

Appendix D – Drainage Asset Management Plan

The Asset Management Plans (Transport, Buildings, Drainage, Fleet and Parks) are available as individual documents on Council's website www.penrithcity.nsw.gov.au

or can be made available as a CD by contacting Council's City Works Manager.



Penrith

Regional City



RESOURCE STRATEGY 2011 - 2021

APPENDIX D - DRAINAGE ASSET MANAGEMENT PLAN

leading
opportunities
green
liveable
vibrant



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The Institute of Public Works Engineering Australia.

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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, e.g. 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, e.g. 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, e.g. 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 arm's 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, e.g. roads, drainage, footpaths and cycle ways. 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 Expenditure 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

Council provides a Drainage network in partnership with the community to enable Maintenance of Drainage Systems to design capacity, maximise the design life of Drainage systems through maintenance and to identify drainage systems requiring enhancement and/or additional GPT's. Council provides drainage structures to ensure:

- Our community's needs for providing a storm water transportation network.
- The City's urban development strategy is enhanced and is well supported.

What does council provide?

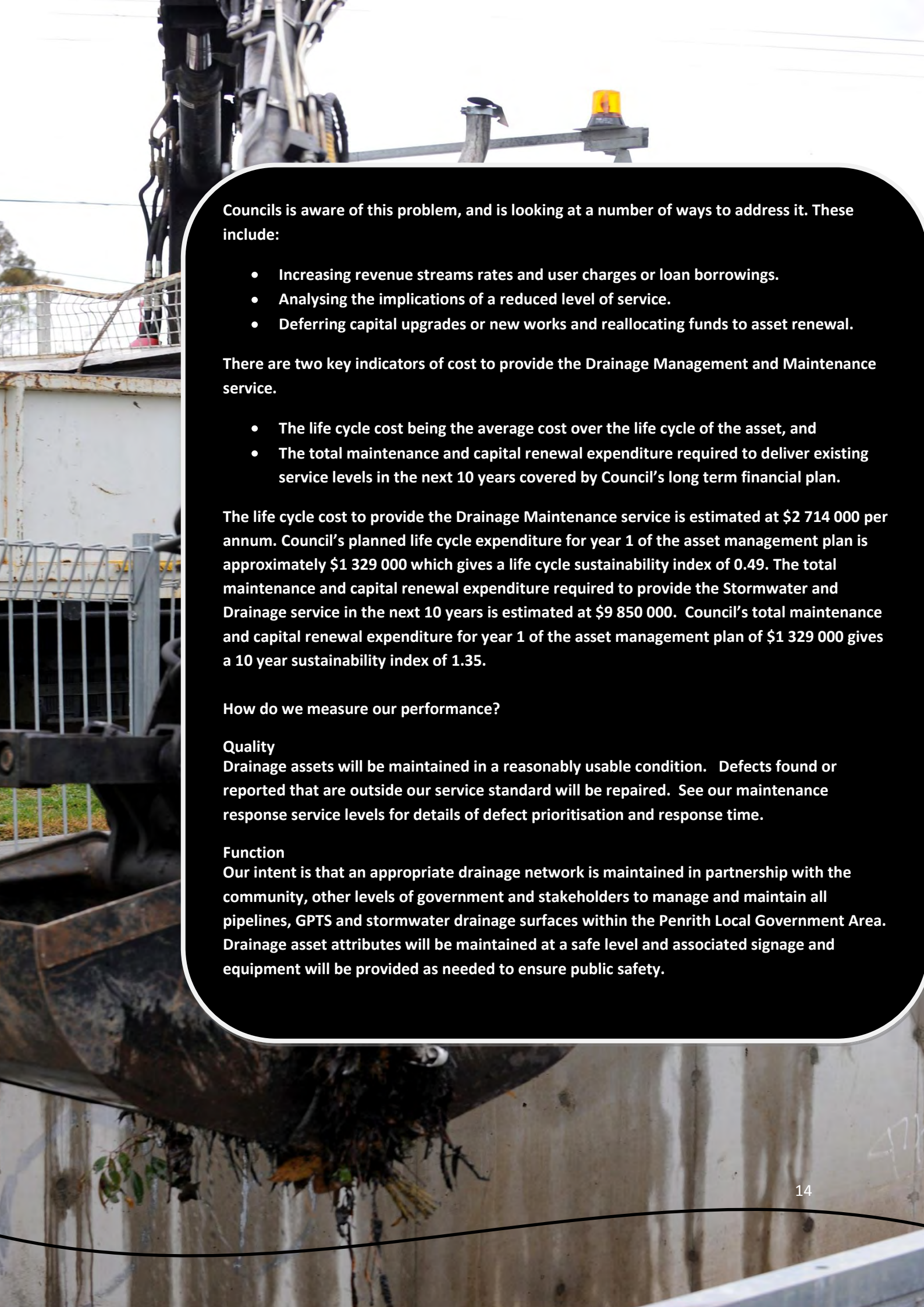
The range of assets covered by this plan includes:

The summary of assets is below:

- Drainage pits
- Headwalls
- Piped drainage
- Gross pollutant traps
- Prescribed dams
- Dry retarding basins
- Litter baskets
- Concrete lined channels
- Open earth channels

Over 70% of these assets are rated as being in 'good' condition, meaning that they are serviceable but significant maintenance is required.

Council undertakes a regular community satisfaction survey to assist in determining whether the current level of asset provision is acceptable to the community. This information, plus engagement with user groups, will help Council to establish the required levels of service, and build this into future versions of this plan.



Councils is aware of this problem, and is looking at a number of ways to address it. These include:

- Increasing revenue streams rates and user charges or loan borrowings.
- Analysing the implications of a reduced level of service.
- Deferring capital upgrades or new works and reallocating funds to asset renewal.

There are two key indicators of cost to provide the Drainage Management and Maintenance 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 Drainage Maintenance service is estimated at \$2 714 000 per annum. Council's planned life cycle expenditure for year 1 of the asset management plan is approximately \$1 329 000 which gives a life cycle sustainability index of 0.49. The total maintenance and capital renewal expenditure required to provide the Stormwater and Drainage service in the next 10 years is estimated at \$9 850 000. Council's total maintenance and capital renewal expenditure for year 1 of the asset management plan of \$1 329 000 gives a 10 year sustainability index of 1.35.

How do we measure our performance?

Quality

Drainage assets will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired. See our maintenance response service levels for details of defect prioritisation and response time.

Function

Our intent is that an appropriate drainage network is maintained in partnership with the community, other levels of government and stakeholders to manage and maintain all pipelines, GPTS and stormwater drainage surfaces within the Penrith Local Government Area. Drainage asset attributes will be maintained at a safe level and associated signage and equipment will be provided as needed to ensure public safety.



We need to ensure key functional objectives are met:

- Maintain a safe and functional drainage portfolio.
- Ensure the drainage assets are presented in a standard manner to the community
- Maintain the assets to an agreed standard fit for their purpose
- Reduce flooding of 300 habitable floors in 6 years.
- 95% of stormwater flooding incidents attended and made safe within 4 hours.

The main functional consequence of ensuring the City Works services is maintained at a safe and functional standard as set out in this Asset Management Plan is the continued provision of storm water drainage surfaces, waste transportation, GPTs and water drainage networks and systems to the Penrith Local Government Area at the highest level acceptable by the community and in compliance with the standards, specifications and legislations.

Safety

We inspect all drainage assets regularly and prioritise and repair defects in accordance with our inspection schedule to ensure they are safe.

What happens next?

Council plans to operate and maintain the drainage network to achieve the following strategic objectives:

1. Ensure the drainage network is maintained at a safe and functional standard as set out in this asset management plan.
2. Maximise design life of drainage systems through maintenance
3. Identify drainage systems that require enhancement and/or additional GPT's.

Council commissioned an Asset Management Gap analysis and Improvement Plan which were completed in late 2009. The recommendations of these documents are now being implemented, with a view to that process being completed in 2012. This will result in significant improvements in Council's asset management practices.

This plan will be updated as asset management practices change and as the value and make-up of the drainage assets group changes. Significant variations in finance and budget will also be incorporated into future versions of this plan. It is anticipated that this plan will be updated annually, with a significant review occurring every four years.

2. INTRODUCTION

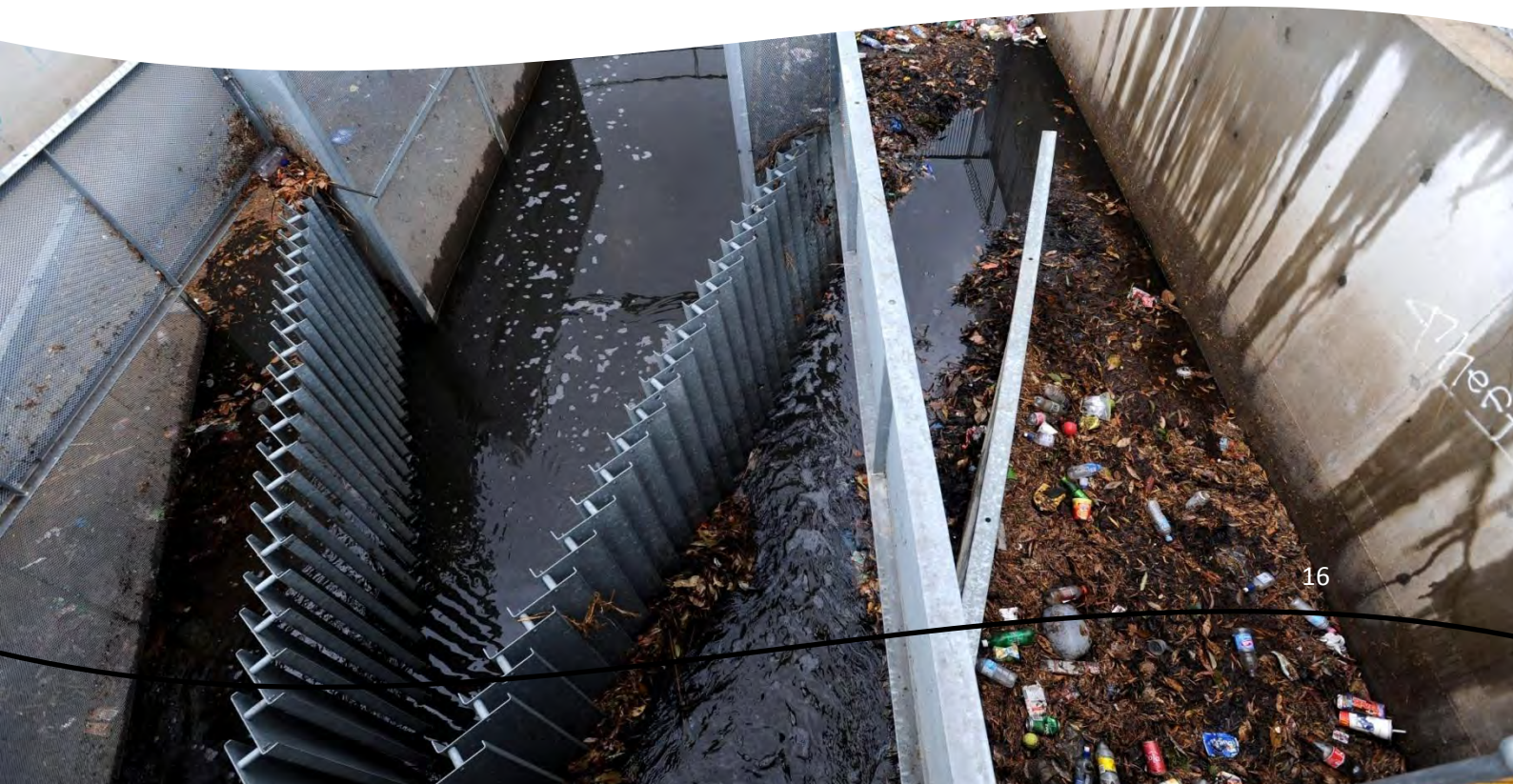
2.1 Background

The drainage assets owned and maintained by Council represent our commitment to provide to our communities strong and stable pipelines and public drains to provide a network of storm water transportation, mechanisms to reduce flooding and mitigate water overflow and to capture pollutants that could enter rivers, lakes and creeks. Drainage assets constructed and maintained by Council are utilised to ensure flooding is minimised and river pollution is alleviated. They act as structures capable of directing flood and rain water and other sources of water to be drained for the purpose of reducing flood and water damage to roads, kerb and property. The provision of public drains in a variety of forms is becoming even more important as we develop as a regional city, wherein stormwater pollution control is a vital. Well developed and utilised drainage structures reduces hydraulic pressures exerted on the ground, increases ground stability and prevents earth movements from occurring. As a growing regional city, public drains play an important role in protecting our infrastructure from hydraulic damage and reduces environmental water pollution.

Given this, it is critical that council maintains these assets so that they are safe, usable and provide a reasonable level of service to the community. This Asset Management Plan has been prepared to provide a context and framework for the management of all assets that fall within the drainage portfolio. Some of the issues which need to be addressed are common to all forms of assets, while others are more specific. This plan demonstrates responsible management of Council's public drain assets, compliance with the regulatory requirements, and explains the funding necessary to provide the required levels of service.

This plan should be read in conjunction with the following documents:

- Drainage Management and Maintenance Service Specification
- Community Strategic Plan 2031
- Penrith's Resource Strategy 2011 - 2021



This asset management plan covers the following infrastructure assets:

Table 2.1 Assets covered by this Plan

Asset Category	Number
Pipelines	604 Km
Drainage pits	20,032
Headwalls	1,791
Prescribed dams	2
Dry retarding basins	111
Gross Pollutant Traps	73
Litter baskets	89
Total Replacement Value	\$303,920,000



Key stakeholders in the preparation and implementation of this asset management plan are listed in Table 1.2.

Table 1.2: Internal Stakeholders

Penrith City Council	City Works staff
	Financial Services Officers
	Asset Systems Staff

External Stakeholders are listed in Table 1.3.

Table 1.3: External Stakeholders

Local Government Association
Federal and State Government
Community
Visitors
Insurers

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. Council has acquired infrastructure 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 is to meet the required level of service in the most cost effective manner for present and future consumers. 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,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.¹

¹ IIMM 2006 Sec 1.1.3, p 1.3

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

One of a sustainable and prosperous region with a harmony of urban and rural qualities with a strong commitment to environmental protection and enhancement. It would offer both the cosmopolitan lifestyles of a mature city and the casual character of a rural community.

Council's mission is:

Is to implement council's strategy and program. It will do this through skilled and responsive management, by valuing its staff, partnerships and community involvement, by providing quality customer service and upholding ethical standards and behaviour.

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
Optimising Council Asset Performance	Implementation of Asset Management Plan	An Asset Management Strategy is in operation for civil infrastructure that optimises its use and maintains it to agree standards fit for its contemporary purpose.
A Liveable City - Community Wellbeing	<p>To improve and support the wellbeing, health and safety of the Penrith community.</p> <p>Asset Management Strategy.</p> <p>Effective community involvement in asset investment decision making.</p> <p>Ensure safe GPTs and storm water drainage.</p>	<p>Demand Forecasting, Level of Service and Monitoring:</p> <p>The section of this IAMP dealing with future demand, analyses future cash flows required to maintain the City's expanding stormwater drainage system.</p> <p>Capital Works are programmed and funded.</p> <p>Data on forward works programs is available to the community for comments and suggestions. Staff has a significant input into the development of the plan.</p> <p>Provision of good Asset Management practices and analysis.</p>
Economic Prosperity	<p>To improve economic prosperity of the region.</p> <p>To achieve sustainable infrastructure within the Long Term Financial Plans.</p> <p>Ensure all land developments comply with Council's drainage requirements.</p>	<p>Financial Summary:</p> <p>Maintenance works are optimised against the capital works program.</p> <p>Expenditure data available to assist in decision making</p> <p>Demand forecasting analysis</p>

The Natural Environment – SER Principle 3	<p>A leading and action focused Council for the environment.</p> <p>Water resources and ecosystems protected and conserved.</p> <p>Sustainable use of energy.</p>	<p>Technology Change:</p> <p>Improving storm water quality runoff into creeks and streams.</p> <p>Re-use of stormwater wherever possible.</p> <p>Appropriate construction of infrastructure to minimise loss of natural habitat and enhance the environment.</p>
Infrastructure and Human Settlements	<p>Preservation of rural atmosphere, open spaces and natural resources of the City.</p> <p>Accessible and safe communities.</p> <p>Environmentally sustainable development.</p> <p>Improved drainage services with a safe drainage network.</p> <p>Stormwater and wastewater assets that meet environmental outcomes.</p> <p>Well maintained and utilised drains, GPTS and other assets.</p>	<p>Regulatory controls, Planning Documents, Monitoring and Specifications:</p> <p>Minimise risk of flooding that may result in personal or property damage or loss.</p> <p>Maintain overland flow rates pre and post development.</p> <p>Encourage stormwater detention systems which in themselves create new habitats for wildlife as well as recreational areas.</p> <p>Minimise nuisance flooding on roadways.</p> <p>Risk based approach to maintenance management.</p> <p>Identification of assets in their lifecycle with programs for asset renewal and replacement at appropriate intervals to maintain service delivery expectations.</p>
Council Leadership	<p>Sustainable community finances and assets.</p> <p>Effective delivery of services to the community.</p>	<p>Long term planning for the future operation, maintenance, renewal and disposal of assets.</p> <p>Setting levels of service, both technical and customer focussed, to ensure services are delivered effectively.</p>

2.3 Plan Framework

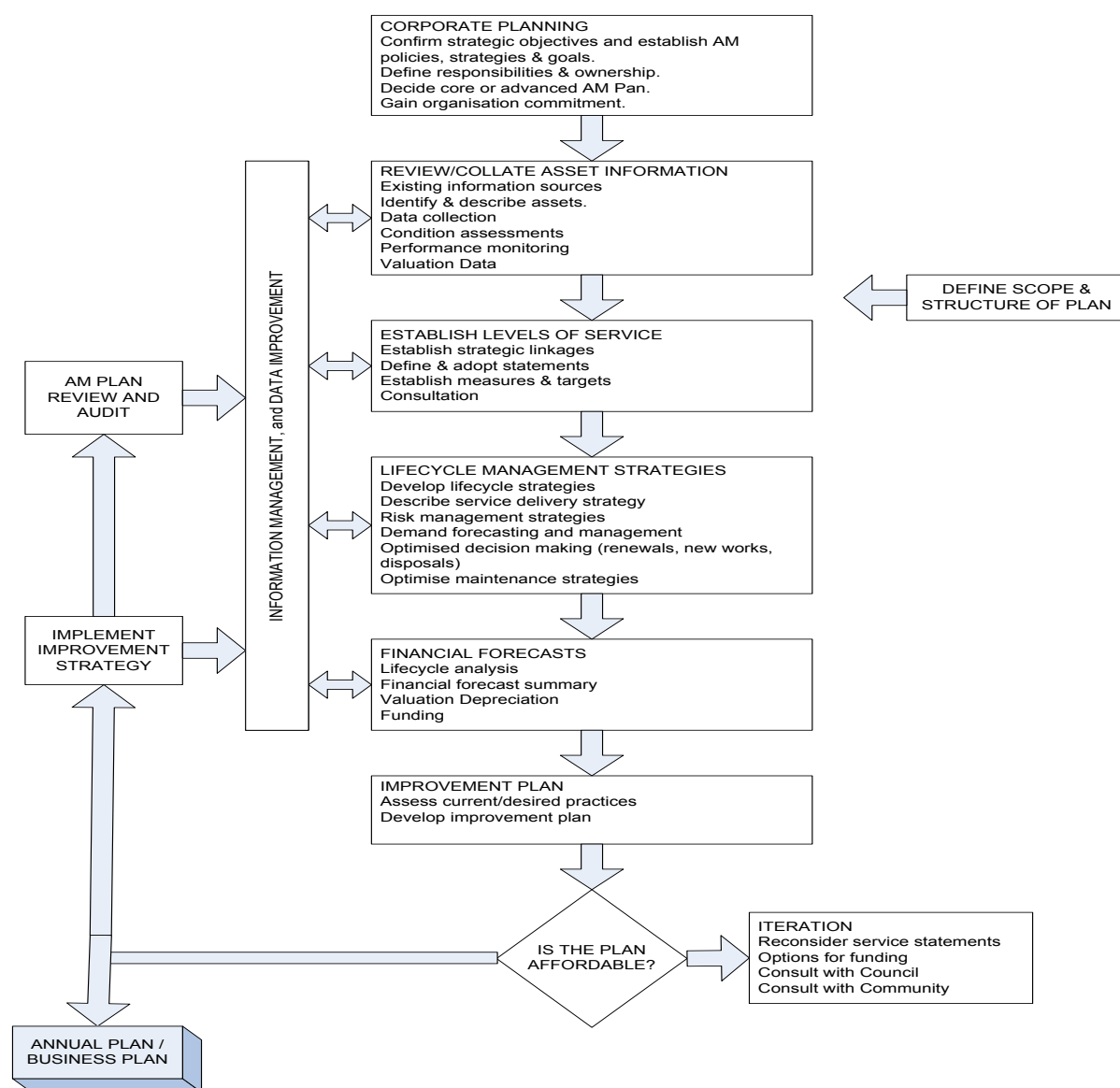
Key elements of the plan are

- 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 Fig 1.5.1, p 1.11



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 move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council participates in the 2009 Comparative Performance Measures in Local Government Customer Satisfaction survey. This survey polls a sample of residents on their level of satisfaction with Council's services. The most recent customer satisfaction survey reported satisfaction levels for the following services. For a more detailed outline of the results please refer to the 'Penrith City Council' Customer Survey 2009 Final Report prepared by IRIS research.

Table 3.1 Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Maintenance of facilities around the river: Importance that Council provides & maintains storm drainage facilities.		√			
Satisfaction rating of provision of stormwater drainage			√		
Protection of the natural environment: Performance in providing & maintaining storm drainage facilities in a sustainable manner.		√			
Maintenance of public drains: Public Safety from drainage assets			√		

Council uses this information in developing the Strategic Management Plan and in allocation of resources in the budget.

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 1993	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 Act - Annual Reporting Section 428(2)(d)	(d) A report of the condition of the public works (including public buildings, public road and water sewerage and drainage works) under the control of council as at the end of that year; together with (i) An estimate (at current values) of the amount of money required to bring the works up to a satisfactory standard; and (ii) An estimate (at current values) of the annual expense of maintain the works at that standard; and (iii) The Council's programme for maintenance for that year in respect of the works.
Environmental Planning and Assessment Act 1979	<ul style="list-style-type: none"> • Requirement for LEP and DCP's. • Council control of service approvals.
Soil Conservation Act 1938	<ul style="list-style-type: none"> • Preservation of water course environment.
Public health Act 1991	<ul style="list-style-type: none"> • Effluent and waste disposal methods. • Delivery of quality water supply services.
Public Works Act 1912	<ul style="list-style-type: none"> • Role of City Infrastructure in planning and construction of new assets.
Occupational Health and Safety Act 2000	<ul style="list-style-type: none"> • Impacts all operations. • Note public safety – insurance. • Cost implications. • Council's responsibility to ensure health, safety and welfare of employees and others at places of work.
Protection of the Environment Operations Act 1997	<ul style="list-style-type: none"> • Control of run-off or escape of contaminants entering water courses. • Regulating pollution activities and issue of licenses as well as the monitoring of and reporting on waste output. • This act includes "Due Diligence requirements, disposal procedures for chemicals and sludge and details penalties for causing environmental impacts.
All other relevant Australian Standards and Codes of Practice, Acts and Regulations, relevant policies of the Organisation	<ul style="list-style-type: none"> • Water sensitive infrastructure guidelines. • Australian Road Rules • Several Australian Standards and Codes of practices as relevant to stormwater drainage.

3.3 Current Levels of Service

The levels of service that is currently in use by the Assets Team are derived using historical budget information, internal consultation with stakeholders, statutory requirements and a corporate customer service request system (CRS).

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:

- Maintenance is work undertaken to ensure that the drainage asset continues to meet the required performance and standard throughout its useful life.
- There are two main strategies of maintenance approach, namely “preventive” maintenance and “reactive” maintenance.
- Preventive maintenance – the actions performed to retain an item or asset in its original condition as far as practicable by providing systematic inspection, detection and prevention of incipient failure. Preventive maintenance is normally programmed.
- Reactive maintenance – the actions performed, as a result of failure, to restore an item or asset to its original condition, as far as practicable. Reactive maintenance may or may not be programmed.

Service Criteria

Quality
Quantity
Availability
Safety

Technical measures may relate to

Smoothness of drains
Number of drains proportional to flood risk
Number of usable drainage assets
Number of injury accidents

The current levels of services that are currently in use by the Asset Services Department are derived using historical budget information, internal consultation with stakeholders, statutory requirements and feedback from the public.

Council’s current service levels are detailed in Table 3.3.

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 & disposal of stormwater and Infrastructure.	Customer Service Requests In regards to flooding or stormwater nuisance. Community forums feedback.	< 25 per month	
Function	Flooding complaints responded to.	Response time	100% responded to within 5 days	
Safety	Minimise risk for the public from drowning, pollution and spread of diseases.	Accident reports, Customer Requests.	No current measure.	
TECHNICAL LEVELS OF SERVICE				
Function	Number of localised flooding complaints caused by blockages to Council's Drainage System	Complaints	<10 complaints per annum	
Quality	High quality stormwater discharge to creeks and rivers	No. of reported contaminated discharges	< 1 reported contaminated discharge	
Quality	Periodic visual inspection to determine condition	CCTV Inspection	> 2% of all assets inspected per annum	
Function	Adequate capacity and structural strength.	No. of properties protected from 1 in 20 yr flood inundation	< 5% of all properties in urban areas	
Function	Provide stormwater services that protect the environment	Frequency of cleaning GPTs	100% of all GPTs cleaned every 2 months.	
Operations	Pit cleaning	No. of pits cleaned	90% of high risk pits inspected and	

			cleaned per annum
Cost Effectiveness	Proactive Scheduled maintenance. Re-use of materials. Use highly Productive drainage construction machinery and innovative design, materials and techniques.	Per cent of maintenance done by proactive repairs.	70% of Maintenance budget spent on pro-active maintenance.
System Availability	Response time incidents	<ul style="list-style-type: none"> • Major burst main • Minor burst main • Water service failure 	<ul style="list-style-type: none"> • 15 – 30mins • 2hrs • 1hr

3.4 *Desired Levels of Service*

At present, indications of desired levels of service are obtained from various sources including the 2009 Customer Satisfaction survey, residents' 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.

The following principles are adopted in delivering levels of service in relation to drainage:

- (a) Safe for use for the community;
- (b) Appearance is acceptable;
- (c) Regular maintenance is undertaken;
- (d) Facilities are appropriate and in good condition;
- (e) Facilities are operational;
- (f) Regular asset inspections are carried out;
- (g) Signage is appropriate;
- (h) Council responds to complaints and issues.

The City of Penrith drainage Service Specifications will reinforce the amenity and functionality of the City's creek lines, transport corridors, drainage pipeline networks and infrastructure easements. People will have close access to opportunities for non-motorised movement throughout a completely connected City, breathing new life and enhanced functionality in to the space set aside to contrast the built and natural environment in recognition of Penrith's Flood Liable location.

4. FUTURE DEMAND

4.1 Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc.

Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1 Demand Factors, Projections and Impact on Services

Demand factor	Present position			Projection			Impact on services
Population	177,152 (2006 Census)			189,052 (2020 Projection)			Increase in maintenance and renewal costs
Demographics (By age group)	0 to 4	13,154	7.4%	0 to 4	13,229	7.0%	Increase of runoff volumes. Higher levels of expectations to providing a very effective and efficient drainage network and associated systems.
	5 to 9	13,225	7.5%	5 to 9	12,934	6.8%	
	10 to 14	13,709	7.7%	10 to 14	12,521	6.6%	
	15 to 19	13,840	7.8%	15 to 19	13,060	6.9%	
	20 to 24	14,553	8.2%	20 to 24	14,698	7.8%	
	25 to 29	13,688	7.7%	25 to 29	15,289	8.1%	
	30 to 34	13,737	7.8%	30 to 34	14,459	7.6%	
	35 to 39	12,826	7.2%	35 to 39	13,381	7.1%	
	40 to 44	12,668	7.2%	40 to 44	12,277	6.5%	
	45 to 49	12,932	7.3%	45 to 49	11,889	6.3%	
	50 to 54	11,628	6.6%	50 to 54	11,028	5.8%	
	55 to 59	10,450	5.9%	55 to 59	10,501	5.6%	
	60 to 64	6,641	3.7%	60 to 64	9,635	5.1%	
	65 to 69	4,535	2.6%	65 to 69	8,306	4.4%	
	70 to 74	3,334	1.9%	70 to 74	6,681	3.5%	
	75 to 79	2,728	1.5%	75 to 79	4,195	2.2%	
	80 to 84	2,064	1.2%	80 to 84	2,770	1.5%	
	85 +	1,430	0.8%	85 +	2,226	1.2%	
Urban consolidation	Urban areas are being improved and populated by various new urban release areas			Urban areas will face higher levels of dense urban housing developments.			<p>Increase in impermeable area resulting in increased stormwater flows.</p> <p>Reduction in capacity of the existing system, upgrade of system necessary</p> <p>Increase in pollutants to receiving waters</p>

Environmental awareness	Awareness raising & water quality improvements	Expansion of Water Sensitive Urban Design	Recovery of some network capacity Water quality improvements Additional material disposal costs
Road traffic	2-2.5% growth per annum		Potential increase in pollution, more wetlands required to remove contaminants
Climate change	Developing awareness in community and profession	Less frequent, more intense rainfall events	Reduction in system capacity Inundation of stormwater pit outfalls
Global Warming	The globe is warming	Changes to rainfall intensities and frequencies will influence stormwater runoff volume.	Increases in stormwater runoff volume are not anticipated to create an influence on system design in the medium term.
Environmental Awareness	Minor control of pollutants entering streams and waterways.	Greater restriction on the quality of run-off water particularly from roads and reserve areas	Increased use of filters, possible change in maintenance practises - more street sweeping and a different regime for maintenance in reserves adjacent waterways.



4.2 Changes in Technology

Technology changes are forecast to affect the delivery of services covered by this plan in the following areas.

Table 4.2 Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Water Sensitive Urban Design (WSUD)	Reduced flow rates from new developments Higher quality runoff Greater detention storage and re-use of stormwater
Water course management techniques	Removal of trees along water courses
New pipe materials	Poly pipe is lighter and can bend around corners making it easier and cheaper to lay but harder to capture the location of. Only used in non-commercial/ industrial areas and areas of low load forces e.g. Parks and gardens. Poly pipe has cleaning/maintenance implications and possibly a shorter economic life (25-30 years) Reinforced concrete fibre – lighter and easier to install, more cost effective
Aquifer storage	Water as a commodity can be harvested and stored underground only to be retrieved at a later time when required to irrigate reserves, etc. Groundwater studies would need to be undertaken to determine the suitability of this and additional infrastructure (pipes, pumps, etc.) required to replenish and extract water from underground aquifers.
New side entry pits	New pits come with grates to make it easier and more cost effective to inspect, maintain and clean. Life-cycle costs could be greatly reduced.
GIS	Further development of Geographic Information Systems (GIS) will improve the management of drainage infrastructure, particularly the coordination of maintenance activities, through enhanced data collection, analysis and dissemination systems.
Drainage technology improvements	Safer roads, improved drainage preventing water ponding and excess water degradation of pavements.

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

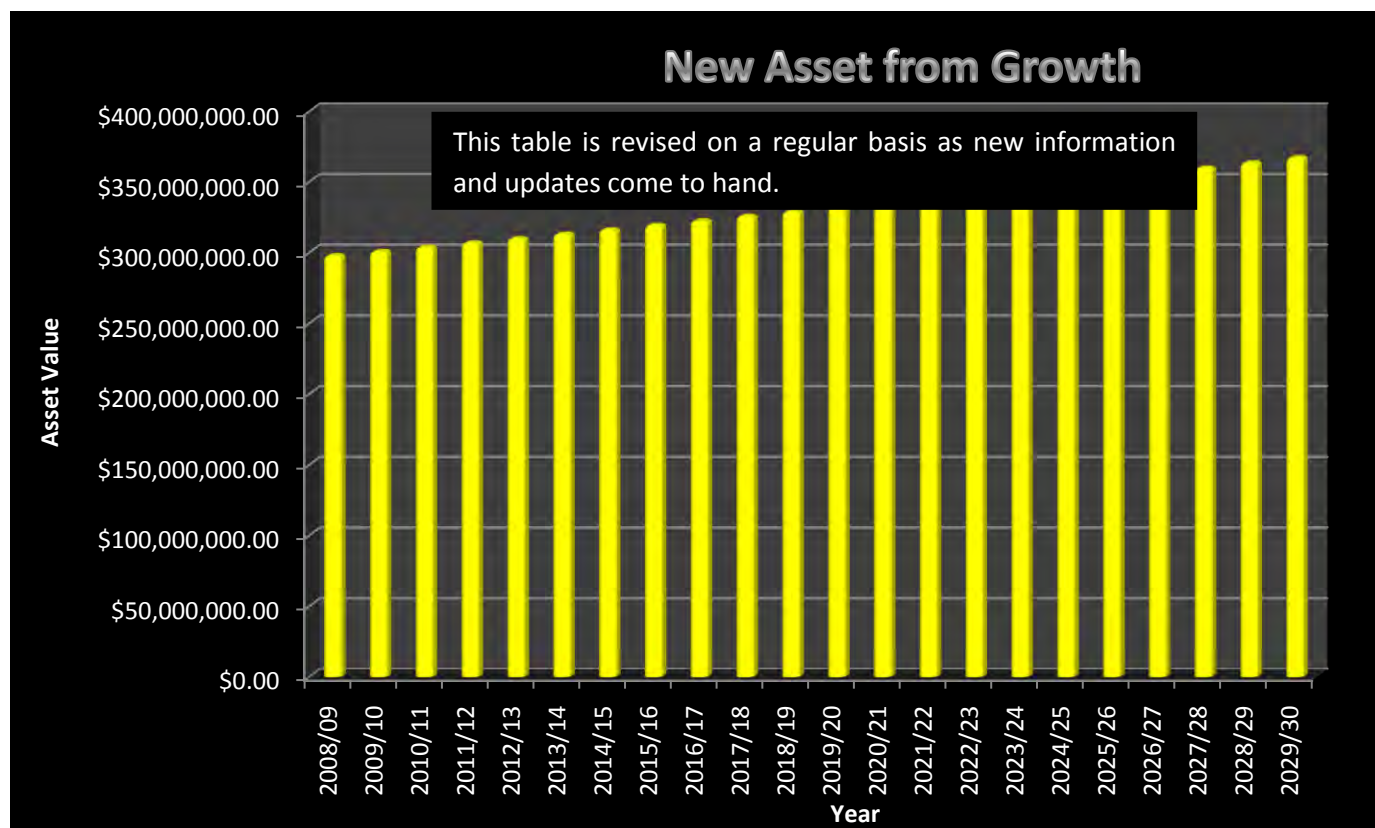
Service Activity	Demand Management Plan
Community demand for minimisation and mitigation of flooding	Undertake catchment analysis and modelling to determine hydraulic requirements for drainage system. Inspect and evaluate the condition of old drainage system and compile replacement program.
Community demand for preserving and enhancing the environment, through stormwater harvesting and treatment from chemicals, debris and organic matter	Build new and upgrade existing infrastructure to carry the increased stormwater runoff generated by development. Reduce the additional quantity of stormwater, such as through on-site detention of peak flows, on-site storage and reuse (rainwater tanks), discharge to the ground (aquifer discharge).
Stormwater and drainage	Public education and information on good storm water management practice. Rebates on development contributions for rainwater tanks in new developments. Designing soakage systems which discharge to the ground where practicable. New developments in drainage deficient areas to include onsite retention of storm flows to limit discharge to existing predevelopment discharge flows.
Financial	Developing long term Financial Management Plans to ensure financial sustainability.



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 New Asset from Growth



The graph above is only a projection of asset value increase. The above graph will be updated when exact costings for new works become available.

Acquiring 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.

New assets will also be created by developers as part of the development of new subdivisions. The details of works to be carried out are detailed in Section 94 Contribution Plans. These plans are available for viewing at www.penrithcity.nsw.gov.au/index.asp?id=3204

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs.

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown below.

Property	Dimension
Drainage Pits	20032
Headwalls	1791
Gross Pollutant Traps	73
Pipelines	604Km
Prescribed Dams	2
Dry Retarding Basins	111
Litter baskets	89
Concrete lined channels	5.4Km
Open earth channels	4.1Km

Major infrastructure has been established as local suburbs expand and this is evident no more so than with the recent expansion to Claremont Meadows, Glenmore Park and the Penrith Lakes Developments. New large scale developments are bringing with them new infrastructure which in the case of stormwater drainage is long lived. It is the assets in the older more established areas of urban centres that will first reach failure due to age related condition defects and/or capacity related issues.

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

Fig 2 Asset Age Profile

*****The Asset Age Profile of Council's Drainage Assets is currently being investigated. *****

The age profile of stormwater drainage assets will be derived from the average age of development of the land immediately surrounding the asset. This method uses Council's own GIS and knowledge of land divisions derived from the digital cadastral database (DCDB). The outcomes from the analysis should be interpreted with some caution as they are inferred and are an estimate at best. They do however enable an age profile of assets to be established where prior to this no age data existed. The estimated construction year is now populated for each and every asset.

It is known that the age profile reflects a stormwater drainage network that parallels the history of urbanised development in the City of Penrith. The age profile of stormwater drainage assets has been derived from the average age of development of the land immediately surrounding the asset. The outcomes from the analysis should be interpreted with some caution as they are inferred and are an estimate at best. They do however enable an age profile of assets to be established where prior to this no age data existed. The estimated construction year is now populated for each and every asset.

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
Stormwater Drainage	Increase in structural and hydraulic failure
Stormwater Pipes	Blockages, chemical erosion, movement of soil and overloading the system reduce useful life and design capacity of the pipes. Increase land divisions which increase the load and the volumes on existing drainage infrastructure
Stormwater Pits	Vandalised and damaged pits reduce the capacity of the system and put pressure on downstream components, which cause ageing of the entire system.
Fences	Poor overall condition

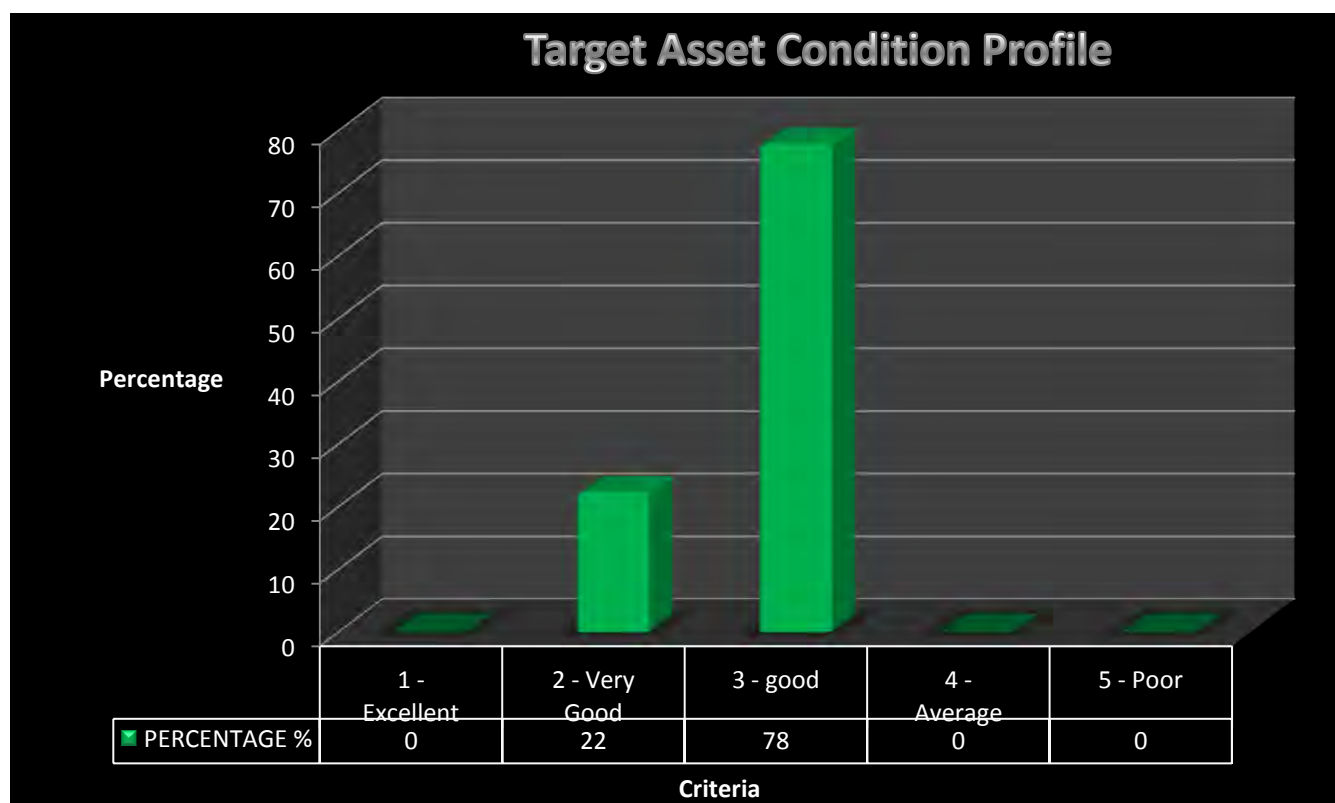
The above service deficiencies were identified from Customer requests and regular assets inspections.



5.1.3 Asset condition

The targeted condition profile of Council's assets is shown below.

Fig 3 Target Asset Condition Profile



Condition is measured using a 1 – 5 rating system.²

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 2010 covered by this asset management plan is summarised below. Assets were last revalued at June 2010. Assets are valued at current rates.

Current Replacement Cost	\$303,920,000
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² IIMM 2006, Appendix B, p B:1-3 ('cyclic' modified to 'planned')

Depreciable Amount	\$303,920,000
Depreciated Replacement Cost	\$302,156,000 [CRC - Annual Dep. Exp.]
Annual Depreciation Expense	\$1,764,000

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	0.44% [Asset Expenditure/Current Replacement Cost]
Annual Upgrade/expansion	0.18% [2009/10 Projects/CRC]

5.2 Risk Management Plan

An assessment of risks³ associated with service delivery from infrastructure assets has identified 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. Council has a separate Risk Management Plan which is used to assess the risks of all assets in the Asset Management Plan for Drainage. Please refer to Council's Service Risk Assessment Document.

Climate change is an emerging field of possible risk to the lifecycle management of existing and new assets. The NSW Government Guidelines Economic Appraisal (TPP 07-05) has been updated to reflect upon growing concerns on the possible effects that climate change may have on Asset and Infrastructure Assessments.

An economic appraisal assists efficient public sector resource allocation decisions, by systematically analysing all the quantifiable and non-quantifiable costs and benefits - economic, social and environmental - of various ways of meeting a service objective. Economic appraisal (cost benefit analysis; cost effectiveness analysis) is the standard evaluation framework for resourcing decisions. It is applicable to policy evaluation and analysis of recurrent programs as well as capital projects, to assist decision making.

Drainage assets will be maintained and constructed taking into account any risk arising from Climate Change. Risk management for climate change related concerns will form part of the Council's Risk Management Tool kit and asset planning strategies will be formed to adapt to possible uncertain risk from climate change. A key method to aid in the effective use of funding is through the economic appraisal of drainage assets to determine adaptability to climate change. This method will assist in determining which assets require replacing or upgrading and that this asset class will be assessed within a standard cost benefit framework (economic appraisal of the costs and benefits of various options to achieve a service objective) in accordance with *NSW Government Guidelines for Economic Appraisal*.

³ Refer to Penrith City Council's Risk Management Tool Kit

Refer to NSW Treasury Circular NSW TC10/12 15 September 2010 for more information.

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

Table 5.3.1 Maintenance Expenditure Trends

Year	Maintenance Expenditure			
	Reactive	Planned	Cyclic	Total Exp.
2006/07	\$ 370 015	\$ 191 401	N/A	\$561 416
2007/08	\$ 472 823	\$ 297 421	N/A	\$770 244
2008/09	\$ 425 031	\$ 412 916	N/A	\$837 947

Planned maintenance work is 49% of total maintenance expenditure.

Maintenance expenditure levels are considered to be adequate 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.

5.3.2 Standards and specifications

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

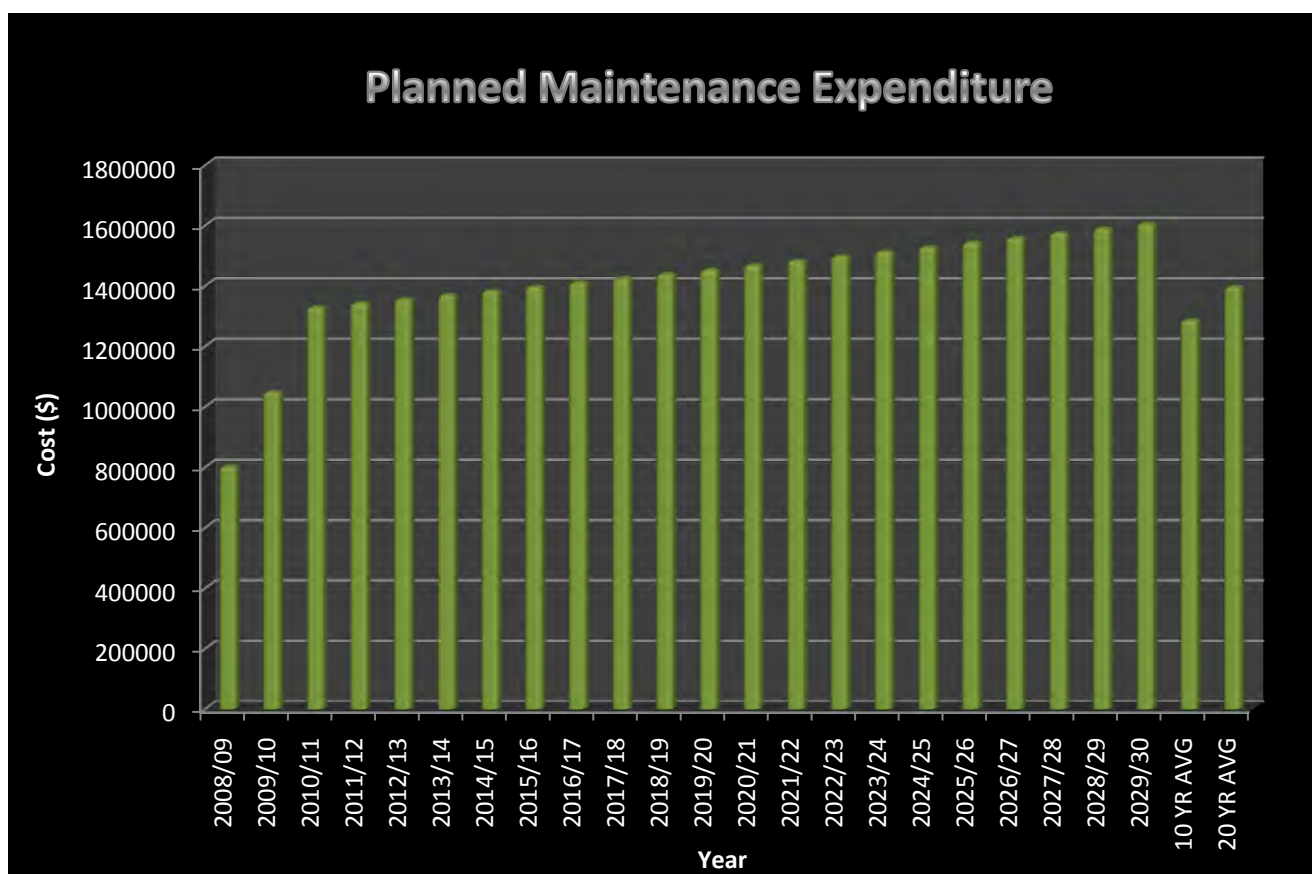
- Local Government Act 1993
- Protection of the Environment Operations Act 1979

- Environmental Planning and Assessment Act 1979
- Occupational Health and Safety Act 2000
- Roads Act 1993
- Council's Customer Service Charter
- Council's Probity and Governance Policies
- AS/NZS 3500.3.2003 Plumbing and Drainage Part 3: Stormwater Drainage.
- AS2436-1981 Guide to noise control on construction maintenance and demolition sites.
- National Capital Planning Authority 1993, *Designing Subdivisions to Save and Manage Water*.
- AS4919-2003 General Conditions of contract for the provision of asset maintenance and services.
- Argue J.R. Stormwater Management in Australian residential developments towards a common practice.
- Australian Rainfall Runoff - 4th Edition.

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 2009/10 dollar values.

Fig 4 Projected Maintenance Expenditure



Deferred maintenance, i.e. 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*'. Work 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 is detailed in Table 5.4.1.

Table 5.4.1 Renewal Priority Ranking Criteria

Criteria	Weighting
Safety - Erosion and sedimentation control and treatment	60%
Structural Integrity - Renewal and maintenance of stormwater drainage infrastructure serving high density housing developments	20%
Function - Maintaining stormwater quality by minimising pollution and contamination of runoff	10%
Economic Advantages/Availability of materials	10%
Total	100%

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 include relining of water mains, replacement of the mechanical seals/impellers of the pumps/pipelines, resurfacing GPT's ...etc.

5.4.2 Renewal standards

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

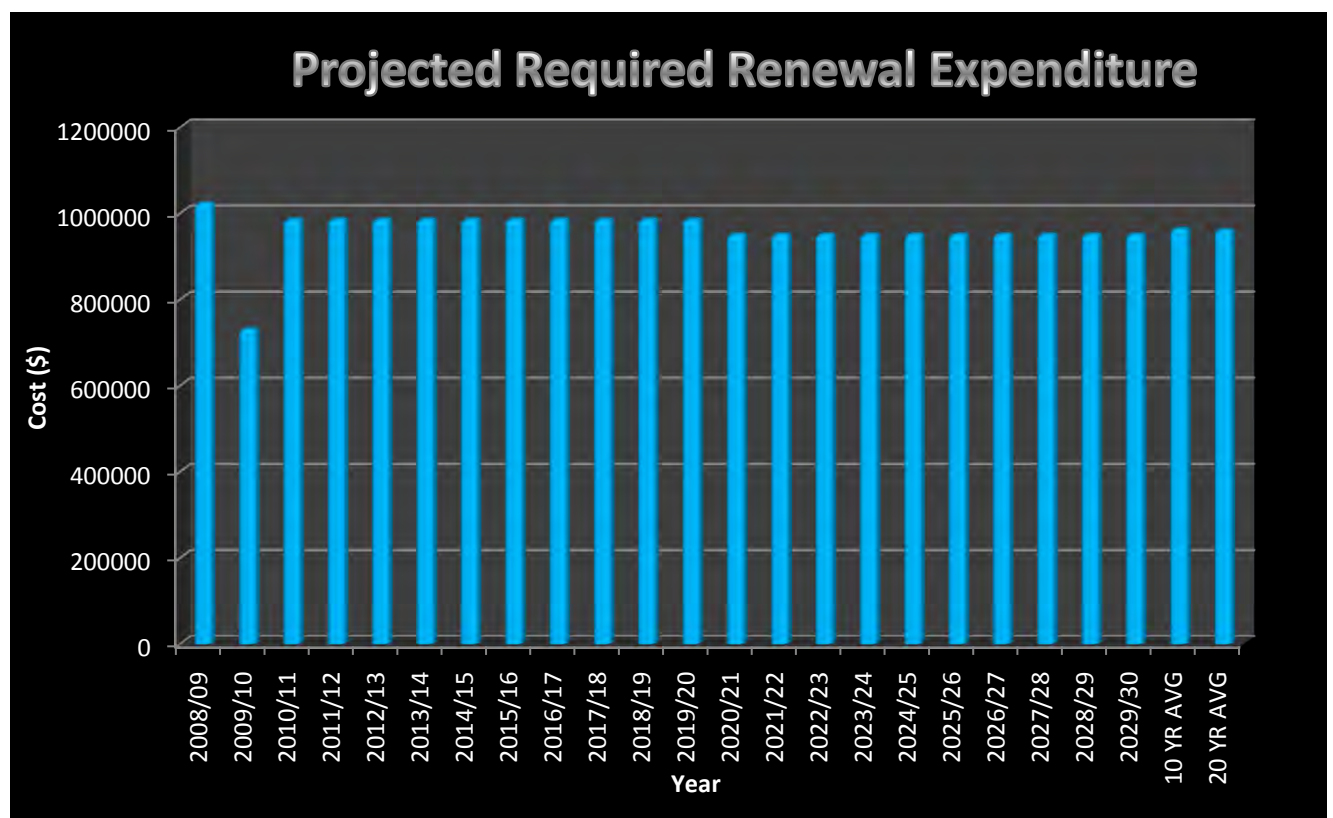
- Local Government Act 1993
- Protection of the Environment Operations Act 1979
- Environmental Planning and Assessment Act 1979

- Occupational Health and Safety Act 2000
- Roads Act 1993
- Council's Probity And Governance Policies
- AS 1742.3 – 1996 Traffic Control Devices for Works on Roads
- RTA's Traffic Control at Work Sites Manual, Issued December 1998
- Council's Aus-Spec #4 and #6 Standards
- Adopted Service Specification
- AS/NZS4058 Precast concrete pipes, and
- AS/NZS3725 Design for installation of buried concrete pipes

5.4.3 Summary of future renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The asset stock in this asset category has a lifecycle of 100 years, meaning that regular renewal procedures are not needed. Renewal processes only occur when there is a works request i.e. when there is a storm blockage or through an asset renewal program. However, the majority of the tasks carried out in this asset category fall under the maintenance budget. Note that all costs are shown in current 2009/10 dollar values.

Fig 5 Projected Asset Renewal Expenditure



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
Community Profiling – Customer requests etc.	45%
Funding Availability	25%
Physical Environment Issues - Stormwater quality (pollutant traps, infiltration trenches)	15%
City Planning - New stormwater pipes and pits due to Development	15%

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.

Fig 6 Planned Capital Upgrade/New Asset Expenditure

Note* Current funding and Asset Analysis is based on Asset Renewal and the Long Term Financial Plan, No Upgrade or New Assets have been identified. The service review will identify New Assets required.

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.

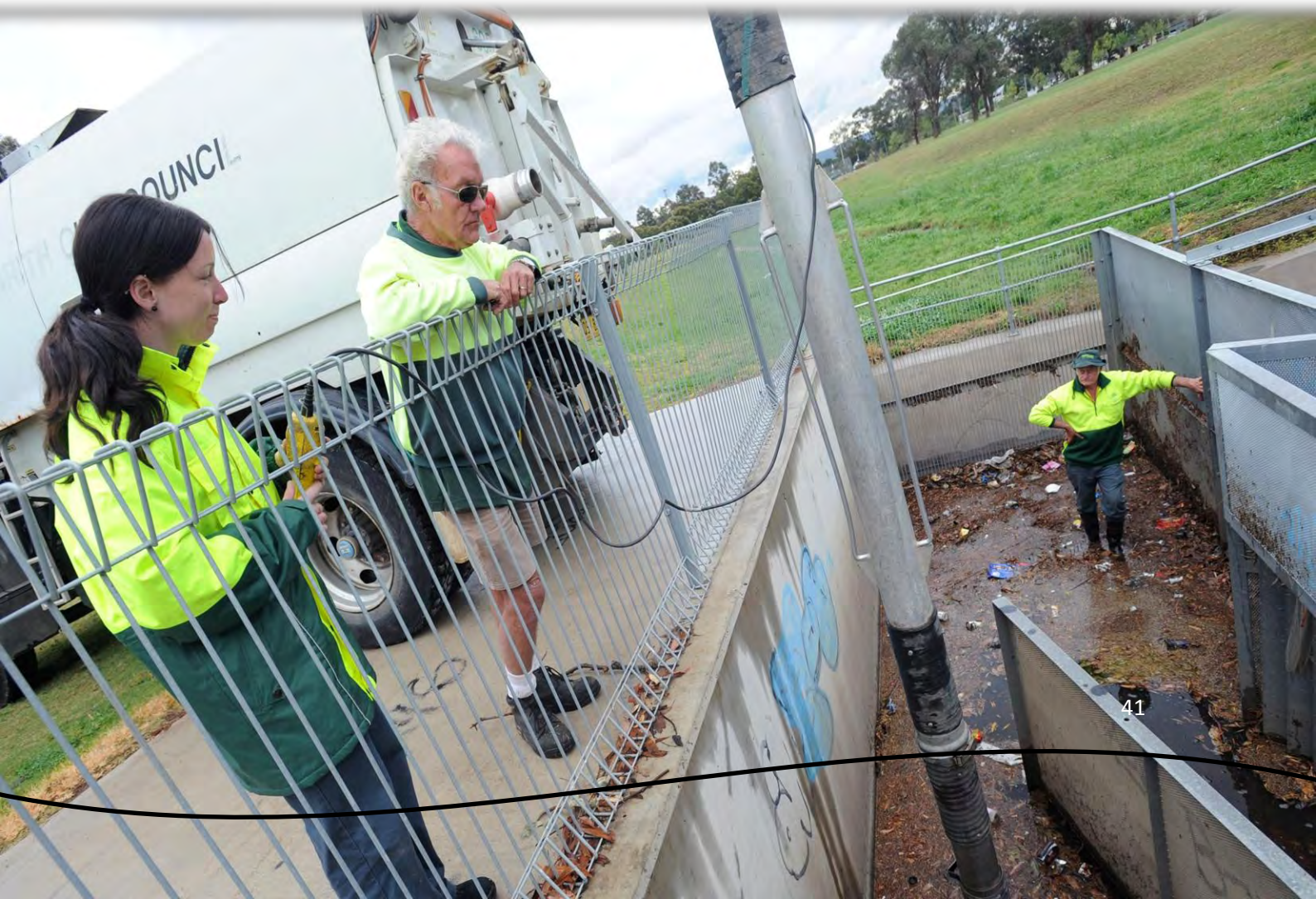
5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any.

Table 5.6 Assets identified for Disposal

Asset	Reason for Disposal	Timing	Cash flow from disposal
Various	Due to upgrade of existing stormwater infrastructure, due to water harvesting or Land Developments.	Ongoing	Nil

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.



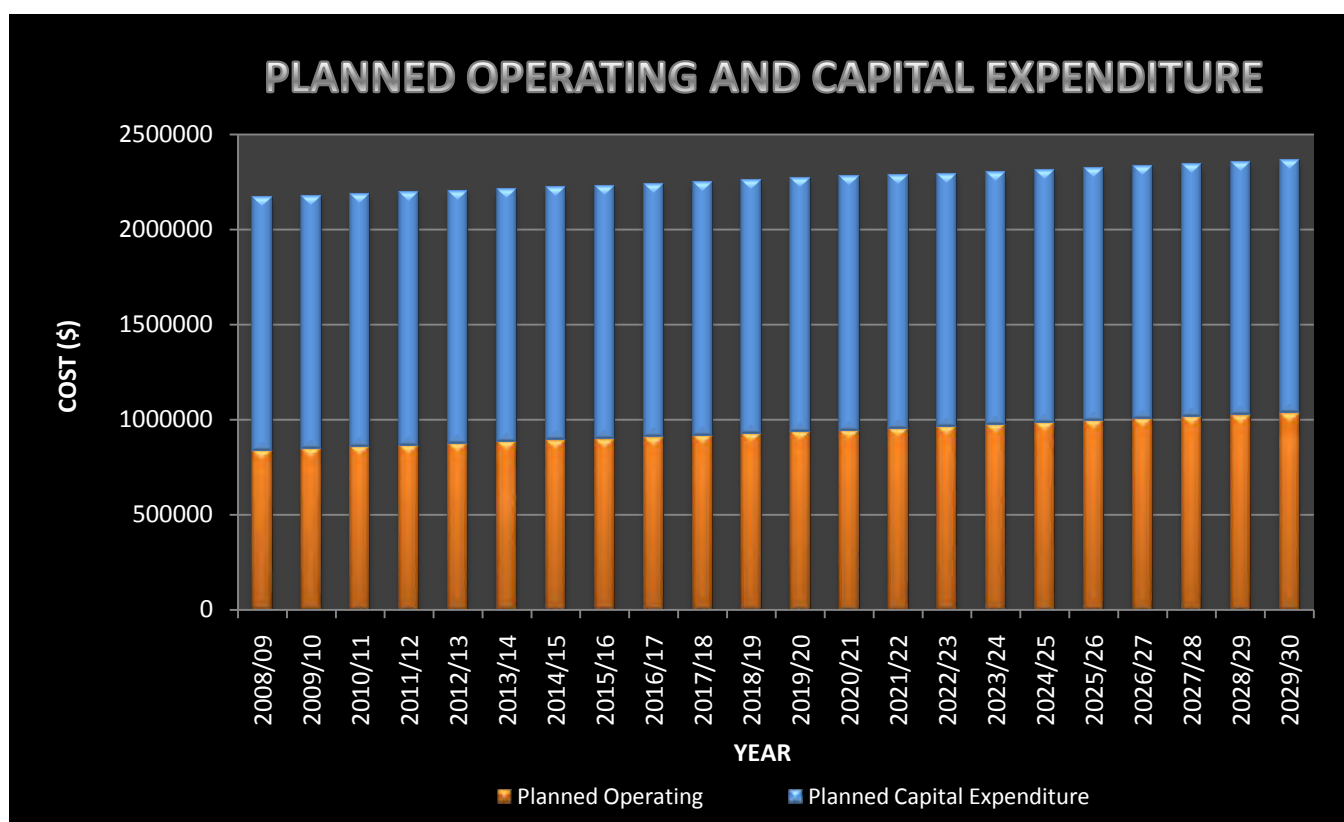
6. FINANCIAL SUMMARY

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 planned operating (operations and maintenance) are fixed values and capital expenditure (renewal and upgrade/expansion/new assets) is variable depending on Council's development plans.

Fig 7 Planned Operating and Capital Expenditure



Note that all costs are shown in current 2008/9 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 \$2 714 000.

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 \$1 329 000.

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 Drainage 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.

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. Stormwater assets are typically a long lived asset and much of Council's assets are in the early stage of their life. Therefore, very few renewals are planned for the medium term.

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. 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 reserve funding that will need to be acquired per financial year as the asset stock increases so that there are sufficient funds available when a renewal job does need to be carried out. Renewal expenditure for the Drainage Service cannot be projected or predicted given that renewal works will only be carried out when a customer service request is lodged or during the construction of new urban areas. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

Fig 8 Projected Renewal Expenditure

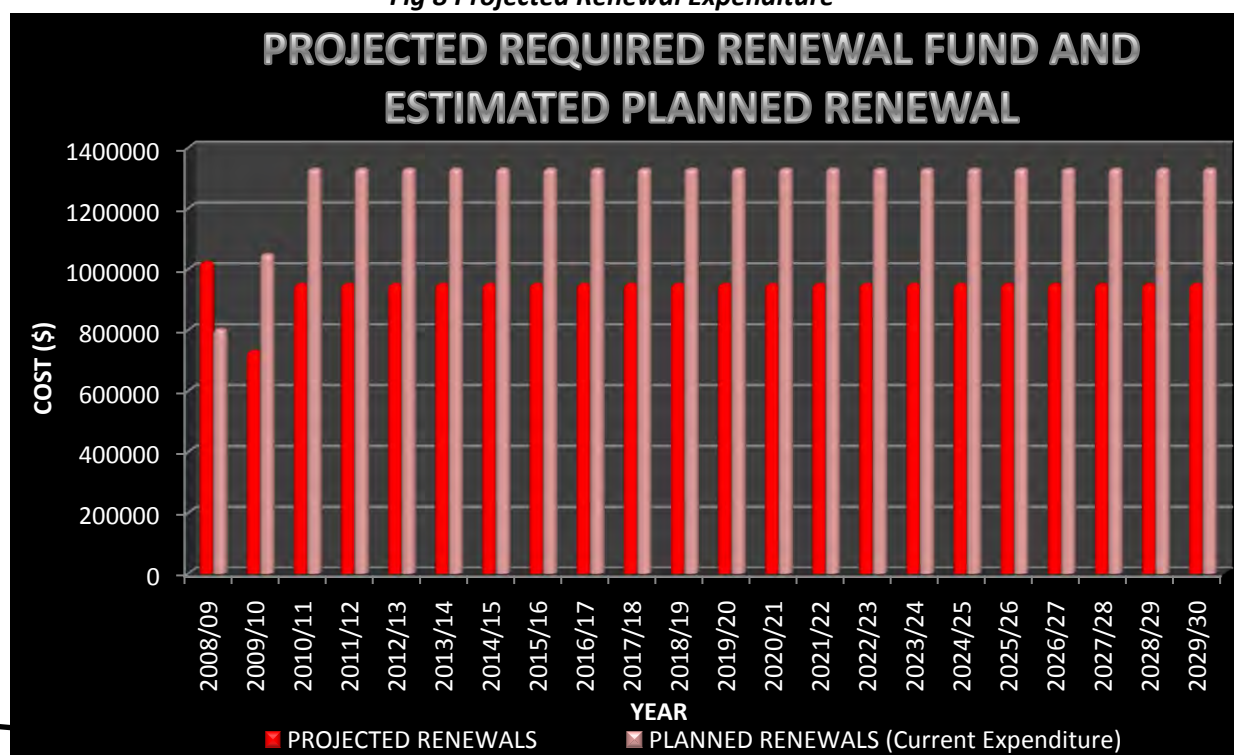


Table 6.1.1 shows the gap between projected and planned renewals.

Table 6.1.1 Projected and Planned Renewals and Expenditure Gap

Note Projected and Planned renewal expenditure gap cannot be determined because renewals in this asset category do not require regular renewal given that the assets have a very long lifecycle. This table will be updated as financial data becomes available.*

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.

Council will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and to help reduce the implication of funding gaps that include decreased asset values, poor quality and reliability and increased maintenance and renewal costs and failure to meet the needs of the community.

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 \$9 850 000. Estimated maintenance and capital renewal expenditure in year 1 is \$ 1 329 000. The 10 year sustainability index is 1.35.

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 Achieving the financial strategy will require:

- Increasing revenue streams, rates and user charges;
- Cost analysis from a reduced service level and implementation;
- Deferring capital upgrades/new works and reallocates funds to capital renewal/preservation work.

In order to reduce/eliminate the funding gap and provide the required funds for the renewal/replacement of water assets, the following measures need to be undertaken:

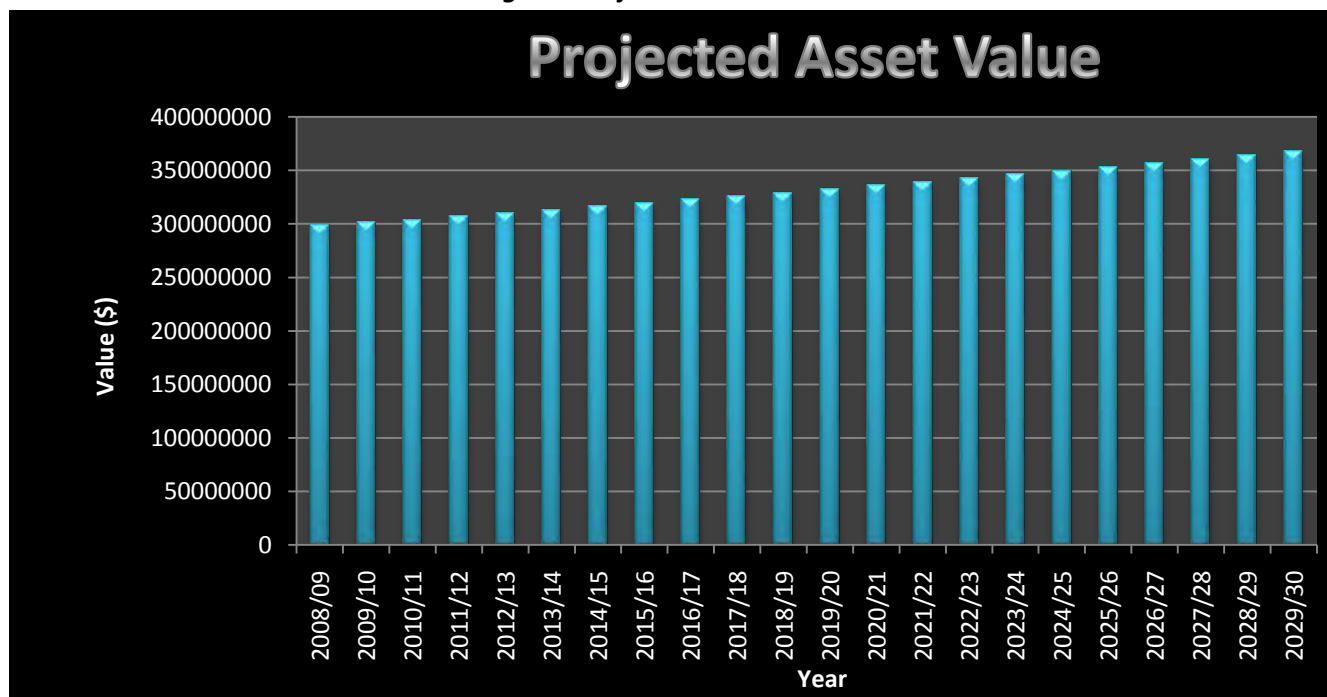
1. Rationalization of asset renewal/replacement – it is very important to thoroughly investigate asset conditions, estimate the remaining of their useful life and prioritize maintenance/renewal/replacement works accordingly. Asset renewal/replacement to be carried out based on asset conditions, rather than asset age.
2. Monitor the fees and charges for water supply/treatment & maintenance/operations tasks and adjust them based on the actual cost, taking into account elevated charges during drought periods due to low water consumption as a result of water restrictions and for water treatment using activated carbon. Also, taking into account high rainfall season due to changes in weather patterns. Implementing the abovementioned measures should provide substantial savings without affecting the level of service and hence provide sufficient funds for the asset renewal/replacement as required.
3. Cost analysis from a reduced service level and implementation

4. Deferring capital upgrades/new works and reallocates funds to capital renewal/preservation work

6.3 Valuation Forecasts

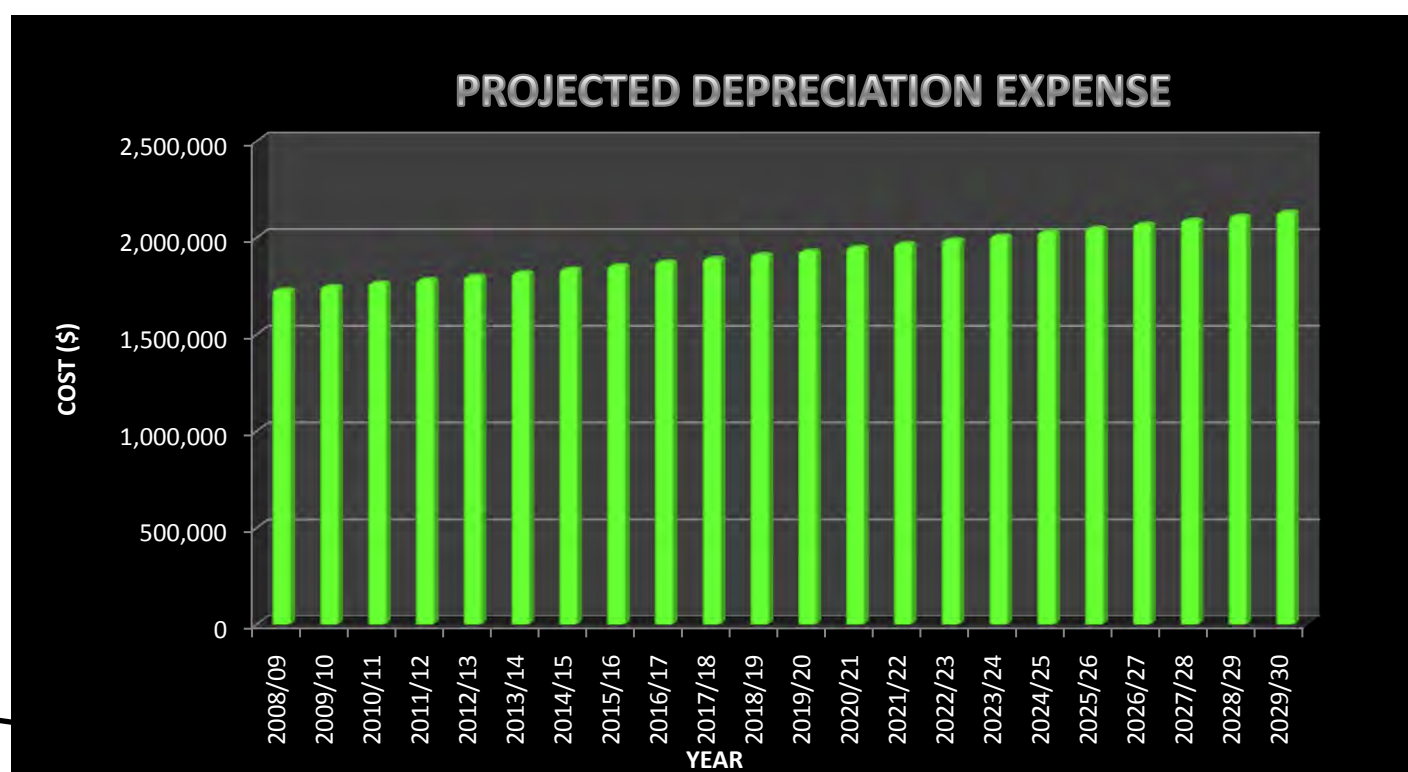
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Fig 9 shows the projected replacement cost asset values over the planning period in current 2008/09 dollar values.

Fig 9 Projected Asset Values



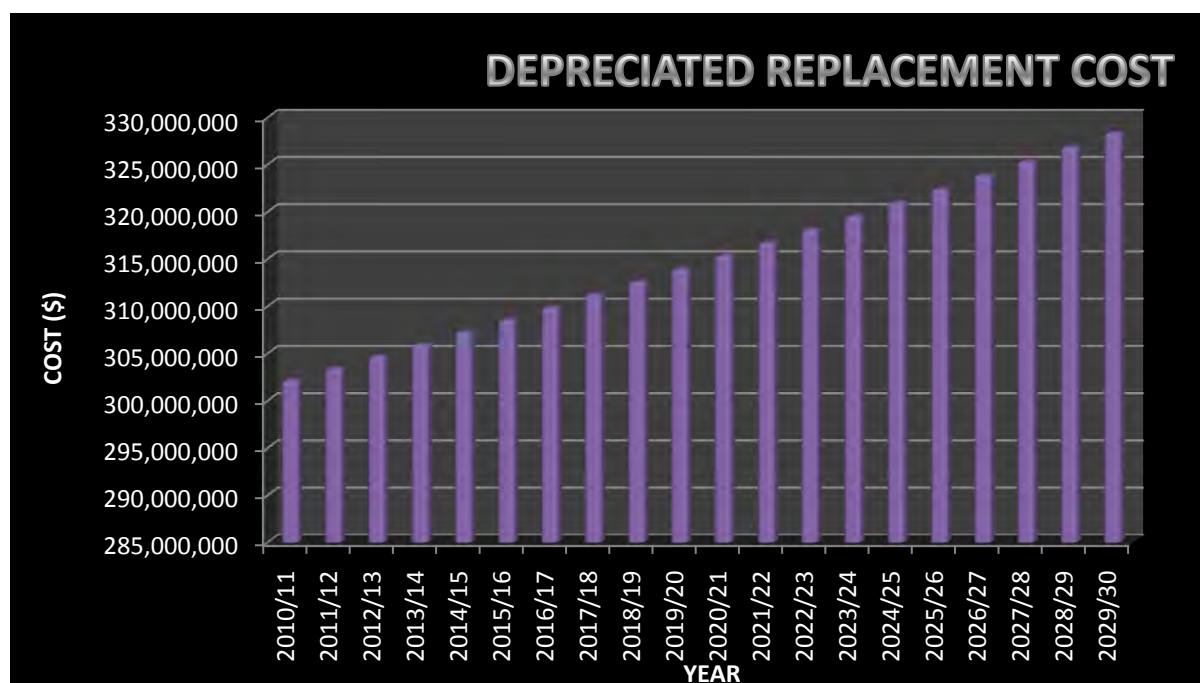
Depreciation expense values are forecast in line with asset values as shown in Fig 10.

Fig 10 Projected Depreciation Expense



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 Projected Depreciated Replacement Cost



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:

- Newly constructed assets will have the base allocation for the service specification increased in the subsequent financial year as per the agreed (indexed) rate in the adopted Service Specification.
- Developer constructed assets considering the whole of life costs associated with creating the assets (e.g.: gross pollutant traps, wetlands, rain gardens)
- Property assets will remain in Council ownership throughout the planning period.
- Forecasts are based on current equipment and construction cost and will be influenced by cost increases in materials and labour.
- Maintenance costs are based largely on historical expenditure and assume there are no significant increases in service requirements or contractor/material rates.

- Asset renewal costs in years 1 to 3 are generally based on staff assessment of renewal needs, and from year 3 on, the costs are based on the life expectancy of the asset and the proposed alignment with other asset groups.
- It is assumed that new release areas in Penrith will significantly increase the population of Penrith City Council Local Government Area thus increasing the need for capital expenditure (new works and renewals).
- Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.
 - Confirming rates of development in new release areas
 - Improved tracking of operation / maintenance and rehabilitation costs.
 - Centralised asset management and data analysis.
 - The implementation of a Council wide Asset Management Plan.



7. ASSET MANAGEMENT PRACTICES

This section identifies the strategies, practices and guidelines supporting Asset Management at Penrith City Council. These activities have no direct impact on the condition or performance of the asset themselves, but provide the tools and functions required to support the maintenance, renewal and enhancement plans. These functions include:

- System planning and monitoring
- System record management
- Asset management planning and policy

7.1 Accounting/Financial Systems

Financial transactions are recorded in Council's corporate financial systems (currently Technology 1 – Financials).

The Senior Finance Officer and Senior Accountant are responsible for operating the finance system. A Systems Analyst provides technical support for the systems operation and maintenance.

The Long Term Financial Plan also uses the life cycle program as a stand-alone asset management database for all infrastructure assets. Asset data is manually transferred (at a Group level) into the general ledger (Finance One).

The finance system is the responsibility of the finance function. The life cycle asset management database is the joint responsibility of the civil maintenance function and the information management function.

Council's long term Financial Model as included in the Resource Strategy demonstrates Council's financial position and its capacity to fund additional major capital expenditure, continued asset renewal and any potential increase in services or service levels. It has been prepared in accordance with the provisions of the Local Government Amendment (Planning and Reporting) Act 2009 and the associated guidelines and manual. It clearly shows that Council, with its current income, has no capacity to fund additional facilities or upgrades unless services or service levels are decreased, or additional funding sources are identified. This has particular relevance given that there is already a gap identified between planned drainage asset renewals and projected drainage asset renewals.

The Local Government Act 1993 requires that Council prepare and maintain all accounting records, accounts and financial statements in accordance with all relevant Australian Accounting Standards. The following accounting standards and guidelines must be complied with:

- AASB 116 Property, Plant & Equipment – prescribes requirements for recognition and depreciation of property, plant and equipment assets
- AASB 136 Impairment of Assets – aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts
- AASB 1021 Depreciation of Non-Current Assets – specifies how depreciation is to be calculated
- AAS 1001 Accounting Policies – specifies the policies that Council is to have for recognition of assets and depreciation

- AASB 1041 Accounting for the reduction of Non-Current Assets – specifies the frequency and basis of calculating depreciation and revaluation basis used for assets
- AAS 1015 Accounting for acquisition of assets – method of allocating the value to new assets on acquisition
- AAS 27 Financial reporting by Local Government
- AAS 1010 Recoverable Amounts of Non-Current Assets – specifies requirement to test the reasonableness of valuations

Council will be preparing a draft capitalisation and depreciation policy which is currently being reviewed. Financial thresholds and activities have been developed to assist in determining when expenditure is capital or maintenance.

Accounting for Property, Plant, Equipment and Infrastructure Policy, the objective of this policy is to provide guidance around identifying, classifying, valuing, recording and disposing of non-current physical assets. This will provide for greater understanding and accuracy of Penrith City Council's capital requirements and depreciation expenses in the context of financial sustainability and intergenerational equity as well as ensuring that Penrith City Council is meeting its statutory reporting obligations.

Any changes to our current financial systems will be driven from the Service Review and the Asset Strategy Framework.

7.2 *Asset Management Systems*

Physical Asset data are recorded in Council's Drainage Technical systems (currently TAMS Drainage)

Council is in the process of acquiring a software interface to assist in integrating AssetMaster data to its counterparts in Technology 1 Financials.

Responsibilities for administering asset management systems are as follows:

- Assets Systems Engineer – (TAMS Drainage)
- GIS Officer – MapInfo
- Systems Analyst – Authority

Data entry on a job by job basis is handled via several staff within Penrith City Council City Works department. It is suggested that life cycle is used as the base for a proactive maintenance program using data collected in the most recent survey.

As a result of this asset management plan, the following changes are proposed for the asset management system:

- Tighter integration with the GIS so that all assets can be located easily with some accuracy
- Transition to work order system for work planning and control
- Add additional asset data to the asset register to make the system more useful for staff
- Link customer requests with specific assets or asset types.

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.

Penrith City Council in cooperation with other stake holders are in a process of establishing a system where physical data from TAMS Drainage can be easily linked to financial data in Technology 1 Financials.

Currently Council is developing its processes for recognising the creation of infrastructure assets. Council has embarked on a journey to capture the back log of asset inventory data primarily for the purposes of asset revaluation. This is on the threshold of being completed and Council recognises the importance of now maintaining the asset register as has been reflected in the asset management policy.

New assets can be realised in any one of the following ways:

- Gifted to Council from developers
- Constructed as part of a project, and
- Installed by Field Services staff

The number of gifted stormwater assets to Council is on the increase. With the majority of these assets being buried, it is important that good as-constructed information is supplied by the developer. Council has developed its own digital as-constructed information standards to ensure that this occurs. This standard, when partnered with the Engineering Design Standards, provides the developer with all the information needed to deliver high quality assets and information relating to those assets to the satisfaction of Council. Council's own Developer Interface Engineer ensures that developers follow the correct process for recognising new assets.

Similarly for major projects, the Project Manager is responsible for ensuring that the information pertaining to any new stormwater assets is provided to Council in adherence with the standards and in a timely manner. Lastly, Council is working on procedures for internal staff to follow when installing new assets. This will involve recording some detail about the new asset and its location and then passing this information to the officer responsible for updating the asset register. Currently this process is very informal.

Council recognises the sensitivity of new asset creation as opposed to maintenance or repair. Council's capitalisation policy describes in financial and non-financial terms what is considered to be a new asset (capital expenditure) and what is considered to be just maintenance. For example; a

pipe replacement is considered capital in nature if the pipe length replaced is greater than 6 metres or the entire task cost more than \$5,000 to complete.

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

7.4 Standards and Guidelines

- Local Government Act 1993
- Protection of the Environment Operations Act 1998
- Environmental Planning and Assessment Act 1979
- Occupational Health and Safety Act 2000
- Roads Act 1993
- Council's Probity and Governance Policies
- Dept of Environment and Conservation – Threatened species conservation Act – 1995
- AS 1742.3 – 1996 Traffic Control Devices for Works on Roads
- Adopted Drainage Maintenance Service Specification
- Council's Customer Service Charter
- Australian Accounting Standards (AASB116, Property, Plant and Equipment, Australian Accounting Standards Board, July 2007. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, 2006) IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au
- ISO 36000 – Risk Management
- Councils' Customer Service Charter
- Council's Probity and Governance Policies
- AS1742.3 – Traffic Control Devices for Works on Roads
- RTA's Traffic Control at Work Sites Manual
- AAS27, Financial Reporting by Local Governments, Australian Accounting Standards, June, 1996.
- AASB1031, Materiality, Australian Accounting Standards Board, July 2004.
- Local Government Asset Accounting Manual, Department of Local Government, New South Wales, Update No. 4, 1999

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 cash flows 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.	Identify drainage assets not yet captured	City Works	Staff	
2.	Plotting of existing drainage assets in GIS and linking to database	IMTM/ City Works	Staff	
3.	Plotting of newly create assets	infrastructure and Projects	Staff	
4.	Set response levels of service for reactive maintenance.	infrastructure and Projects		
5.	Modify finance system to capture expenditure against all types of maintenance – reactive, planned and cyclic.	Corporate Services		
6.	Undertake condition audits of a small percentage of stormwater pipes to validate consumption profile.	Manager Assets and Contracts		
7.	Monitor asset performance	Manager Assets and Contracts		
8.	Modify Customer Request reporting to collect the necessary data for measuring customer satisfaction and responsiveness.	Corporate Services		
9.	Document maintenance management	Infrastructure and Projects		
10.	Continue to capture the remaining stormwater asset detail into the corporate asset register	Corporate Services		
11.	Implement procedures for the handover of new asset information from developers including as-constructed plans.	Corporate Services		

-
- | | | |
|-----|--|-----------------------------|
| 12. | Undertake further planning on the requirements for upgrade of stormwater assets. | Infrastructure and Projects |
|-----|--|-----------------------------|
-

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 will be updated annually, with a significant review occurring every four years.





REFERENCES

Penrith City Council, 'Strategic Management Plan',

Penrith City Council, 'Annual Plan and Budget.

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

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au

Penrith City Council, 'Drainage Management and Maintenance Service Specification'

Various AMP

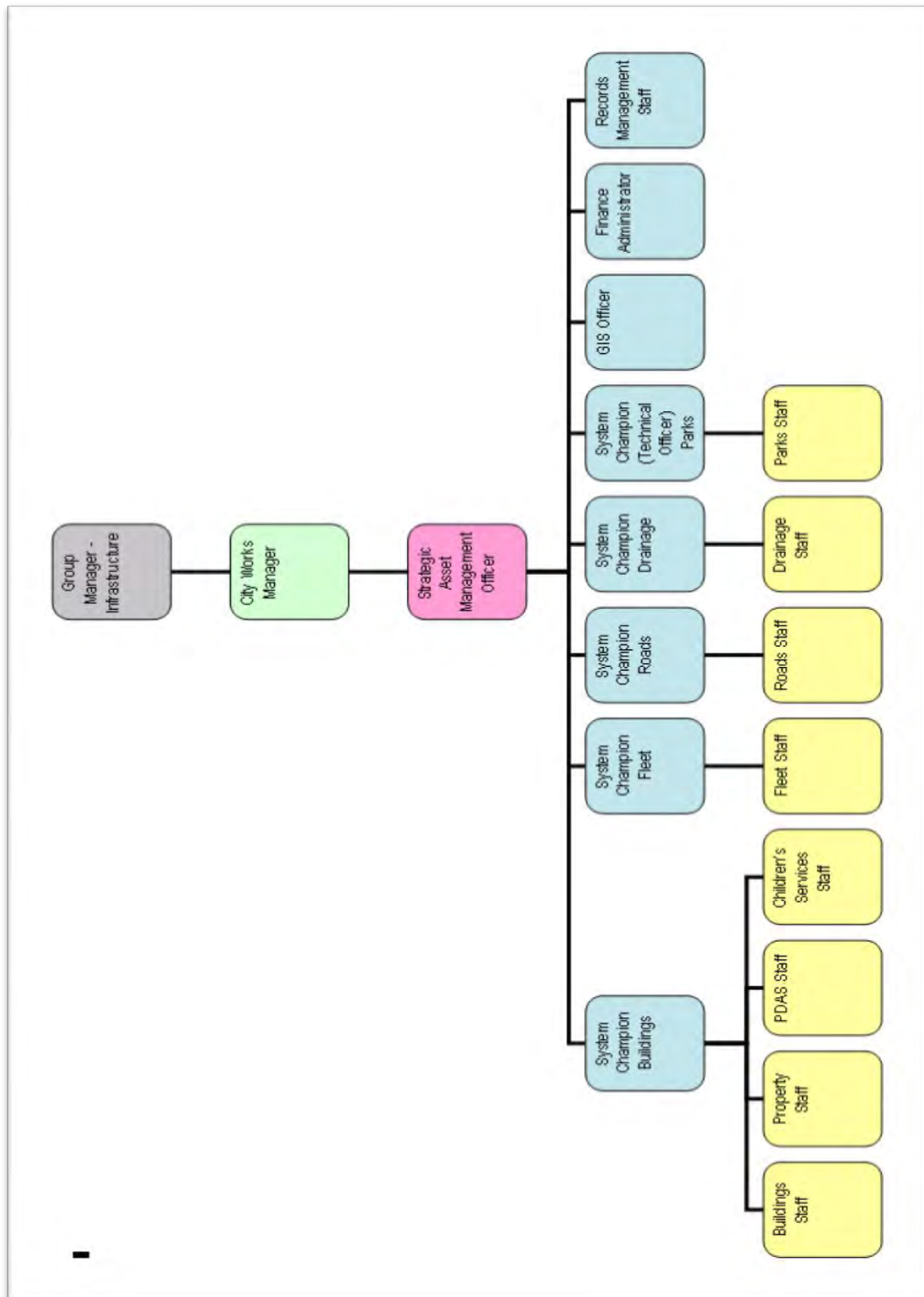


APPENDICES

- Appendix A Asset Management Systems Structure
- Appendix B Drainage – Renewal and Capital Works 13 Year Accomplishments
- Appendix C Sustainability ratio costing

Appendix A Asset Management Systems Structure

Responsibilities for administering asset management systems are as follows:



Appendix B Drainage – Renewal and Capital Works 13 Year Accomplishments

Year	Major Jobs	No of Jobs	Expenditure \$	Quantity
1996/97	<ul style="list-style-type: none"> Station Street – Ransley Street to Jamison Road (in conjunction with roadworks) 	7	\$544,100	
1997/98	<ul style="list-style-type: none"> Shepherd Road Detention Basin Queen Street Drainage Upgrade (in conjunction with roadworks) 	10	\$331,000	
1998/99	Capital <ul style="list-style-type: none"> Castlereagh Street, Penrith – Stage 1 Bunyarra Drive Drainage Chameleon Drive Drainage Basins Scopes Creek Stormwater Improvements 	9	\$1,506,800	
1999/00	<ul style="list-style-type: none"> 	6	\$127,508	
2000/01	<ul style="list-style-type: none"> Crossman Reserve Victoria Street Herbert Street Third Road Grays Lane Devlin Road Buckland Road GPT's Chameleon Basins (in progress) Warrington Creek (contribution) 	10	\$399,000	
2001/02	<ul style="list-style-type: none"> Stock Ave Hinxman Rd Byrnes Creek (contribution) 	7	1,479,000	

Year	Major Jobs		No of Jobs	Expenditure \$	Quantity
	<ul style="list-style-type: none"> Richmond Rd GPT's (2) – Showground, Hillcrest 	<ul style="list-style-type: none"> Komirra Rd Tamarra C.C. Chameleon Drainage Basin Crossman Reserve 			
2002/03	<ul style="list-style-type: none"> Dunheved Circuit Stock Ave GPT's – North Cranebrook Copeland St 	<ul style="list-style-type: none"> Schoolhouse Creek Komirra Rd Tamarra C.C. Showground Channel 	8	936,000	
2003/04	<ul style="list-style-type: none"> 15 EEP Projects 11 Drainage Projects 	<ul style="list-style-type: none"> (\$536,190) (\$906,250) 	26	\$1,442,440	
2004/05	<ul style="list-style-type: none"> 8 EEP Projects 17 Drainage projects 	<ul style="list-style-type: none"> (\$208,830) (1,881,055) 	25	\$2,089,885	
2005/06	<ul style="list-style-type: none"> EEP Projects Drainage Projects 	<ul style="list-style-type: none"> 			
2006/07	<ul style="list-style-type: none"> EEP Projects Drainage Projects 	<ul style="list-style-type: none"> Lambridge Estate Park Ave (Capital Works) The Kingsway 		\$2,934,000	
2007/08	<ul style="list-style-type: none"> EEP Projects (9) Drainage Projects 	<ul style="list-style-type: none"> Mackellar Street (Capital Works) 		\$728,000	

Year	Major Jobs		No of Jobs	Expenditure \$	Quantity
		<ul style="list-style-type: none"> • Lindridge Street (Capital Works) 			
2008/09	<ul style="list-style-type: none"> • EEP projects • Drainage projects 	<ul style="list-style-type: none"> • 229 Parker Street (Capital Works) • Jamison channel fencing (Capital Works) • Christie Street – Stge 1 (Capital Works) 		\$354,000	
2009/10	<ul style="list-style-type: none"> • EEP Projects • Drainage projects 	<ul style="list-style-type: none"> • Christie Street – Stge 2 • River Road • Davenport Drive • Kurrajong Road • Mamre Road GPT • Herbert St 		\$531,964 (drainage projects)	

Appendix C Sustainability Ratio Costing

Drainage 10 Year Scenario			Notes
10 Year Sustainability Ratio			Renewal and Maintenance
Required 10 Year	Total (\$)	Annual (\$)	
Renewal	\$350,000.00	\$35,000.00	
Maintenance	\$9,500,000.00	\$950,000.00	
Total	\$9,850,000.00	\$985,000.00	
Planned 10 Year	Total (\$)	Annual (\$)	
Renewal	\$0.00	\$0.00	
Maintenance	\$13,290,000.00	\$1,329,000.00	
Total	\$13,290,000.00	\$1,329,000.00	
10 Year Sustainability Ratio			
Planned		\$13,290,000.00	
Required		\$9,850,000.00	
Ratio		1.35	
Average Annual Lifecycle Sustainability Ratio			
Lifecycle Cost		Annual (\$)	
Renewal	AAAC	\$1,764,000.00	
Maintenance	10 Year Average	\$950,000.00	
Total		\$2,714,000.00	
Lifecycle Expenditure		Annual (\$)	
Renewal	10 Year Average	\$0.00	
Maintenance	10 Year Average	\$1,329,000.00	
Total		\$1,329,000.00	
Average Annual Lifecycle Sustainability Ratio			
Planned		\$1,329,000.00	
Required		\$2,714,000.00	
Ratio		0.49	

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PERSIAN	اگر نمی توانید این مطلب را بخوانید، لطفاً به خدمات ترجمه تلفنی به شماره 131 450 زنگ بزنید و از آنان بخواهید با شورای شهر پنریت Penrith City Council به شمار ه 4732 7777 (02) از جانب شما تماس بگیرند. یا اینکه به شهرداری Council آمده و مترجم بخواهید.
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