rainfall and Runoff – Institution of Engineers, Australia.

5.4.3 Summary of future renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Fig 5. Note that all costs are shown in current 2013 dollar values.

The projected capital renewal program is shown in Appendix B.

Fig 5a. Town of Gawler - Projected Capital Renewal Expenditure - Stormwater

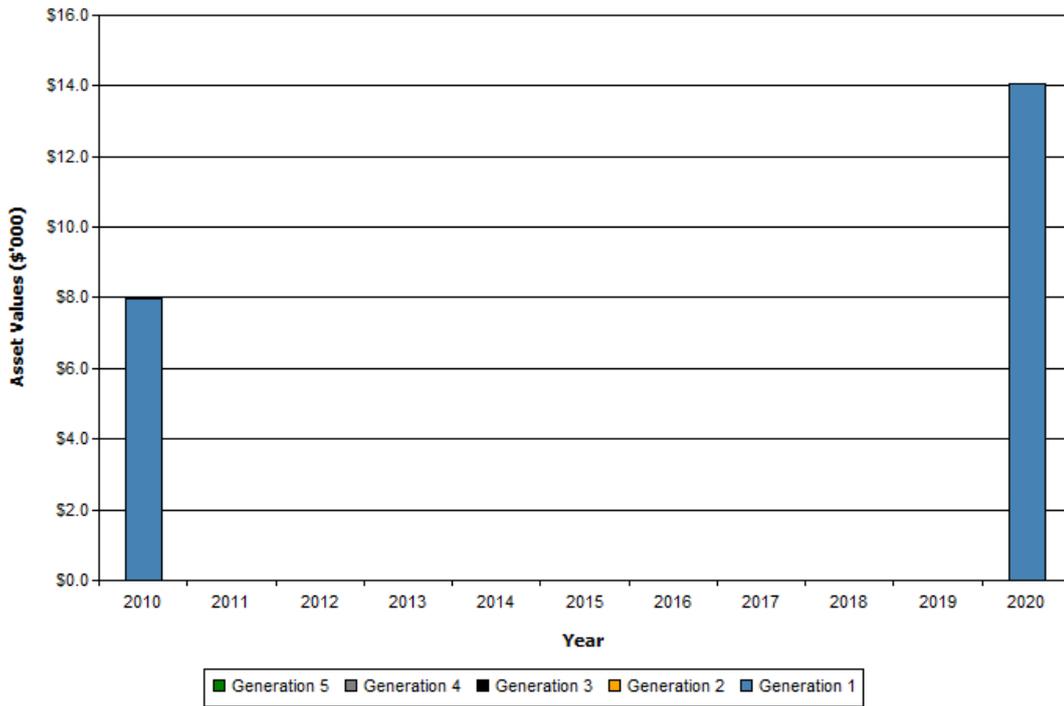
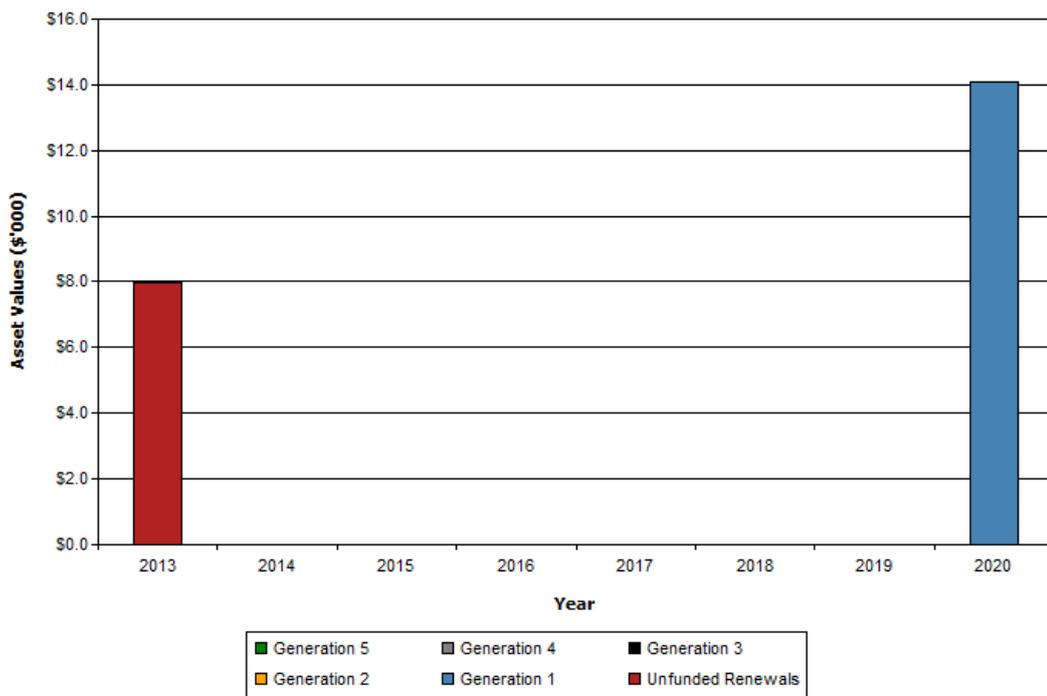


Fig 5b. Town of Gawler - Projected Capital Renewal Expenditure - Stormwater



Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

Table 5.5.1 New Assets Priority Ranking Criteria

Criteria	Weighting
Provide at 100 year stormwater ARI protection for residential development.	30%
Maintain the existing stormwater assets to ensure floodwater protection.	20%
Develop or alternatively adopt existing stormwater management guidelines for new development. Guidelines to address erosion and sediment control on construction sites. Promote objectives and policies within and outside of Council.	20%
Reducing the additional quantity of stormwater, such as with on-site detention of peak flows, on-site storage and re-use (rainwater tanks), discharge to the ground (soakage pits/aquifer discharge).	30%

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

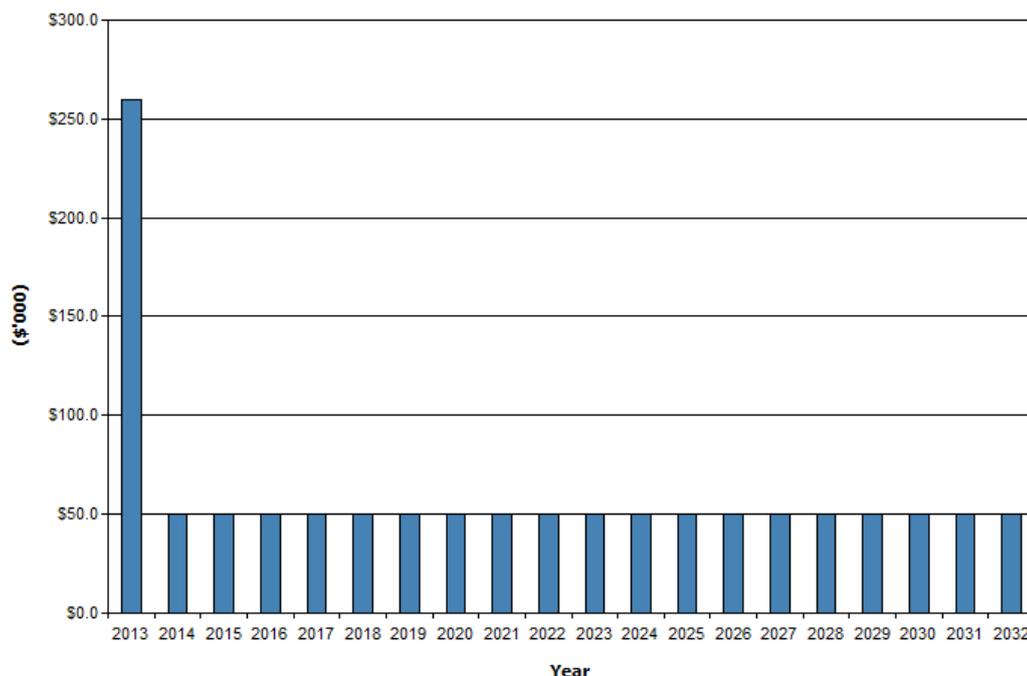
5.5.3 Summary of future upgrade/new assets expenditure

Planned upgrade/new asset expenditures are summarised in Fig 6.

New assets and upgrade/expansion of existing assets are identified from various sources such as elected member or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds (as determined in the annual budget process and in accordance with the adopted Long Term Financial Plan) and scheduled in future works programs.

All costs are shown in current 2013 dollar values.

Fig 6. Town of Gawler - Planned Capital Upgrade/New Asset Expenditure - Stormwater



New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

Note: Council approved 2012/13 budget, provided for capital upgrade/ new asset expenditure is \$0.26m. However, future years shown are the planned expenditure of \$0.05m which is based on Council approved Long Term Financial Plan (LTFP).

Council staff is currently preparing a 10 year Capital Works Program which will be presented for Council endorsement. This Program will inform the LTFP and the Figure 6 will be updated in the next revision of AMP.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. At present, no stormwater assets will be disposed of. Future updates of this plan may identify assets for possible decommissioning and disposal. These assets will then be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any.

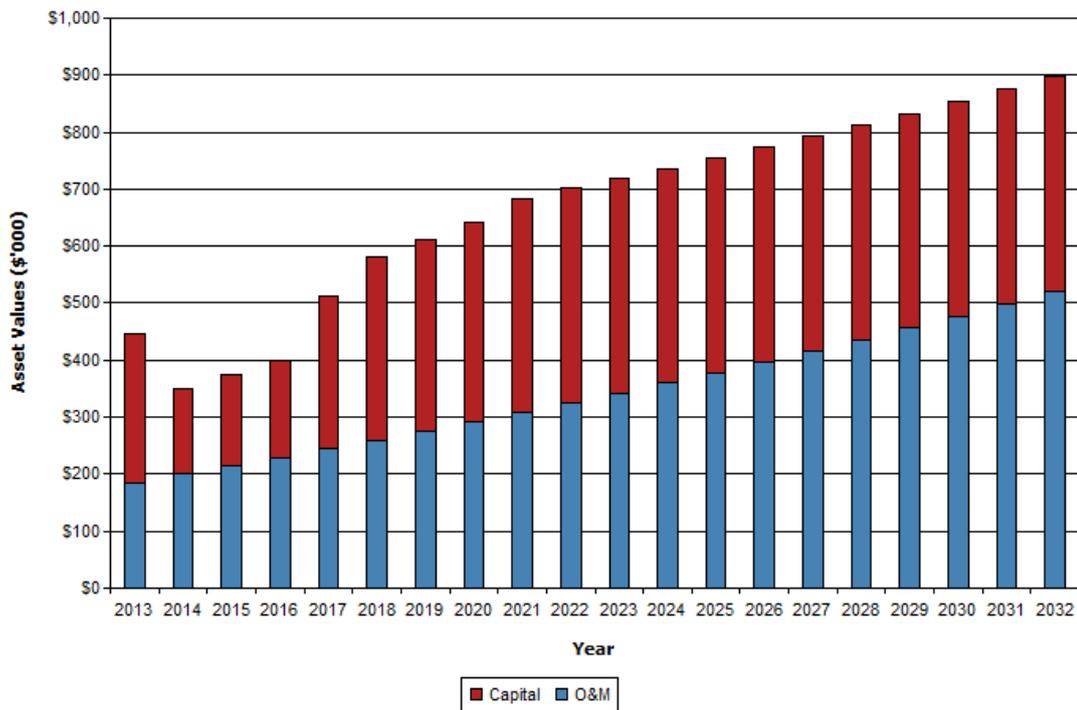
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this Asset Management Plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 7. Town of Gawler - Planned Operating and Capital Expenditure - Stormwater



Note that all costs are shown in current 2013 dollar values.

6.1.1 Sustainability of service delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this Asset Management Plan is \$568,561.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan is \$89,874.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this stormwater Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary long term financial plans to provide the service in a sustainable manner.

The life cycle gap for services covered by this Asset Management Plan is \$478,687 per annum. The life cycle sustainability index is 0.16.

Medium term – 10 year financial planning period

This Asset Management Plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20 year period for input into a 10 year financial plan and funding plan to provide the service in a sustainable manner.

This may be compared to existing or planned expenditures in the 20 year period to identify any gap. In a core Asset Management Plan, a gap is generally due to increasing asset renewals.

Fig 8 shows the projected asset renewals in the 20 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period as shown in Fig 8. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

Fig 8. Town of Gawler - Projected and Planned Renewals and Current Renewal Expenditure - Stormwater

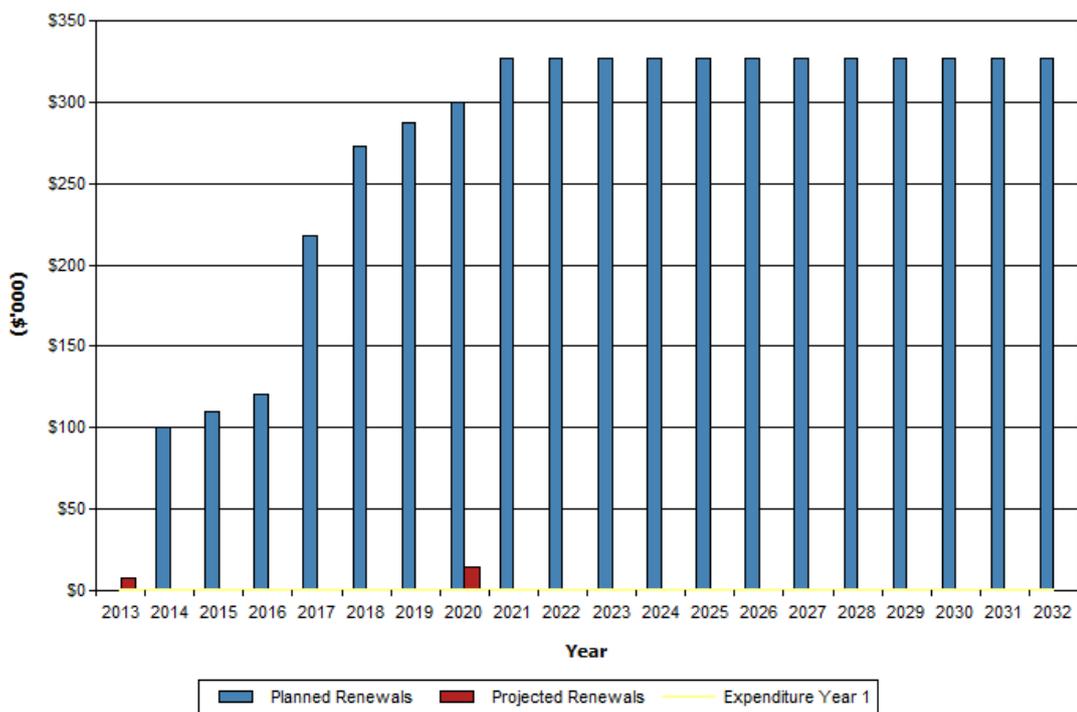


Table 6.1.1 shows the gap between projected and planned renewals.

Table 6.1.1 Town of Gawler - Projected and Planned Renewals and Expenditure Gap

Town of Gawler >> Planned Expenditures for Long Term Financial Plan (Stormwater)						
Year End Jun 30	Total Operations Expenditure (\$'000)	Total Maintenance Expenditure (\$'000)	Projected Capital Renewal Expenditure (\$'000)	Planned Capital Renewal Expenditure (\$'000)	Shortfall in Renewal (Planned - Projected) Expenditure (\$'000)	Cumulative Renewal Funding Shortfall (\$'000)
2013	\$14.60	\$171.07	\$7.98	\$0.00	-\$7.98	-\$7.98
2014	\$15.14	\$184.59	\$0.00	\$100.00	\$100.00	\$92.02
2015	\$15.68	\$198.51	\$0.00	\$110.00	\$110.00	\$202.02
2016	\$16.22	\$212.60	\$0.00	\$121.00	\$121.00	\$323.02
2017	\$16.76	\$227.08	\$0.00	\$218.00	\$218.00	\$541.02
2018	\$17.29	\$241.95	\$0.00	\$273.00	\$273.00	\$814.02
2019	\$17.82	\$257.10	\$0.00	\$287.00	\$287.00	\$1,101.02
2020	\$18.36	\$272.73	\$14.07	\$300.00	\$285.93	\$1,386.95
2021	\$18.89	\$288.65	\$0.00	\$327.00	\$327.00	\$1,713.95
2022	\$19.42	\$305.16	\$0.00	\$327.00	\$327.00	\$2,040.95
			\$22.05	\$2,063.00	\$2,040.95	

Table 6.1.2 Town of Gawler - Proposed and Planned Upgrade/New and Expenditure Gap

Town of Gawler >> Proposed Upgrade/New Expenditures for Long Term Financial Plan (Stormwater)				
Year End Jun-30	Proposed Capital Upgrade/New Expenditure (\$'000)	Planned Capital Upgrade/New Expenditure (\$'000)	Shortfall in Upgrade/New (Planned - Proposed) Expenditure (\$'000)	Cumulative Upgrade/New Funding Shortfall (\$'000)
2013	\$260.00	\$260.00	\$0.00	\$0.00
2014	\$1,500.00	\$50.00	-\$1,450.00	-\$1,450.00
2015	\$2,700.00	\$50.00	-\$2,650.00	-\$4,100.00
2016	\$1,025.00	\$50.00	-\$975.00	-\$5,075.00
2017	\$1,075.00	\$50.00	-\$1,025.00	-\$6,100.00
2018	\$450.00	\$50.00	-\$400.00	-\$6,500.00
2019	\$750.00	\$50.00	-\$700.00	-\$7,200.00
2020	\$750.00	\$50.00	-\$700.00	-\$7,900.00
2021	\$750.00	\$50.00	-\$700.00	-\$8,600.00
2022	\$750.00	\$50.00	-\$700.00	-\$9,300.00
	\$10,010.00	\$710.00	-\$9,300.00	

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any funding gap.

The above table indicates that there is no renewal funding gap at the end of the 10 year period. Inspection and condition assessment will provide improved information for future planning.

However with the expected considerable future growth for the Town of Gawler, funding will be required to facilitate capital upgrade/new asset work e.g. Milne Road Drainage. Table 6.1.2 shows a Capital Upgrade/New funding gap based on proposed projects.

A reallocation of Capital budget from Renewal/Replacement to Upgrade/New will be required with subsequent amendments to Council's Long Term Financial Plan.

Council's long term financial plan covers the first 10 years of the 20 year planning period. The total maintenance and capital renewal expenditure required over the 10 years is \$2,381,490.

This is an average expenditure of \$238,149. Estimated maintenance and capital renewal expenditure in year 1 is \$179,050. The 10 year sustainability index is 0.75.

Note: Currently preparing Actions and Opportunities Report for Milne Road Drain which will provide a costed and risk assessed solution. Council has not endorsed the Milne Road Drain project for 2013/14 Budget.

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan.

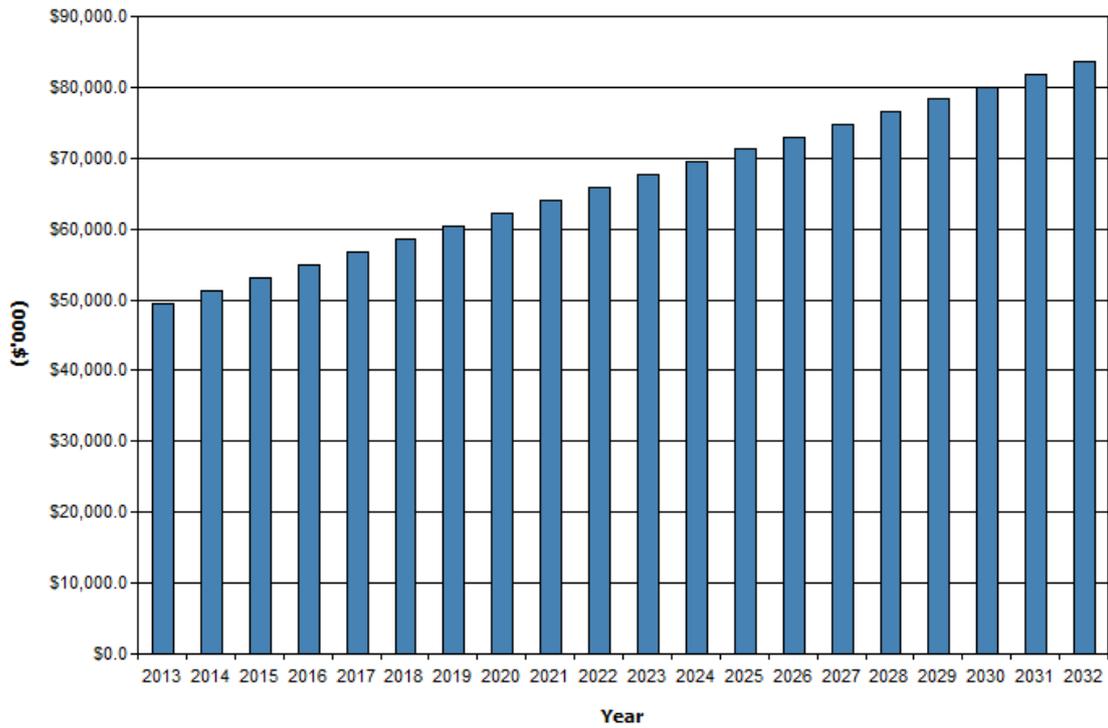
Achieving the financial strategy will require a combination of the following:-

- Assessing the requirements for the use of loans internal / external to fund renewal spikes
- Exploring the options for cost reductions from review of service levels
- Increasing revenue from rates and user charges
- An appropriate balance of Capital Renewal/Replacement work to Upgrade/New.

6.3 Valuation Forecasts

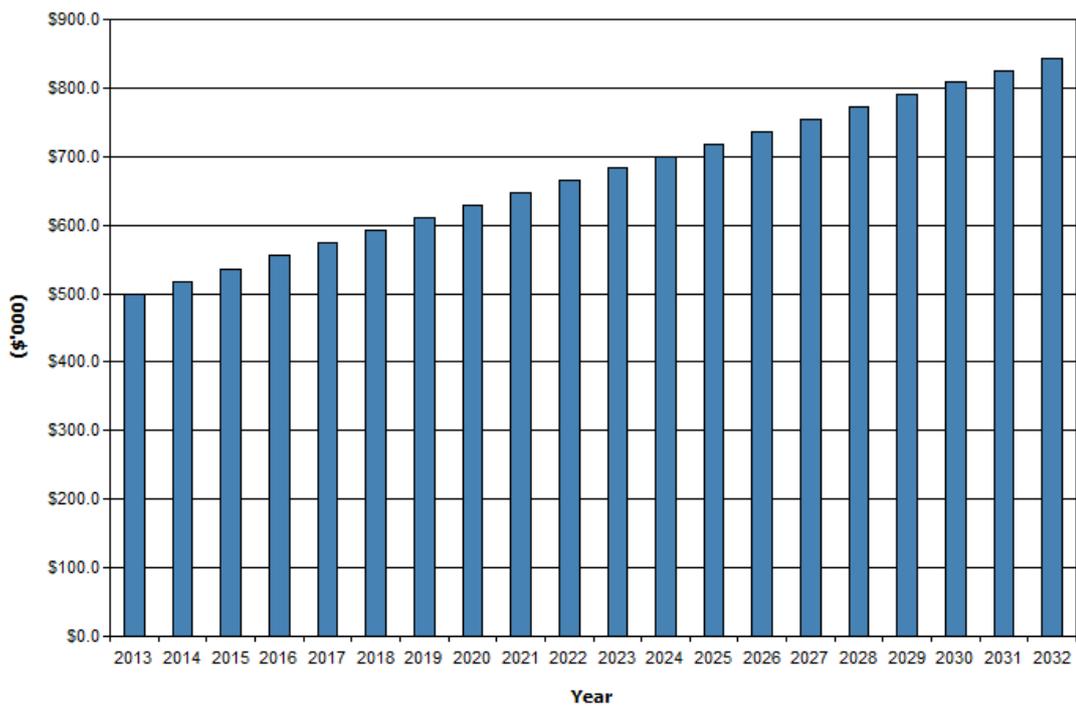
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Fig 9 shows the projected replacement cost asset values over the planning period in current 2013 dollar values.

Fig 9. Town of Gawler - Projected Asset Values - Stormwater



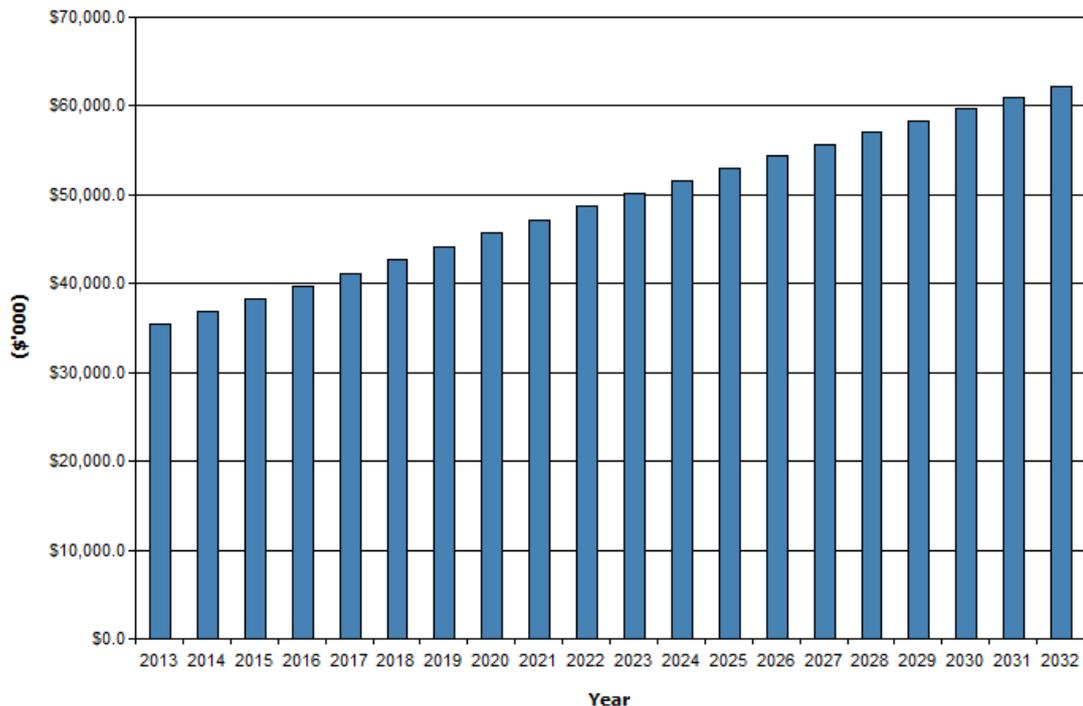
Depreciation expense values are forecast in line with asset values as shown in Fig 10.

Fig 10. Town of Gawler - Projected Depreciation Expense - Stormwater



The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Fig 11.

Fig 11. Town of Gawler - Projected Depreciated Replacement Cost - Stormwater



6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this Asset Management Plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this Asset Management Plan are:

- Indexation rates – the Local Government Price Index (LGPI) and other indexation factors relevant for each asset class is used to determine revaluations of assets in the Long Term Financial Plan.
- Assumptions on the relationship between development growth and associated increases in the asset stock.
- Assumptions on changes to useful life estimated to reflect improved maintenance and renewal practices.
- Present infrastructure service levels will remain for the life of the Plan.
- Appropriate capital replacement/renewal funding is provided for within the Long Term Financial Plan.

- The average useful lives and remaining lives of the asset groups based on current local knowledge and experience and historical trends.

Accuracy of future financial forecasts may be improved in future revisions of this Asset Management Plan by the following actions.

- Assumptions have been made as to the average useful lives and remaining lives, these need to be reviewed and the accuracy improved based on real time assessment of asset deterioration (review of the effective economic life of pipes has the potential for greatest variance in cost predictions).
- Changes in development needs associated with the rate and location of growth.
- Changes in the desired level of service and service standards from those identified in this plan.
- Significant changes in the cash flows may also result from more detailed evaluation of asset capital projects associated with New/Upgrade work.

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses Civica Authority software as its corporate Accounting/Financial system. There is currently no automated integration between the Civica Authority software or the Asset Master software used for Asset Management purposes.

The Australian Accounting Standards and the Local Government (Financial Management) Regulations 2011 provide the statutory benchmark against which Council reports on asset accounting.

The chart of account structure used within the general ledger is designed to facilitate the ease of data extraction required for internal and statutory financial reporting. However, given the general ledger structure has not been reviewed for a considerable number of years, it is recommended that the existing structure be reviewed to ensure that it appropriately meets Council's financial reporting needs (including those relating to asset accounting).

The current capitalisation threshold for infrastructure assets is \$10,000, in accordance with Council's Asset Capitalisation Policy. The threshold value is reviewed on an annual basis.

7.2 Asset Management Systems

1. Summary of Asset Management Systems

An asset management system is a combination of processes, data and software applied to provide the essential information outputs for effective asset management of risk and optimum infrastructure maintenance and refurbishments.

Council utilises a number of asset management systems which contribute to the overall management of the long term planning of its infrastructure assets in order to:

- Know what and where the assets are and who is responsible for them;
- Know the condition of assets;
- Establish suitable operational, maintenance and renewal regimes to suit the assets and level of service required of them by present and future customers;
- Identify the true costs of operations and maintenance and predict future capital investments and maintenance expenditure required to optimise the asset function and lifecycle.

Council has AssetMaster for infrastructure asset management, MapInfo Professional GIS for asset mapping, MapInfo Exponare GIS as a mapping viewer and Civica Authority for customer requests.

In addition to customer requests, finance and accounting information are managed in Civica Authority which is Council's corporate information system.

AssetMaster

AssetMaster is Council's asset management software system used for the management of its infrastructure assets data. AssetMaster manages physical and financial data of assets. The data is the physical attributes of assets; physical activities carried out on assets; condition and valuation. AssetMaster reports on data which is required by both Asset Managers and the Finance Department. Currently the data of the asset classes: Stormwater pits, pipes, channels and basins are recorded in AssetMaster.

When there is a change in asset details, data will be updated in AssetMaster. When new assets are created asset, details are recorded periodically in AssetMaster so that at the end of financial year all created assets are registered in AssetMaster. General errors in the day-to-day administration are corrected as required.

Options for using AssetMaster in field inspections

Council has recently purchased two laptops which have AssetMaster and MapInfo Professional GIS software. This will enable any defects, inspections and physical activities carried out in the field on assets to be recorded in AssetMaster to update the data already stored against the various assets. Also to record information of new assets created in the field.

AMOnline is another AssetMaster functionality which allows remote access to AssetMaster to update assets condition data during field inspections. This function will be useful, when asset maintenance regime is implemented through AssetMaster system using Work Order and Maintenance modules. Work flow of maintenance activities can be controlled in AssetMaster.

AssetMaster is stand-alone system which at present is not available as a Council wide option but only to the Engineering section and is used for data collection; condition assessment and asset valuation. AssetMaster will be made available to Depot section for recording maintenance activity process once the Work Order and Maintenance modules are implemented.

Regular assets condition data capture will be required to monitor the ongoing stormwater network condition and project future budgetary requirements to achieve the adopted strategy and determine the optimum use of available funds.

Whilst AssetMaster software can be used as a tool in predicting the deterioration of the stormwater network over time and optimising maintenance and Capital spending, it should be noted that this requires resource expenditure in both data and system set up.

MapInfo Professional GIS and MapInfo Exponare for asset mapping and viewing

Council has a Council wide Geographical Information System (GIS) – MapInfo Exponare. This is a read only system. MapInfo Professional software is the system used to map the assets to record spatial information of assets. AssetMaster system is linked to the MapInfo Professional GIS system. This linkage allows spatial representation of asset data to be shown on MapInfo Exponare GIS viewer.

All Stormwater asset classes are shown in the asset layer option in Exponare; this provides the spatial representation of asset data. Any user can then visually identify the asset on the GIS screen without needing to know the asset number or description etc. and is then able to extract the information that is recorded about that asset in AssetMaster system.

MapInfo Professional is used to enter spatial data on new assets and review data on existing assets. This work is now undertaken by Council staff. An automatic update programme runs every night which transfers any amended or new asset data into the asset layer in Exponare.

Civica Authority for customer requests

Customer requests involving comments/actions/request affecting all assets are recorded in this module and detailed reporting is available within module.

Customer requests are handled through Civica Authority system and relevant information can be recorded in AssetMaster by separate electronic linking.

2. Summary of how AM Systems are linked to Accounting/Financial System

Council utilises a standard computerised general ledger system for all of its accounting reporting. The integrated accounting software used to manage all of Council's accounting reporting is provided by Civica Authority incorporating their financial and accounting modules.

AssetMaster is used to carry out all revaluation, capitalisation, disposal and depreciation processing of individual assets.

Hard copies of financial summary reports generated from AssetMaster are provided to the Finance department to enter values into the financial system for asset accounting purpose.

At present there is no integrated link between AssetMaster asset management system and Council's accounting/financial system.

The integration of AssetMaster system with Civica Authority Corporate system is desirable but Council has identified that this is not an immediate requirement.

3. Accountabilities and Responsibilities for AM systems

Elected Members are responsible for adopting the policy and ensuring that sufficient resources are applied to manage the assets.

The Chief Executive Officer has overall responsibility for developing an asset management strategy, plans and procedures and reporting on the status and effectiveness of asset management within Council.

The Director, Planning and Infrastructure is responsible for the day to day activities associated with asset management:-

- To oversee Council's Infrastructure and Asset Management Plan and assess proposals for further asset investment.
- To develop and implement a framework to achieve contemporary asset management in a financially sustainable manner.

The Engineer, Asset Management is responsible for coordinating all activities associated with asset management.

Other staff involved in asset management are:-

- Manager, Engineering Services
- Manager, Finance

7.3 Information Flow Requirements and Processes

The key information flows *into* this Asset Management Plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by Council.

The key information flows *from* this Asset Management Plan are:

- The assumed Works Program and trends;
- The resulting budget, valuation and depreciation projections;
- The useful life analysis.

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

Summary of New Asset Recognition and Capitalisation Process

Demand for new stormwater assets is a mixture of those related to residential developments across the Council area, together with those constructed by Council associated with requirements of various Stormwater studies carried out / to be carried out.

These new stormwater assets are not recognised until Council receives a Certificate of Title and associated Deposited Plan from the Registrar General Office.

Council's development approval procedure requires submission of construction plans from which Stormwater type and dimensions are then obtained.

These dimensions are then multiplied by agreed unit rates to produce a new stormwater asset value.

Stormwater construction arranged by Council will be included in Council's Works Capital new/upgrade program and the actual cost of constructing the footpath will be the new asset value.

Individual asset numbers are automatically created for all new assets entered into AssetMaster and for those assets, whose values are calculated by unit rates, the unit rate appears and the asset value is automatically shown.

When all known values have been obtained then the new asset can be Capitalised. This is undertaken in AssetMaster.

Capitalisation is undertaken separately for each new asset and when completed the asset value will then be shown in AssetMaster and a report is produced in AssetMaster detailing all of these assets.

The Engineering Section is responsible for:-

- Recording all new assets received direct from developers into AssetMaster and linking them to MapInfo.
- Including any new stormwater assets which are to be constructed in Council's Works Capital upgrade/new program.
- The Capitalisation of all new assets in AssetMaster.
- Providing reports to the Finance Section to enter into Council's finance system.

7.4 Standards and Guidelines

- LGA of SA, Sustainable Asset Management in South Australia, A Guided Pathway to Asset Management Planning, 2007
- IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney
- AASB Accounting Standards
- Australian Standards
- Town of Gawler, Standards and Guidelines for Land Divisions and Developments on Lands

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the Asset Management Plan can be measured in the following ways:

- The degree to which the required cashflows identified in this Asset Management Plan are incorporated into Council's long term financial plan and Strategic Management Plan;
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the Asset Management Plan;

8.2 Improvement Plan

The asset management improvement plan generated from this Asset Management Plan is shown in Table 8.2.

Table 8.2 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Section 3.3 – Current levels of service to be developed.	Engineering	Staff Time	June 2015
2.	Section 3.4 – Desired levels of service to be developed.	Engineering	Staff Time	June 2016
3.	Section 4.1 – Review of development needs associated with the rate and location of growth.	Planning	Staff Time	June 2016
4.	Section 4.3 – Demand management summary table to be reviewed.	Engineering	Staff Time	June 2015
5.	Section 5.1.1 – Continue to collect and update asset data.	Engineering	Staff Time	Ongoing
6.	Section 5.1.2 – Asset capacity and performance table to be reviewed.	Engineering	Staff Time	June 2015
7.	Section 5.1.3 – Undertake condition assessment of stormwater assets to enable improved information for future planning and development of maintenance and Capital programs.	Engineering	Staff Time	June 2015
8.	Section 5.2 – Risk management plan to be developed.	CEO	Staff Time	June 2016
9.	Section 5.3.1 & Appendix A – Maintenance response levels of service to be developed.	Engineering	Staff Time	June 2014
10.	Section 5.4.1 – Renewal priority criteria to be developed.	Engineering	Staff Time	June 2014
11.	Section 5.5.1 – Asset priority ranking criteria to be reviewed.	Engineering	Staff Time	June 2014

12.	Section 3 – Carry out consultation to ascertain the community's service needs and preferences and confirm target levels adopted.	CEO	Staff Time	June 2015
13.	Section 3 – Review of the customer request report available in Authority.	DPI/DCCS	Staff Time	June 2015 then Annually
14..	Section 3.2 – Review of legislative requirements to ensure Council's compliance with the latest legislations and regulations.	DCCS	Staff Time	June 2016
15.	Section 5 - Review of useful life of all stormwater assets based on real time assessment of asset deterioration.	Engineering	Staff Time	June 2015
16.	Section 7.1 – Review capital expenditure threshold values for stormwater assets.	Finance	Staff Time	Annually
17.	Section 7.1 – Review of financial reporting systems to determine whether any changes are required to meet statutory requirements.	Finance	Staff Time	June 2015
18.	Section 7.2 – Review of current asset management systems for improvement, systems integration and expansion.	Engineering	Staff Time	June 2016
19.	Section 8.2 – Completing the improvement plan by November 2016.	ALL	Staff Time	Nov 2016

8.3 Monitoring and Review Procedures

This Asset Management Plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

The Plan has a life of 4 years and is due for revision and updating within 2 years of each Council election.

REFERENCES

Town of Gawler, 'Strategic Plan 2010 – 2018'

Town of Gawler, 'Adopted Budget – Business Plan 2012/13'

Town of Gawler, 'Long Term Financial Plan 2011-2020'

Town of Gawler, 'Development Plan 2012'

DVC, 2006, 'Asset Investment Guidelines', 'Glossary', Department for Victorian Communities, Local Government Victoria, Melbourne,
<http://www.dvc.vic.gov.au/web20/dvclqv.nsf/allDocs/RWP1C79EC4A7225CD2FCA257170003259F6?OpenDocument>

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au

IPWEA, 2012, 'Australian Infrastructure Financial Management Guidelines, Version 1.3', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au

City of Playford – Asset Management Plan – Stormwater Drainage – 2011

City of West Torrens – Asset Management Plan – Stormwater – December 2012

The Barossa Council, Stormwater Infrastructure and Asset Management Plan, November 2012

APPENDICES

Appendix A Maintenance Response Levels of Service

To be produced and will be inserted in future updates of this plan.

Appendix B Projected 10 year Capital Renewal Works Program

The projected renewal budget has the figures in 2013 dollar terms.

A Local Government Price Index will need to be applied to these figures before entering into Council's Long Term Financial Plan.

Asset ID	Sub Category	Asset Name	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
9696	Pits	Murray street	SW_PIT_ID - PT1705	0	2013	\$4,539.69	70
10481	Pits	Walker Place	SW_PIT_ID - PT2490	0	2013	\$3,439.15	70
						\$7,978.83	
9337	Pits	Lawrence Avenue	SW_PIT_ID - PT1346	7	2020	\$14,073.13	50
						\$14,073.13	
TOTAL =						\$22,051.96	

The above assets will be inspected to verify condition and hence accuracy of remaining life estimates.

Appendix C Planned Upgrade/ Expansion/ New 10 year Capital Works Program

New assets and upgrade/expansion of existing assets are identified from various sources such as elected member or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds (as determined in the annual budget process and in accordance with the adopted Long Term Financial Plan) and scheduled in future works programs.