





# PLANT AND EQUIPMENT Asset Management Plan



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Asset Management for Small, Rural or Remote Communities Practice Note

The Institute of Public Works Engineering Australia.

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## **1. EXECUTIVE SUMMARY**

### **1.1. Context**

Gwydir Shire Council is the result of an amalgamation of Bingara Shire Council, Yallaroi Shire Council and part of Barraba Shire Council on the 17th of March 2004.

The Gwydir Shire encompasses a diverse landscape that is both picturesque and productive.

It is 9,122 square kilometres in size and is situated north of Tamworth Regional Council and continues almost to the Queensland border.

The southern boundary of the shire is the Nandewar Range where the Gwydir and Namoi Valleys meet. The Horton Valley and Cobbadah District are home to some Australia's most highly regarded beef cattle studs. These enterprising farmers use the latest artificial breeding and agronomic technology to produce beef of the highest quality. Meat Sheep and merinos that grow high quality wool are also grazed in this area.

The Gwydir River enters the Gwydir Shire where it spills from the Copeton Dam and meanders in a westerly direction through the towns of Bingara and Gravesend. The Gwydir Valley is well known for irrigated and dry land cropping as well as livestock production. In addition to the traditional crops of wheat, barley, oats and sorghum, there are olive groves, pecan nut plantations and freshwater fish farms in the Gravesend district.

Heading northwest from the timbered surrounds of the town of Wialda and the close-knit community of Coolatai, the countryside opens into an undulating vista of basalt farmland. This area, including the villages of Crooble, Croppa Creek and North Star, is Australia's 'Golden Triangle'. Farmers using advanced farming techniques, such as minimum tillage and satellite guidance systems, produce a variety of high yielding crops such as wheat, barley sorghum, maize, chick peas, canola and cotton to name just a few.

This area also has several cattle feedlots, which supply grain fed beef to the Australian domestic market and export markets

throughout the world. Gwydir Shire residents enjoy excellent medical and health services with medical centres in both Wialda and Bingara. The Shire boasts two new hospitals and aged care facilities have been expanded and are of a very high standard.

Shire residents enjoy a quality and plentiful water supply. In fact the new Bingara Water Treatment Plant and Reservoir were officially opened on Friday 13th May 2011. As well, residents are provided with open, beautifully maintained streetscapes, parks and sporting facilities.

Our younger citizens enjoy a great range of services and educational opportunities. The Gwydir shire is a strong and socially minded community with many volunteers. Volunteering has taken on a whole new dimension with many manning the newly opened Wialda and Bingara Visitor Information Centres which has allowed the centres to be open over weekends and public holidays.

Living in Gwydir Shire has purpose and direction. What it means to live and work in our Shire is explained in the following five guiding themes. These themes form the basis of our strategic planning and direction for the next ten years.

### **1.2. The Council's guiding Themes:**

#### **1.2.1. A Healthy and Cohesive Community (Social)**

Gwydir Shire has a staggering statistic: for an area of over 9,000 km<sup>2</sup> there are less than 6,000 residents- or one resident per 1.5 km<sup>2</sup>.

Rather than being fragile as a consequence of this statistic, the Shire has a strong sense of community. Each of the Shire's communities shares a sense of pride in their place and are positive about their future.

This community pride and confidence is based on a commitment, a spirit of co-operative effort, and a belief that their community can achieve harmony, cohesion and positive results.

### 1.2.2. Building the Business Base (Economy)

Business in Gwydir Shire is predominately independently owned, demonstrating a commitment and attachment to the local community. Business owners do have a strong local clientele base and display a gritty determination to succeed. These characteristics show a confidence in their future that is not always reflected in official statistics and reports.

Current analysis of future trends in the Shire is still difficult due to lack of data. Data from the last Census, undertaken in 2001, does not necessarily reflect changes in the regional and local economy since that time. There is also a wealth of evidence that small rural communities and townships have diminished in size, activity and economic importance over the last few decades.

This trend is acutely felt in towns such as Warialda and Bingara. Warialda, for example, was a centre for agricultural services and supplies catering for large agricultural enterprises which

employed many staff. The business of agriculture has changed, and this has profoundly influenced Warialda's business landscape.

Gwydir Shire's economy is dependent on agriculture but that 'gritty determination' is bringing other newer businesses and opportunities to the Shire. Recent seasons have brought much needed rain which has led to a resurgence in wealth and positivity.

There are also strong signs that tourism is bringing a new dimension to the Shire especially with the construction of the new Warialda Tourist Information Centre, and the refurbishment of the Roxy complex in Bingara.

For tourism to thrive, however, it needs to be based on the development of a strong brand and marketing strategy. The Shire also has an opportunity to capitalise on the 'tree change' movement, or to target communities who are being affected by 'sea change' impacts.

Business 'infrastructure' is a priority for the future economic sustainability of the Shire. The 'infrastructure' priorities vary from facilitating increased participation by women in the workforce, through to leveraging of regional training opportunities and programs such as the Gwydir Learning Region.

In addition, the impending construction of the Hospitality, Primary Industries and Automotive Trade Training Centres will create new industry, employment and opportunities.

Over the last three years an effective mobile/internet service has been implemented and this has enabled businesses to operate effectively and for Gwydir Shire to project a professional image to the external business community.

The Shire is located at the centre of the North-West/New England Region and this has made Bingara a place to meet and to host conferences. The opportunity to increase the number of meetings and conferences to be held in our Shire will be enhanced when the Roxy complex is fully functional.

### 1.2.3. An Environmentally Responsible Shire (Environment)

Over the history of European settlement in the Gwydir Shire area, some of the past decisions were made without a complete understanding of their impact upon the landscape and the consequences of upsetting natural ecosystems. When the development of the land occurred at rates faster than the rate at which degradation became apparent, these less than desirable practices were repeated.

Extensive land clearing and extraction of water for agriculture are examples of practices that can over time, detrimentally impact the natural environment of this Shire. Possible consequences are species loss; both terrestrial and riverine flora and fauna, and physical and chemical degradation of soils and river systems.

Today there is a lot of activity, by State agencies, non-government organisations, farmers, the rural community, and the Council

to enhance the sustainability of Gwydir's natural resources.

Looking into the future, the emphasis is on achieving both environmental sustainability as well as robust agricultural activity. In Gwydir Shire there are significant environmental assets that require special attention and care. These features are also key attractions for a healthy tourism industry in the Shire. Gwydir River is one such example.

The Council will partner with the Border Rivers-Gwydir Catchment Management Authority to adopt a catchment wide approach to the integrated issues of climate change, soil, water and habitat conservation and establishment in the Shire. The Border Rivers – Gwydir Catchment Management Authority is working towards a potential outcome to operate as an active trader in the 'environment' in the future. Such an economic mechanism will put a value on the environment and enable landowners to be compensated for land areas that become dedicated to conservation.

Council has a key role to play in furthering sustainable behaviour within the Gwydir community.

Education and provision of key information can help residents move towards more sustainable practices, and to help them understand how their actions can ameliorate a variety of environmental impacts.

Council can lead by example through good management and by demonstration. With limited resources, Council will prioritise water and waste as key environmental issues.

It is argued that human activity has interrupted the global carbon cycle and is beginning to have a profound impact on the Earth's climate. The changes that are required to address climate change can offer an opportunity for innovation and economic development.

The agricultural sector is the second biggest contributor to greenhouse gas emissions through the emission of methane and nitrous oxide by livestock. Being a major contributor to emissions,

agriculture will be expected to reduce emissions, a challenge for a sector already confronted by other constraints.

However, with its large land base, climate change is a real opportunity for Gwydir Shire.

One such opportunity is in exploring the development of carbon sequestration opportunities, including commercial plantations, and landcare plantings to offset greenhouse gas emissions.

These plantings would also provide benefits in addressing salinity impacts, and could be planned to complement biodiversity objectives by creating habitat corridors and links across the landscape.

#### **1.2.4. A Proactive Consumer–Orientated Organisation**

Council can only achieve the outcomes it seeks for the Shire by continuing to operate as a well managed organisation. The organisation must also have the community's respect and be dedicated to working innovatively and effectively in the Shire's interest.

The organisation will need to continue to adapt to important changes. For example, people affected by Council's decisions are expecting to participate and influence the conduct of those issues. Modern communication technology is facilitating closer involvement with and exposure of Council's processes. These trends will need to be managed with sensitivity and care if that legitimate community request is to be reflected. These processes also need to reflect the requirements of the Department's Integrated Planning and Reporting.

Council's workplace must adapt to these and other changes as they emerge so that it appeals to talented people. Council recognises the quality of the people it can attract and retain in its organisation is vital to its achieving its program. It values its people and appreciates their contribution. It will continue to recognise the obligation for them to be provided with a safe and satisfying workplace; to be treated equitably and with respect; and to be properly rewarded.



The functions and responsibilities of local government continue to increase. That provides Council with the challenges of selecting its activities wisely and of adequately resourcing its programs. Opportunities for new resources and increased effectiveness will be pursued. Council will also place an emphasis on improving alignment between employees and Council's values and goals.

The programs and services the Council selects must be carefully designed and delivered to equitably and cost effectively advance the well being of the Shire's people.

### 1.2.5. Regional and Local Leadership

Council is committed to leading the Shire in addressing the issues identified in this Strategy and moving towards the Vision it has defined for the Shire. This focus on leadership relates to both leadership within the Shire and that external to it.

The Shire has already demonstrated innovative responses through initiatives such as the Gwydir Learning Region.

In addition, the formation and direction of the Australia Rural Road Group is, so far, an effective and highly supported body trying to gain funding to improve the nation's dramatically deteriorating rural road network.

This continued 'can do', innovative approach, and the enthusiasm and energy sets Gwydir Shire apart and allows the Shire to 'punch above its weight' in the region.

As an entity operating in the twenty first century, it is imperative that the Council demonstrate best practice corporate governance behaviour. In time, sustainability and governance will be managed as a single holistic approach to the management of an organisation. Gwydir Shire recognises this trend and is in the process of implementing the Department's Integrated Planning and Reporting requirements.

Transport of agricultural produce and goods to markets and people to work, school and recreation is vital to continued community growth and development. The transport

network servicing the community is ageing and services are in decline resulting in loss of all weather access on many unsealed roads, detours around about 20 bridges with load limits and increasing maintenance costs.

### 1.2.6. Plant and Equipment Service

The Plant and Equipment assets items comprise:

• Backhoes	4
• Buses	2
• Garbage Compactors	4
• Cranes	2
• Excavators	3
• Front End Loaders	5
• Graders	7
• Gravel Trucks	4
• Implements	19
• Minor Plant Items	347
• Miscellaneous Plant	41
• Passenger Vehicles 2WD	29
• Passenger Vehicles 4WD	3
• Pig Trailer/ Superdog Trailers	4
• Prime Movers	3
• Ride on Mowers	18
• Rollers	10
• Street Sweepers	1
• Tipper Trailer / Low Loader	4
• Tractors	7
• Trailers	42
• Trucks	22
• Utility 2WD	33
• Utility 4WD	18
• Water Carts	4

These infrastructure assets have a replacement value of \$14,794,243.

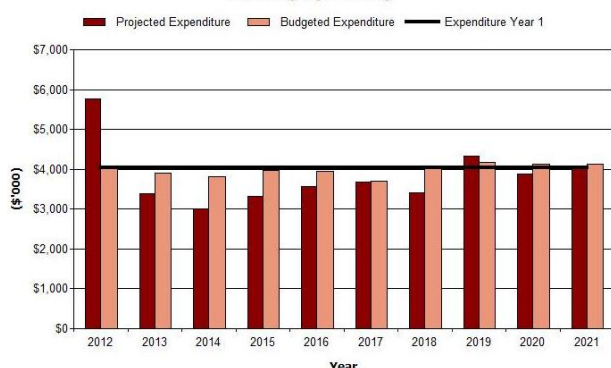
### 1.3. What does it Cost?

The projected cost to provide the services covered by this Asset Management Plan includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is **\$34,378,000** or \$3,438,000 per year.

Council's estimated available funding for this period is 1,655,000 per year.

Projected and budgeted expenditure are shown in the graph below.

**Gwydir SC - Projected and Budget Expenditure for (Plant and Equipment)**



Councils' present funding levels are sufficient to continue to provide existing services at current levels in the medium term.

#### 1.4. What we will do

Council plans to provide Plant and Equipment services for the following within a 10 year plant replacement program:

- Operation, maintenance, renewal and upgrade of Heavy Plant, Light Plant, Light Vehicles, Small Plant and miscellaneous equipment to meet service levels set by council in annual budgets.
- Inclusion of additional plant items may be required within the next 10 year planning period with the asset management plan being adjusted as required to account for the additional items.

#### 1.5. What we cannot do

Council does not have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

- 
- 

#### 1.6. Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Rising costs of fuel and increasing purchase prices for new assets.
- Increasing community expectations for road network services.

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

- Managing and maintaining the existing plant and equipment.
- Monitoring the efficiency and suitability of the existing plant and equipment to ensure items are replaced at the optimal time.
- Acquiring additional plant and equipment where there is a demonstrated need and efficiency gain

#### 1.7. The Next Steps

The actions resulting from this asset management plan are:

- Continue to improve asset information and knowledge;
- Develop a single corporate asset register (AIM) for financial and reporting purposes.
- Monitor the provision of Plant and Equipment alongside the community expectations for roads.

#### 1.8. Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Gwydir Shire Council Plant and Equipment needs.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The Plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Council's transport network was constructed from government grants often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Councils' present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, replacing existing and constructing new assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs
6. Consulting with the community to ensure that transport services and costs meet community needs and are affordable,

7. Developing partnership with other bodies, where available to provide services;
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that council will have to reduce service levels in some areas, unless new sources of revenue are found. For Plant and Equipment, the service level reduction may include reduction in the quality of machinery and reduction in the capacity to undertake quality construction works.



What can we do?

Council can develop options and priorities for future Plant and Equipment services with costs of providing the services, consult with the community to plan future services to match the community services needs with ability to pay for services and maximise benefit to the community for costs to the community.

## 2. INTRODUCTION

### 2.1. Background

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

The asset management plan is to be read with Council's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- Gwydir Shire Council Annual Report 2011-2012
- Gwydir Shire Council Management Plan 2012-2013

This infrastructure assets covered by this asset management plan are shown in Table 2.1.

**Table 2.1: Assets covered by this Plan**

Asset Category	No. of Items	Replacement Value
Backhoes	4	\$ 445,484.60
Buses	2	\$ 120,390.00
Garbage Compactors	4	\$ 510,877.85
Cranes	2	\$ 39,506.00
Excavators	3	\$ 516,517.00
Front End Loaders	5	\$ 511,447.03
Graders	7	\$ 2,535,603.83
Gravel Trucks	4	\$ 1,096,201.34
Implements	19	\$ 138,573.00
Minor Plant Items	347	\$ 221,487.48
Miscellaneous Plant	41	\$ 903,807.93
Passenger Vehicles 2WD	29	\$ 671,811.42
Passenger Vehicles 4WD	3	\$ 151,690.41
Pig Trailer/ Superdog Trailers	4	\$ 150,401.00
Prime Movers	3	\$ 425,021.00
Ride on Mowers	18	\$ 174,410.36
Rollers	10	\$ 796,085.68
Street Sweepers	1	\$ 18,857.66
Tipper Trailer / Low Loader	4	\$ 182,835.00
Tractors	7	\$ 659,060.73
Trailers	42	\$ 153,762.54

<b>Trucks</b>	22	\$	2,863,902.95
<b>Utility 2WD</b>	33	\$	771,393.68
<b>Utility 4WD</b>	18	\$	448,451.29
<b>Water Carts</b>	4	\$	286,663.00
<b>Total Asset Value \$</b>			<b>14,794,242</b>

## 2.2. Goals and Objectives of Asset Management

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

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. 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.<sup>1</sup>

The goal of this asset management plan is to:

- Document the services/service levels to be provided and the costs of providing the service,
- Communicate the consequences for service levels and risk, where desired funding is not available, and
- Provide information to assist decision makers in trading off service levels, costs and risks to provide services in a financially sustainable manner.

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<sup>1</sup> IPWEA, 2006, *IIMM* 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:

### **Vision**

*"To be the recognised leader in Local Government through continuous learning and sustainability."*

Council's mission is:

### **Mission**

*"To ensure that the Council's long term role is viable and sustainable by meeting the needs of our residents in a responsible caring way, attract sustainable development while maintaining the traditional rural values, character and culture of our people."*

Relevant goals and objectives and how these are addressed in this asset management plan are shown in Table 2.2.

Table 2.2: Organisation Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in AMP
Ensure shire wide sustainability by providing an appropriate standard of infrastructure that supports economic development.	Consult with and assist businesses and industry to meet their future infrastructure needs.	Through development of an integrated asset management plan covering road infrastructure services for business and industry.
	Ensure effective and efficient management of council owned infrastructure to support economic development.	Minimise life cycle costs of infrastructure for asset users and ensure the AMP demand forecast model will identify the public infrastructure to be managed in a sustainable manner.
	Ensure a strategic regional approach to transport infrastructure demands.	Continue to liaise with State Government and local governments regional authorities to ensure fit for purpose assets are provided within the region with life cycle costs being considered with asset creation, operation and disposal and incorporate demand projections into the asset management plan.
	Facilitate improvement in transport for industry by road, rail, air and sea.	Continue to liaise with key stakeholders to facilitate efficient transport function through the region providing access links to regional, national and global markets and incorporate demand projections into the asset management plan.
Safe and reliable	Maintain and develop	Continue to develop and maintain regular



transport services.	roads, footpaths and tracks including car parking at appropriate standards.	inspection of asset condition and defects and develop maintenance and capital works programs for inclusion in the asset management plan.
	Work with the Roads and Traffic Authority to ensure appropriate traffic management and road safety.	Continue to liaise with the Roads and Traffic Authority through the local traffic committee to develop strategies for traffic management and road safety for inclusion in the asset management plan .

### 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 the organisation 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 the organisation's objectives.
- Asset management improvement plan

### 2.4. Core and Advanced Asset Management

This asset management plan is prepared as a first cut 'core' asset management plan in accordance with the International Infrastructure Management Manual<sup>2</sup>. 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.

### 2.5. Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by Council. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability to pay for the service.

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<sup>2</sup> IPWEA, 2006.

### 3. LEVELS OF SERVICE

#### 3.1. Customer Research and Expectations

Council has not carried out any research on customer expectations. This will be investigated for future updates of the asset management plan.

#### 3.2. Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. Relevant legislation is shown in Table 3.2.

Table 3.2: Legislative Requirements

Legislation	Requirement
NSW 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.
NSW Roads Act 1993	Defines the 'Road Authority' for all classifications of roads in NSW and defines the roles and responsibilities of the "Road Authority".
NSW Road Transport (General) Act 2005.	Sets out the rules to be followed and responsibilities of users of the road system and how the rules are enforced
NSW Workplace, Health and Safety Act 2011	Sets out the roles and responsibilities to secure the health, safety and welfare of persons at work.
RTA NSW - weights and loads regulations, licensing, vehicle inspections, registration, safety and compliance, Road traffic act, Highways act, Australian road rules.	Sets out vehicle configurations as regards dimensions , axle loads , weights, capacities, speeds, traffic management, warning signs, lights etc., noise emissions, chemical emissions, minimum safety standards, licensing requirements, conditional registration, registration – including requirements etc.
Environmental Planning and Assessment Act 1979	Sets out guidelines for land use planning and promotes sharing of responsibilities between various levels of government in the state.
Australian Standards	Provides guidance for transport asset managers in use of transport services such as AS2294 Earthmoving Machinery – Protective Structures Control Devices
Australian Road Rules	The Australian Roads Rules are incorporated into State Traffic Regulations under the Road Traffic Act

#### 3.3. Current Levels of Service

Council has defined service levels in two terms.



**Community Levels of Service** relate to the service outcomes that the community wants in terms of safety, quality, quantity, reliability, responsiveness, cost effectiveness and legislative compliance.

Community levels of service measures used in the asset management plan are:

Quality	How good is the service?
Function	Does it meet users' needs?
Safety	Is the service safe?

**Technical Levels of Service** - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the council undertakes to best achieve the desired community outcomes.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleansing frequency, mowing frequency, etc.
- Maintenance – the activities necessary to retain an assets as near as practicable to its original condition (eg road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (eg frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide an higher level of service (eg widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new library).

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

Table 3.3: Current Service Levels

Key Performance Measure	Level of Service Objective	Performance Measure Process	Desired Level of Service	Current Level of Service
<b>COMMUNITY LEVELS OF SERVICE</b>				
<b>Quality</b>	Plant & Equipment is reliable, comfortable for operators and easy to maintain.	Operator complaints related to comfort and ease of use.	Nil.	To be identified.
<b>Function</b>	Is appropriate for the task, Easy to operate and use.	Service availability specification approved by supervisory staff.	8 hours per day.	To be identified.
<b>Safety</b>	OH&S incidents, complaints regarding noise or emissions, infringement notices issued.	No injury reports No noise, emission or infringement notices or complaints	Nil. Nil.	To be identified.
<b>TECHNICAL LEVELS OF SERVICE</b>				
<b>Condition</b>	Retains optimal resale value, well made, sound design, image	Change over costs, Down time for repairs.	Change over=depreciation <10 hours p.a. due to machine failure.	To be identified.
<b>Function</b>	Equipment is fit for purpose, efficient and adaptable for other jobs	Number of productive machine hours.	>1200 hours – graders >600 hours – backhoes >1000hours - rollers >45,000km - trucks >25,000km- light vehicles	To be identified.
<b>Cost Effectiveness</b>	Maintenance schedules  Fuel efficiency	Low maintenance costs  Benchmark fuel	< industry averages	To be identified.

	Value	costs. Benchmark against external hire rates.		
<b>Safety</b>	Maintain latest equipment, OH & S compliance.	Age of machines Number of hazard reports Number of injury reports	<10 years old Nil Nil	To be identified.
<b>Operations</b>	Comply with safety standards. Low running costs	Monitoring and reporting program  Regular inspection of key components.	Meets all safety standards Inspections being undertaken  Running costs monitored against industry standards	To be identified.
<b>Operations Cost</b>			Funded in LTFFP	\$1,536,000 (pa over the course of the planning period)
<b>Maintenance</b>	Maintenance schedules Fuel efficiency Value	Low maintenance costs  Benchmark fuel costs.  Benchmark against external hire rates	< industry averages	To be identified.
<b>Renewal</b>	Replacement of Plant and Equipment.	Frequency Identified Plant Replacement  Program can be funded  Age of Machinery	The plant replacement program and long term financial plan have been developed to deliver a satisfactory service standard.  The identified program has been included in the long term financial plan  Verification and	\$1,655,000 (pa over the course of the planning period)

				improvement of the useful lives used for valuation purposes, matching these actual services standards will assist to improve financial reporting and planning.
<b>Renewal Cost</b>				Funded in LTFP \$16,546,000 over the course of the planning period.
<b>Upgrade/New</b>	Provide services in a cost effective manner	Cost, corporate strategy.	Achieved by a combination of council and grant funded works.	As required
<b>Upgrade/ New Cost</b>				<b>Funded in LTFP</b> \$0 (no upgrade/ new proposed over the course of the planning period)

### 3.4. Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including 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.

## 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

DESCRIPTION	CENSUS 2001	CENSUS 2006	Projection 2030
Population			
<b>Bingara</b>	1172	1872	<b>3230</b>
<b>Warialda</b>	1198	1871	<b>3228</b>
<b>Gravesend</b>	n/a	276	<b>476</b>
<b>North Star</b>	n/a	638	<b>1101</b>
<b>Gwydir Shire</b>	4296	4657	<b>8035</b>
% of population:	<b>Bingara:</b>		
<b>0-4 yrs</b>	4.9%	5.9%	
<b>5-14yrs</b>	8.6%	11.4%	
<b>15-24yrs</b>	7.2%	6.5%	
<b>25-54yrs</b>	35.8%	31.8%	
<b>55-64yrs</b>	16.1%	17.0%	
<b>65yrs and over</b>	26.8%	27.5%	
% of population:	<b>Warialda:</b>		
<b>0-4 yrs</b>	5.9%	4.9%	
<b>5-14yrs</b>	15.9%	13.8%	
<b>15-24yrs</b>	8.1%	10.4%	
<b>25-54yrs</b>	40%	37.2%	
<b>55-64yrs</b>	12.9%	14.8%	
<b>65yrs and over</b>	17.8%	18.9%	
% of population:	<b>Gravesend:</b>		
<b>0-4 yrs</b>		4.7%	
<b>5-14yrs</b>		15.9%	
<b>15-24yrs</b>		10.1%	
<b>25-54yrs</b>		41.3%	
<b>55-64yrs</b>		14.5%	
<b>65yrs and over</b>		12.7%	
% of population:	<b>North Star:</b>		
<b>0-4 yrs</b>		9.6%	
<b>5-14yrs</b>		19.1%	
<b>15-24yrs</b>		10.3%	
<b>25-54yrs</b>		41.2%	
<b>55-64yrs</b>		11.9%	
<b>65yrs and over</b>		7.5%	
% of population:	<b>Gwydir Shire (Bingara + Yallaroi)</b>		
<b>0-4 yrs</b>	6.7%	5.9%	
<b>5-14yrs</b>	14.3%	13.69%	
<b>15-24yrs</b>	8.4%	8.8%	
<b>25-54yrs</b>	40.9%	35.8%	
<b>55-64yrs</b>	12.82%	15.29%	
<b>65yrs and over</b>	<b>16.8%</b>	<b>20.4%</b>	

Demand factor	Present position	Projection	Impact on services
<b>Construction Costs</b>	Current Costs	Costs anticipated to increase.	The shortage of skilled labour, high labour costs and increasing material costs will impact on the future management plans and equipment.
<b>Increasing Costs</b>	The cost to construct, maintain and replace plant and equipment is increasing	Anticipated to continue	Increasingly difficult to maintaining the current level of service.  Equipment will need to provide greater efficiencies.

## 4.2. Changes in Technology

Technology changes forecast to affect the delivery of services covered by this plan are detailed in Table 4.2.

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

Technology Change	Effect on Service Delivery
<b>Engine management technology required to meet ever more stringent vehicle emissions standards.</b>	Increased capital cost of new assets and an associated increase in the operational and maintenance costs of these assets. The emissions technology will also require changes to work practices in some situations (to reduce idle periods and changes to the operational environment) Certain emissions devices (DPF) are extremely hot and present an ignition risk in long grass on roadsides etc.
<b>Improvements in power train technology that reduce operational costs e.g. common rail diesel engines , inertia recovery systems, design improvements etc.</b>	Reduces operational costs and may perform with improved productivity in the working environment. May be able to rationalise assets in the future to realise cost savings.

## 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.

Non-asset solutions focus on providing the required service without the need for the council to own the assets. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another council area or public toilets provided in commercial premises.

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

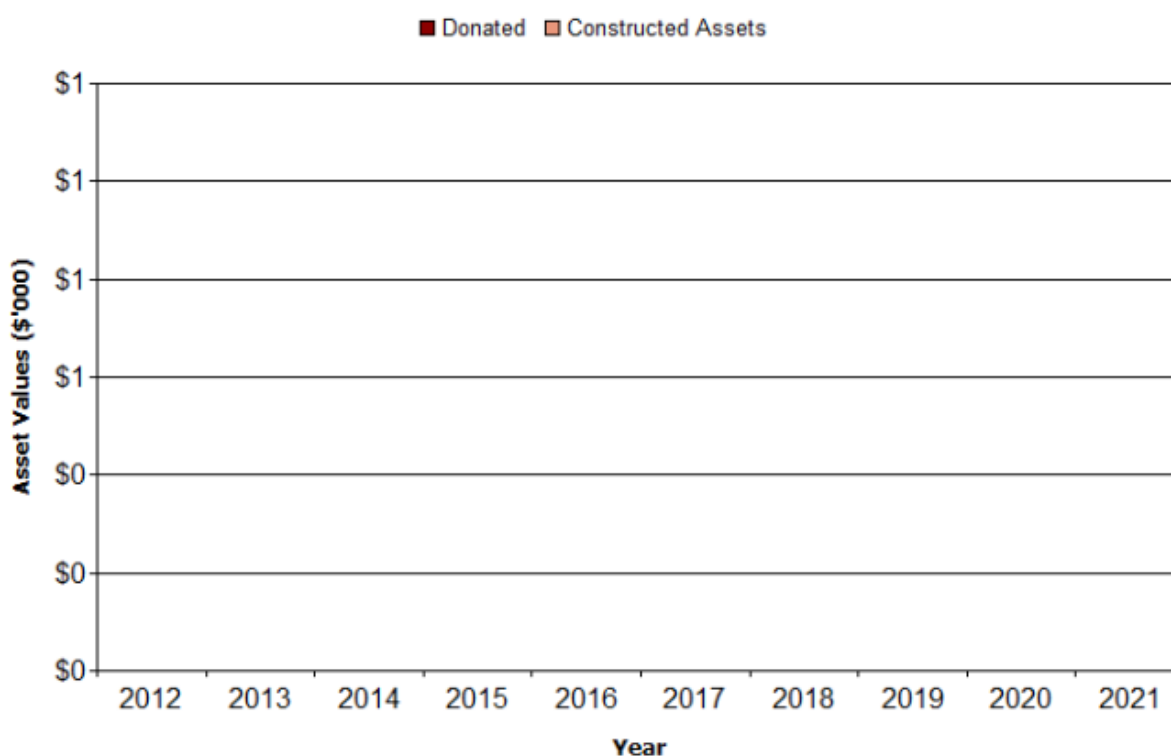
Service Activity	Demand Management Plan
<b>Efficiency</b>	Improve productivity of plant and fleet assets by reviewing specifications regularly with end users to ensure correct size matching and incorporation of the latest technology and operational systems.
<b>Renewal Program</b>	Investigate alternative renewal timeframes including the possibility of component rebuilds during ownership to extend the renewal period

#### 4.4. New Assets for Growth

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by Council. The new contributed and constructed asset values are summarised in Figure 1.

Figure 1: New Assets for Growth

### Gwydir SC - New Assets for Growth (Plant and Equipment)



Acquiring these new assets will commit council to fund ongoing operations and maintenance costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations and maintenance costs.

## 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 in Table 2.1.

The age profile of the assets include in this AM Plan is shown in Figure 2.

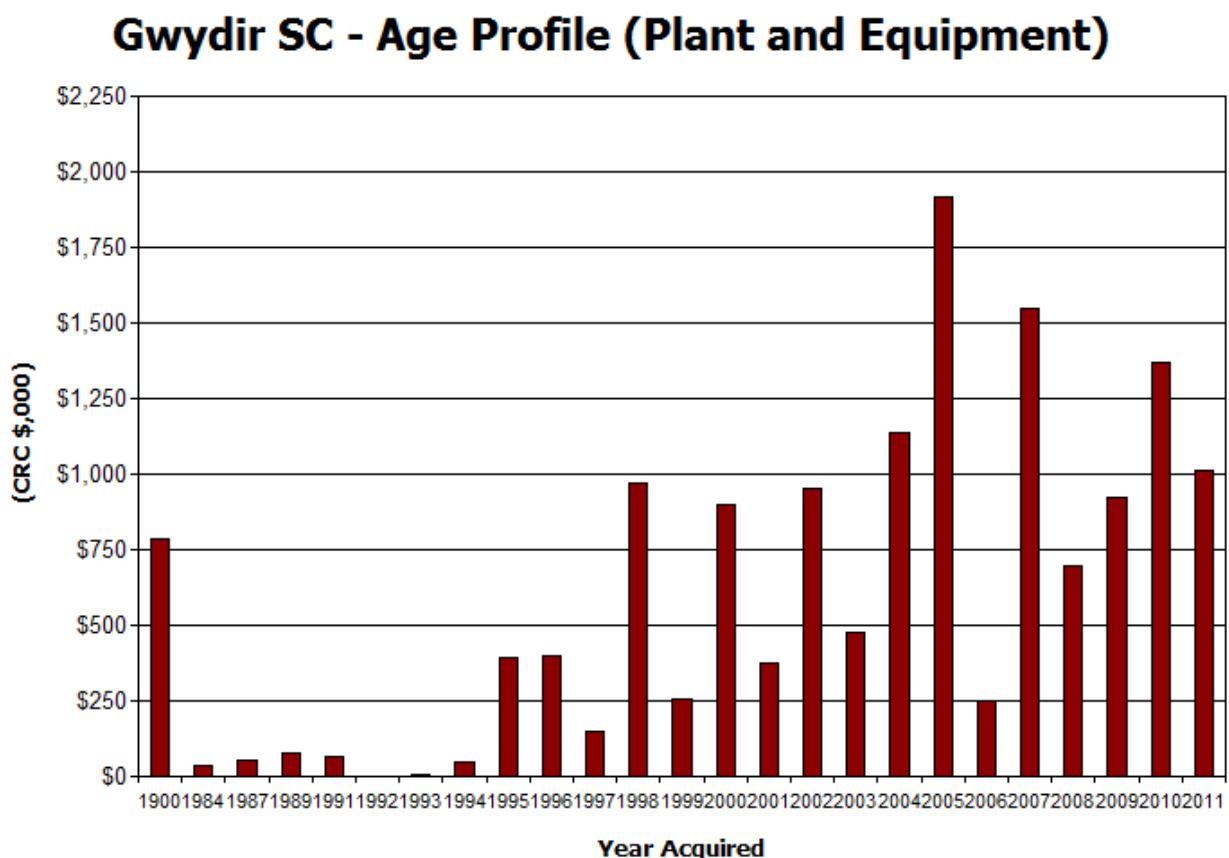


Figure 1 - Asset Age Profile

Age profile information is not currently available. An age profile will be developed in future revisions of the asset management plan.



### 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
In this first Asset Management Plan detailed performance deficiencies have not been identified	In the development of next asset management plans, and in particular as these plans are developed and integrated along with the Long Term Financial Plans and Community Plans service deficiencies will be identified.

### 5.1.3. Asset condition

The condition profile of assets included within this AM Plan is shown in Figure 3.

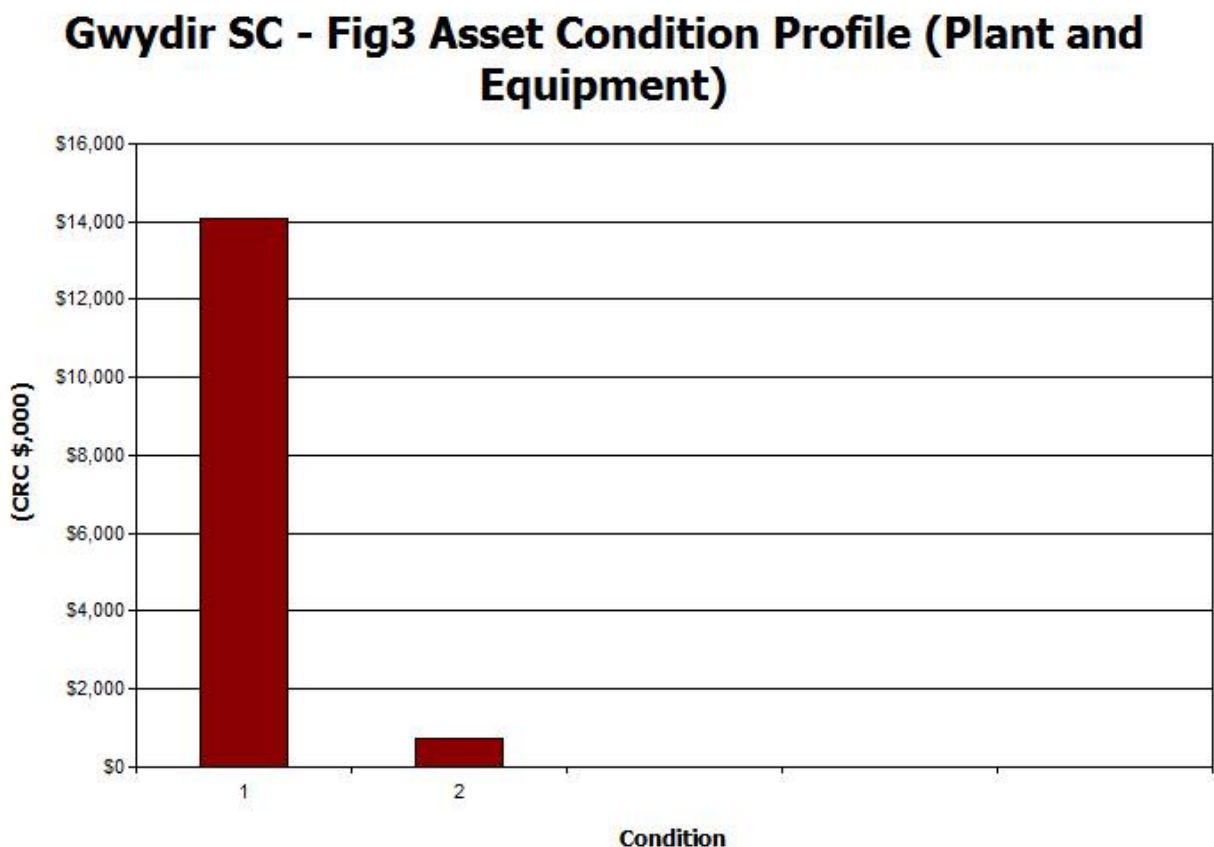


Figure 3: Asset Condition Profile

Condition is measured using a 1 – 5 rating system<sup>3</sup> as detailed in Table 5.1.3.

Table 5.1.3: IIMM Description of Condition

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

#### 5.1.4. Asset valuations

The value of assets recorded in the asset register as at May 2012 covered by this asset management plan is shown below. Assets were last revalued at June 2009.

Current Replacement Cost                      \$ 14,794,000

Depreciable Amount                              \$ 14,794,000

Depreciated Replacement Cost                \$ 8,820,000

Annual Depreciation Expense                 \$ 1,152,000

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

Asset Consumption                      7.8%                      (Depreciation/Depreciable Amount)

Asset renewal                              11.5%                      (Capital renewal exp/Depreciable amount)

Annual Upgrade/New                      0%                      (Capital upgrade exp/Depreciable amount)

Annual Upgrade/New                      0%                      (including contributed assets)

Council is currently renewing assets at 147.6% of the rate they are being consumed and increasing its asset stock by 0% each year.

To provide services in a financially sustainable manner, Council will need to ensure that it is renewing assets at the rate they are being consumed over the medium-long term and funding the life cycle costs for all new assets and services in its long term financial plan.

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<sup>3</sup> IIMM 2006, Appendix B, p B:1-3 ('cyclic' modified to 'planned', 'average' changed to 'fair')

### 5.1.5. Asset hierarchy

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

Council's service hierarchy is shown in Table 5.1.5.

Table 5.1.5: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Heavy Plant	Turnover - maximum 10 years or 10,000 hours
Large Trucks	Maximum 10 years or 500,000klm
Light Plant	Maximum 5 years
Cars	Maximum 3 years or 150,000klm

## 5.2. Risk Management Plan

An assessment of risks<sup>4</sup> associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. 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 identified in the Infrastructure Risk Management Plan are summarised in Table 5.2.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Associated Costs
<b>Ageing Plant and Equipment</b>	<p>Increase in purchase price for replacement assets.</p> <p>Increase in maintenance and operating costs</p>	High	<p>Prioritise renewals and explore purchase alternatives such as exhire.</p> <p>Regular monitoring of costs throughout asset life</p>	Funding for renewals included in the Capital Works Program and Long Term Financial Plan Ongoing staff time.
<b>Existing plant and equipment assets</b>	<b>Items do not comply with regulations</b>	High	<p><b>Regular inspections at scheduled services and vehicle roadworthy checks.</b></p> <p><b>Use online safety systems to keep up to date with regulations.</b></p>	On-going staff time

### 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 specific 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.

Specific 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 but may require a specific budget allocation.

## Gwydir SC - Projected Operations and Maintenance Expenditure (Plant and Equipment)

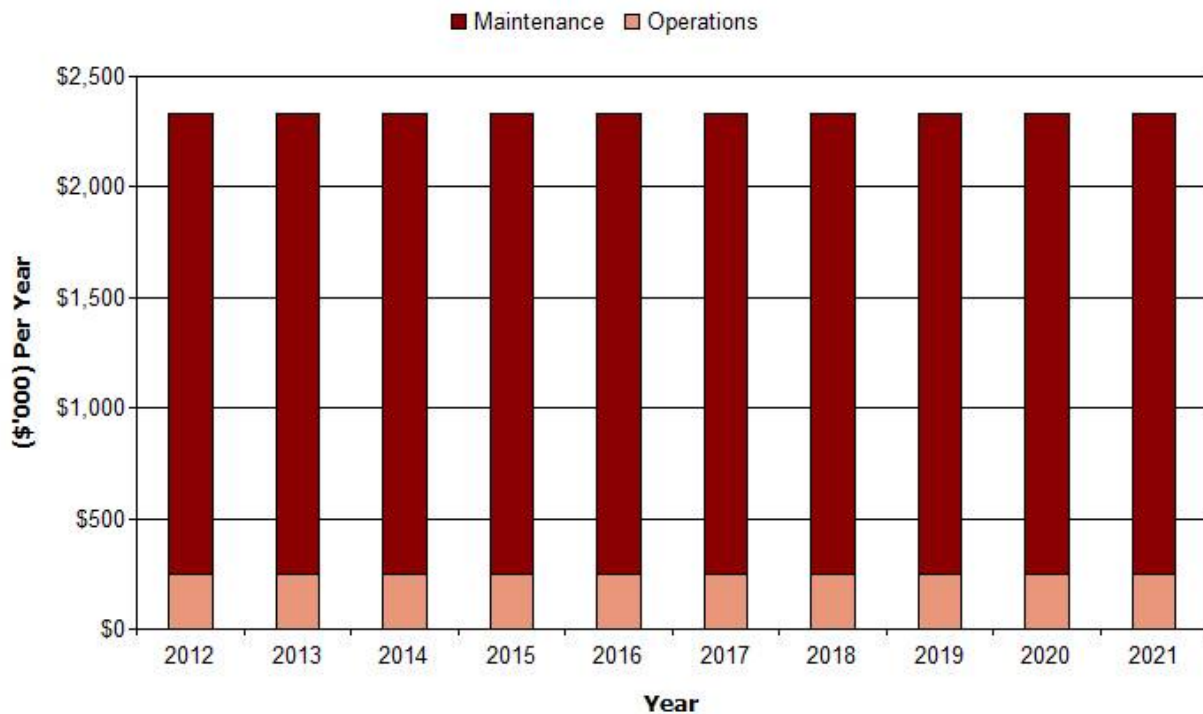


Figure 4: Projected Operations and Maintenance Expenditure

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

Maintenance is funded from the 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 one of three methods provided in the 'Expenditure Template'.

- Method 1 uses Asset Register data to project the renewal costs for renewal years using acquisition year and useful life, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average network renewals plus defect repairs in the Renewal Plan and Defect Repair Plan worksheets on the 'Expenditure template'.

Method 1 was used for this asset management plan.

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.4.1.

Table 5.4.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Meets all regulatory requirements/standards and has all safety equipment in good working order.	50%
Fit for purpose/usage.	25%
Operating and Maintenance costs	20%
Expectations of end users	5%
<b>Total</b>	<b>100%</b>

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.

#### 5.4.2. Renewal standards

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

- Relevant Australian standards
- Compliance with current regulations, laws, statutes
- Industry best practice

#### 5.4.3. Summary of projected renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Figure 5. Note that all costs are shown in 2012 dollar values.

The projected capital renewal program is shown in Appendix B.

## Gwydir SC - Projected Capital Renewal Expenditure (Plant and Equipment)

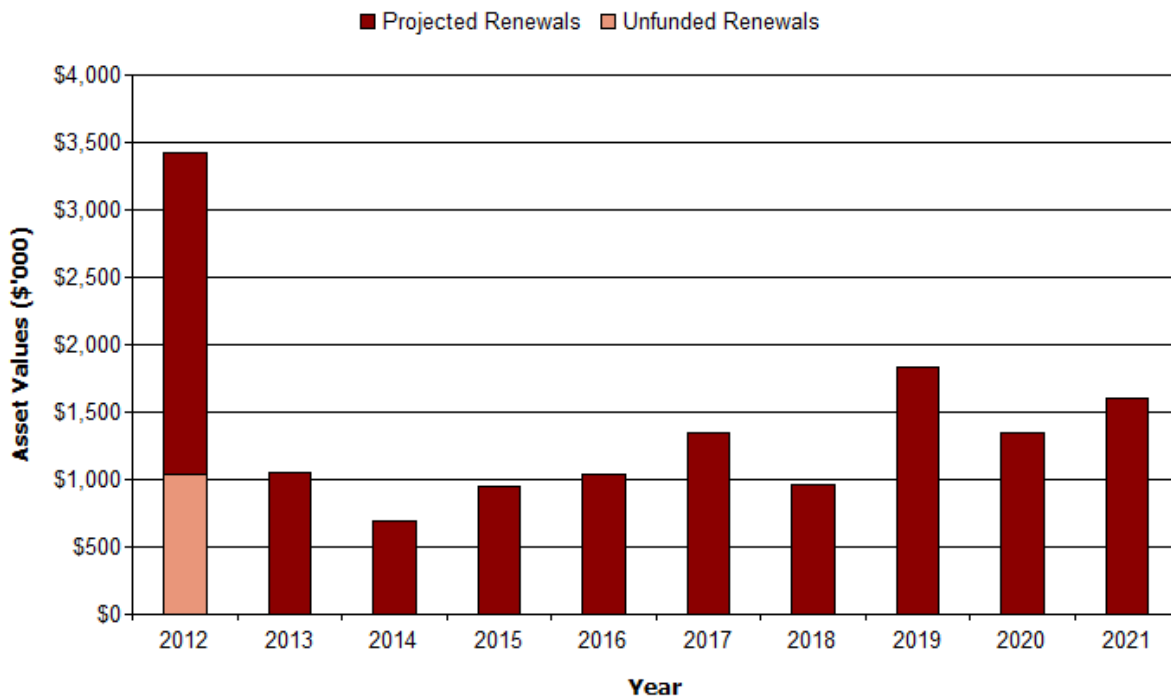


Figure 5 - Projected Capital Renewal Expenditure

Deferred renewal, ie 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 capital works programs 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 estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.5.1.

Table 5.5.1: Upgrade/New Assets Priority Ranking Criteria

Criteria	Weighting
Regulatory change	40%
Reductions in operating costs or improvements in productivity identified in efficiency audits	50%
Value	5%
Impact on existing services and infrastructure.	5%
<b>Total</b>	<b>100%</b>

### 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 projected upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Figure 6. The projected upgrade/new capital works program is shown in Appendix C. All costs are shown in current 2012 dollar values.

#### **Gwydir SC - Projected Capital Upgrade/New Expenditure (Plant and Equipment)**

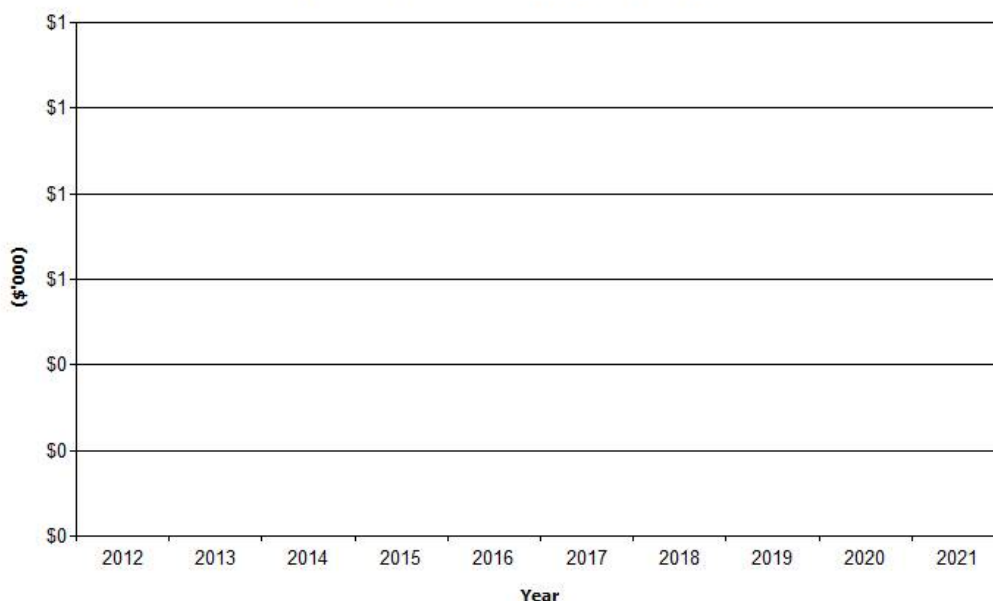


Figure 6 - Projected Capital Upgrade/New Asset Expenditure



New assets and services are to be funded from 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, together with estimated annual savings from not having to fund operations and maintenance of the assets. 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.

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

Table 5.6: Assets identified for Disposal

Asset	Reason for Disposal	Timing	Net Disposal Expenditure (Expend +ve, Revenue -ve)	Operations & Maintenance Annual Savings
No assets identified for disposal in 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 Figure 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets), net disposal expenditure and estimated budget funding.

Note that all costs are shown in 2012 dollar values.

## Gwydir SC - Projected Operating and Capital Expenditure (Plant and Equipment)

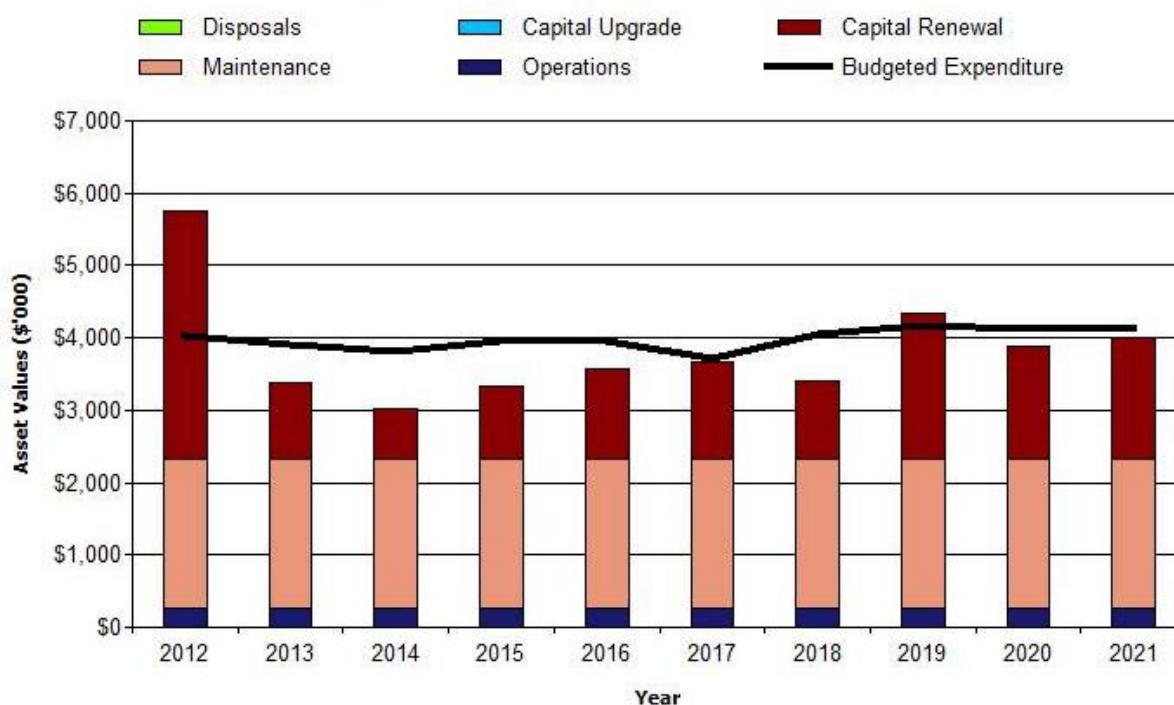


Figure 7 - Projected Operating and Capital Expenditure and Budget

### 6.1.1. Financial sustainability in service delivery

There are three 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/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the 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 operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is \$3,481,000 per year (operations and maintenance expenditure plus depreciation expense in year 1).

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes operations, maintenance and capital renewal expenditure in year 1. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan is 4,029,000 (operations and maintenance expenditure plus budgeted capital renewal expenditure in year 1).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap.

The life cycle gap for services covered by this asset management plan is \$548,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 115.7% of life cycle costs giving a life cycle sustainability index of 1.18

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

#### Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$3,438,000 per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$3,984,000 per year giving a 10 year funding shortfall of \$546,000 per year and a 10 year sustainability indicator of 116.0%. This indicates that Council has 1.18 of the projected expenditures needed to provide the services documented in the asset management plan.

#### Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is \$3,716,000 per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$3,929,000 per year giving a 5 year funding shortfall of \$213,000. This is 106% of projected expenditures giving a 5 year sustainability indicator of 1.05.

#### Financial Sustainability Indicators

Figure 7A shows the financial sustainability indicators over the 10 year planning period and for the long term life cycle.

## Gwydir SC - Financial Sustainability Indicators (Plant and Equipment)

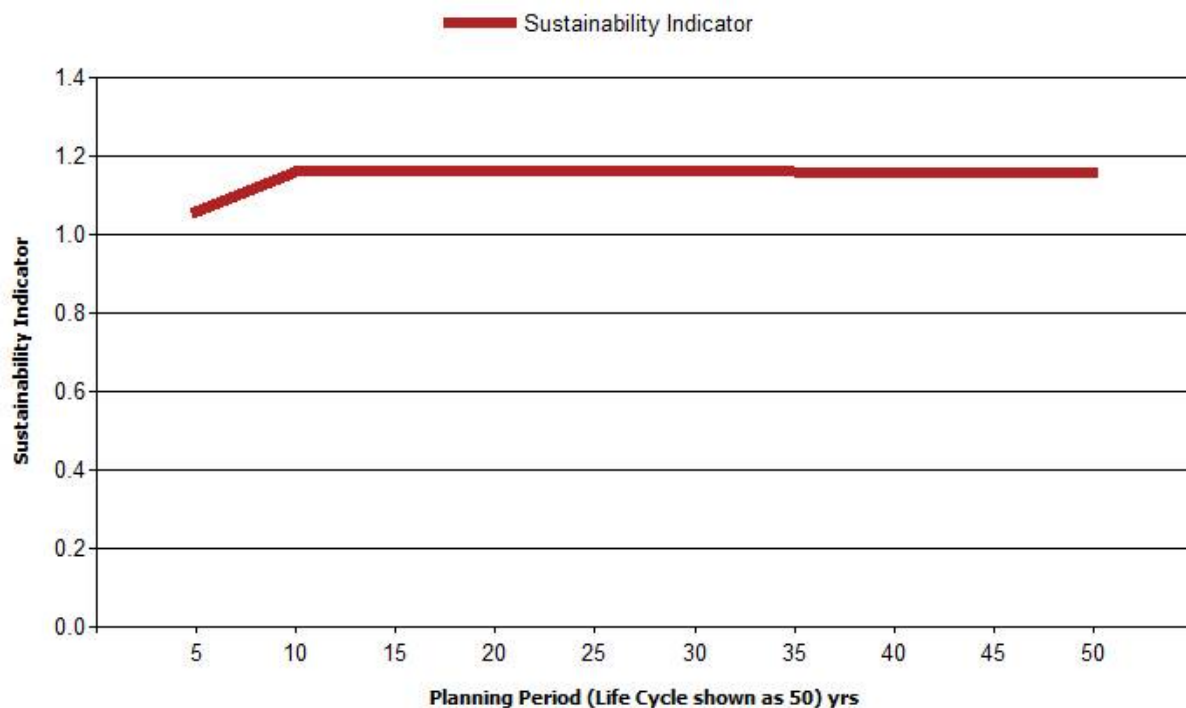


Figure 7A: Financial Sustainability Indicators

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and funding to achieve a financial sustainability indicator of 1.0 for the first years of the asset management plan and ideally over the 10 year life of the AM Plan.

Figure 8 shows the projected asset renewals in the 10 year planning period from Appendix B. The projected asset renewals are compared to budgeted renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period in Figure 8.

## Gwydir SC - Projected & Budget Renewal Expenditure (Plant and Equipment)

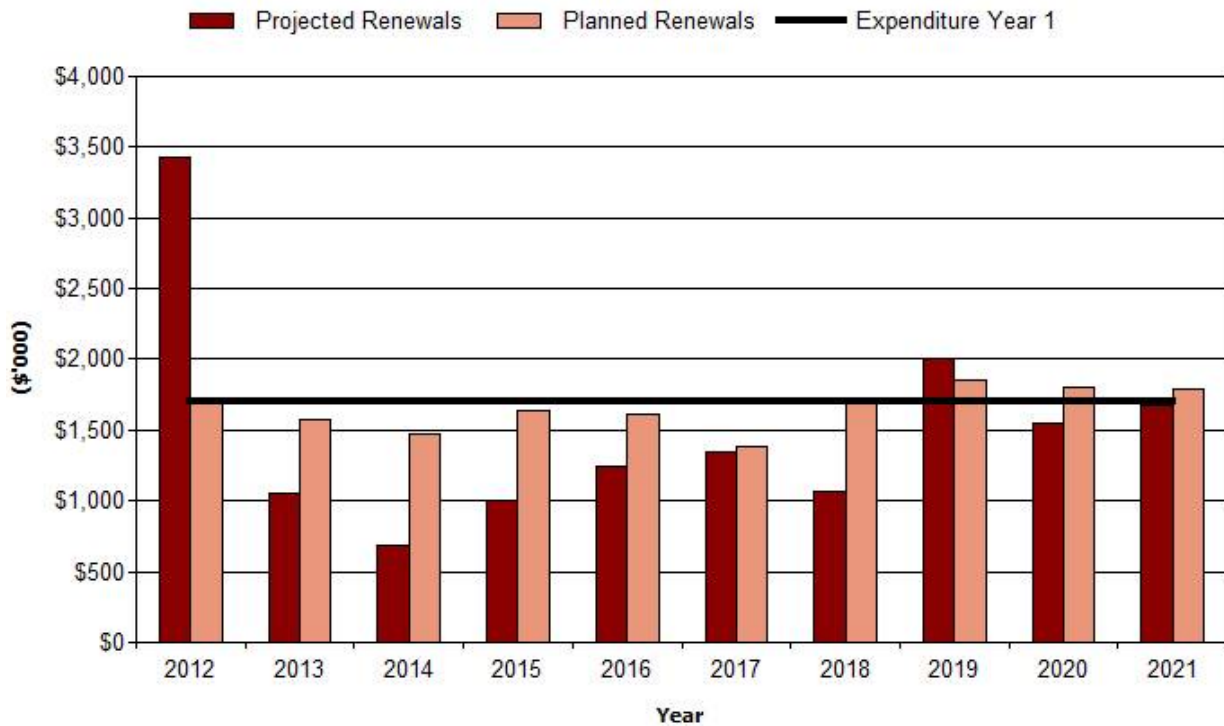


Figure 8 - Projected and Budgeted Renewal Expenditure

Table 6.1.1 shows the shortfall between projected and budgeted renewals

Table 6.1.1: Projected and Budgeted Renewals and Expenditure Shortfall

Year	Projected Renewals (\$000)	Planned Renewal Budget (\$000)	Renewal Shortfall (\$000)		Funding Gap (\$000)		Cumulative Shortfall (\$000)	
			(-ve Surplus)	Gap, +ve	(-ve Surplus)	Gap, +ve	(-ve Surplus)	Gap, +ve
<b>2012</b>	\$3,428.20	\$1,700.00		<b>-\$1,728.20</b>			<b>-\$1,728.20</b>	
<b>2013</b>	\$1,057.39	\$1,573.00		\$515.61			<b>-\$1,212.59</b>	
<b>2014</b>	\$686.76	\$1,478.00		\$791.24			<b>-\$421.35</b>	
<b>2015</b>	\$999.55	\$1,636.00		\$636.45			<b>\$215.10</b>	
<b>2016</b>	\$1,243.53	\$1,615.00		\$371.47			<b>\$586.57</b>	
<b>2017</b>	\$1,344.99	\$1,383.00		\$38.02			<b>\$624.59</b>	
<b>2018</b>	\$1,073.01	\$1,713.00		\$639.99			<b>\$1,264.58</b>	
<b>2019</b>	\$2,002.79	\$1,852.00	<b>-\$150.79</b>				<b>\$1,113.79</b>	
<b>2020</b>	\$1,551.08	\$1,804.00		\$252.92			<b>\$1,366.71</b>	
<b>2021</b>	<b>\$1,680.32</b>	<b>\$1,793.00</b>		<b>\$112.68</b>			<b>\$1,479.39</b>	

Note: An negative shortfall indicates a funding gap, a positive shortfall indicates a surplus for that year.

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

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

We 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 review future services, service levels and costs with the community.

### 6.1.2. Expenditure projections for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in current (non-inflated) values. Disposals are shown as net expenditures (revenues are negative).

Table 6.1.2: Expenditure Projections for Long Term Financial Plan (\$000)

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2011	\$252.00	\$2,077.00	\$3,428.20	\$0.00	\$0.00
2012	\$252.00	\$2,077.00	\$1,057.39	\$0.00	\$0.00
2013	\$252.00	\$2,077.00	\$686.76	\$0.00	\$0.00
2014	\$252.00	\$2,077.00	\$999.55	\$0.00	\$0.00
2015	\$252.00	\$2,077.00	\$1,243.53	\$0.00	\$0.00
2016	\$252.00	\$2,077.00	\$1,344.99	\$0.00	\$0.00
2017	\$252.00	\$2,077.00	\$1,073.01	\$0.00	\$0.00
2018	\$252.00	\$2,077.00	\$2,002.79	\$0.00	\$0.00
2019	\$252.00	\$2,077.00	\$1,551.08	\$0.00	\$0.00
2020	\$252.00	\$2,077.00	\$1,680.32	\$0.00	\$0.00

*Note: All projected expenditures are in 2012 values*

## 6.2. Funding Strategy

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

## 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. Figure 9 shows the projected replacement cost asset values over the planning period in 2012 dollar values.

### Gwydir SC - Projected Asset Values (Plant and Equipment)

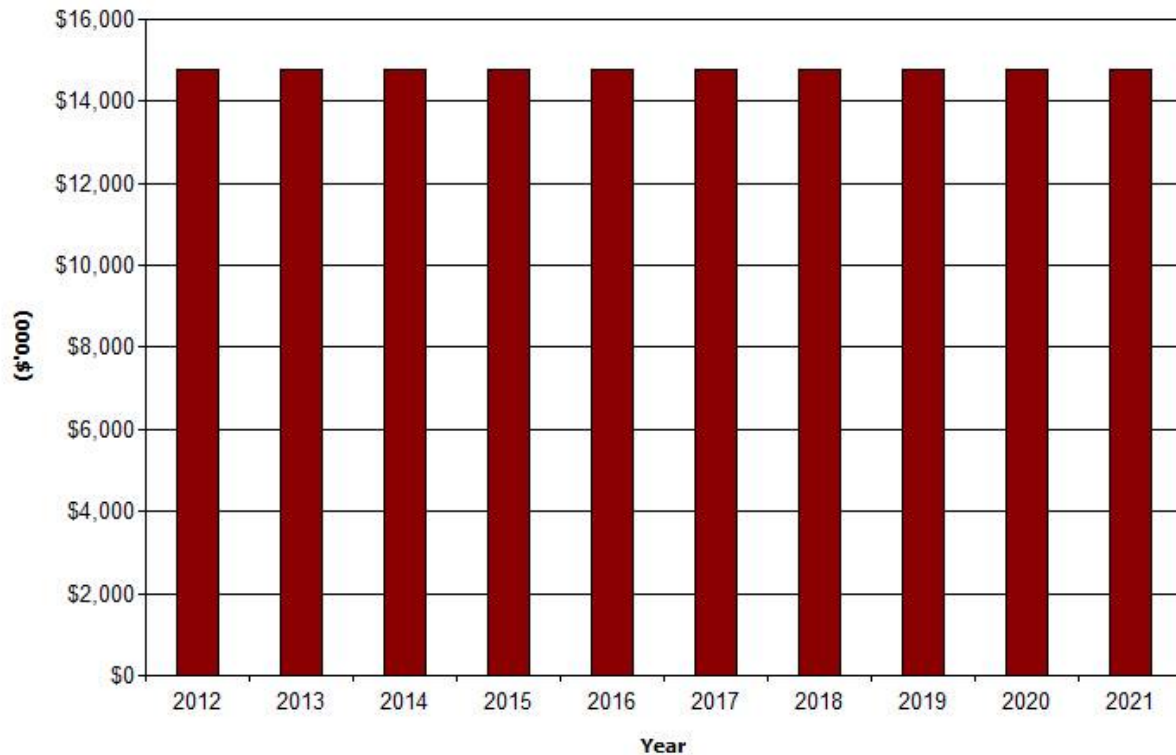


Figure 9: Projected Asset Values

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



## Gwydir SC - Projected Depreciation Expense (Plant and Equipment)

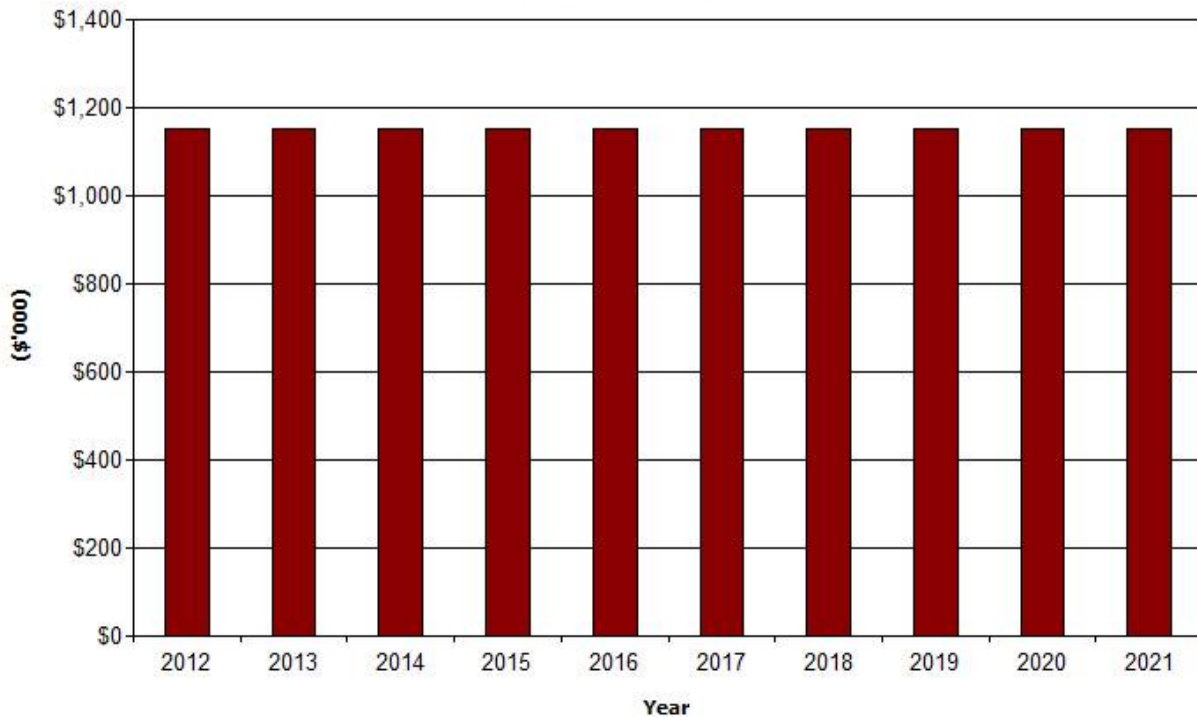


Figure 10: Projected Depreciation Expense

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 Figure 11. The effect of contributed and new assets on the depreciated replacement cost is shown in the darker colour.

## Gwydir SC - Projected Depreciated Replacement Cost (Plant and Equipment)



Figure 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:

- That Plant and Equipment assets will remain in Council's ownership throughout the planning period and that levels of service remain unchanged;
- Required maintenance is assumed to take place in accordance with relevant guidelines/standards;
- Natural disasters, accidents and other unplanned events are not considered in the asset lifecycles;
- That assets will actually be replaced at the end of their respective useful lives;
- Assets are assumed to have reached their allocated useful lives even though actual condition will vary depending on actual usage and prevailing conditions;
- All expenditure is stated in 2012 dollar values;
- Maintenance expenditure is based on historical expenditure and assumes there will no significant change;

- Maintenance and operations allocations are based on maintaining current service levels and utilisation;
- It is assumed that regulations/standards relating to Plant and Equipment will remain the same over the planning period (i.e. the 10 years until June 2022);
- It is assumed that the basic mix of Plant and Fleet items will not alter significantly over the planning period.

## **7. ASSET MANAGEMENT PRACTICES**

### **7.1. Accounting/Financial Systems**

#### **7.1.1 Accounting and financial systems**

Gwydir Shire Council uses the 'Authority' financial management system by Civica. This system tracks all financial transactions relating to Council's assets.

#### **7.1.2 Accountabilities for financial systems**

General Manager	<p>The general manager is generally responsible for the efficient and effective operation of the council's organisation and for ensuring the implementation, without undue delay, of decisions of the council.</p> <ul style="list-style-type: none"> <li>• To manage the council on a day-to-day basis and to direct staff;</li> <li>• To exercise such of the functions of the council as are delegated by the council to the general manager;</li> </ul>
Director Technical Services	<p>The Director of Technical Services is responsible for the financial management of the operation, maintenance, renewal and upgrade of :-</p> <ul style="list-style-type: none"> <li>• Roads/Streets;</li> <li>• Plant;</li> <li>• Bridges/Culverts;</li> <li>• Traffic;</li> <li>• Subdivisions;</li> <li>• Drainage;</li> <li>• Water Supply;</li> <li>• Sewerage;</li> <li>• Parks/Gardens;</li> <li>• Recreation Grounds;</li> <li>• Bush Fire Control;</li> <li>• Swimming Pools;</li> <li>• Aerodromes; and</li> <li>• SES Emergency Services.</li> </ul>
Director Corporate Services	<p>The role of Corporate Services is to provide a range of services to internal and external customers and stakeholders,</p>

	<p>including:</p> <ul style="list-style-type: none"> <li>• Financial management and accounting services</li> <li>• Customer support and administration services</li> <li>• Information Technology services</li> <li>• Payroll services</li> <li>• Rates collection</li> <li>• Records Management</li> <li>• Corporate Asset Management Systems</li> </ul> <p>The role of the Director Corporate Services is to both respond to and participate in the formulation, review and reporting on the corporate role and function of Council.</p> <p>Corporate Services provides the financial, administrative and information technology to enable Council to provide high quality services to the community. The Services' mission is to provide a consistently high standard of Customer Service for the community and Council's operations.</p>
Assets Officer	<ul style="list-style-type: none"> <li>• Collect, enter and maintain Council's asset condition data in the 'Authority' AIM module.</li> <li>• Assist in development and maintenance of Council's asset management information system and implementation of Council's asset management improvement strategy.</li> </ul>

### 7.1.3 Accounting standards and regulations

- The Local Government Act (1993);
- The Local Government Code of Accounting Practice and Financial Reporting;
- AASB 116 / IAS 16 Property, Plant & Equipment
- AASB 136 / IAS 36 Impairment of Assets
- AASB 5 / IFRS 5 Non-Current Assets held for Sale & Discontinued Operations
- AASB 137 / IAS 37 Provisions, Contingent Assets & Contingent Liabilities
- AASB 1049 Whole of Government and General Government Sector Financial Reporting
- AASB 1051 Land Under Roads

### 7.1.4 Capital/maintenance threshold

There is a \$1,000 threshold between capitalisation and expense on individual items. There is no fixed dollar value threshold between capital and maintenance. It will depend on the type of activity as maintenance will maximise the full service potential and capital will renew or extend the service potential.

The Transport Asset Management Plan will assist in the development of Work Orders to enhance feedback into the plan.

### 7.1.5 Required changes to accounting financial systems arising from this AM Plan

As of November 2011, this plan is in 'First Draft' format. Review and updating of the asset inventory and asset condition data is required to further improve this asset management plan therefore improving the decision making ability of Council with respect to recommendations made by this plan.

## 7.2. Asset Management Systems

### 7.2.1 Asset management system

Council utilises the AIM module of 'Authority' as the Corporate Asset Management System.

### 7.2.2 Asset registers

Council's corporate asset register is integral with the AIM module in 'Authority' as described above.

### 7.2.3 Linkage from asset management to financial system

Because AIM is a module of 'Authority', the link between asset management and the financial system is a direct 'live' link.

### 7.2.4 Accountabilities for asset management system and data

Council	Policy and assessment of community requirements and expectations
General Manager	Overall stewardship of AMP
Director Technical Services	Establishment and maintenance of Asset Register
Director Corporate Services	Financial management plan

### 7.2.5 Required changes to asset management system arising from this AM Plan

The Plant and Equipment Asset Management Plan will assist changes to systems to improve maintenance management systems, enhance job planning and strategic planning as well as developing a closer reconciliation between the financial a technical asset registers.

## 7.3. Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- Council strategic and operational plans,
- Service requests from the community,
- Network assets information,
- The unit rates for categories of work/materials,
- Current levels of service, expenditures, service deficiencies and service risks,
- Projections of various factors affecting future demand for services and new assets acquired by Council,

- Future capital works programs,
- Financial asset values.

The key information flows *from* this asset management plan are:

- The projected Works Program and trends,
- The resulting budget and long term financial plan expenditure projections,
- Financial sustainability indicators.

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

#### **7.4. Standards and Guidelines**

Standards, guidelines and policy documents referenced in this asset management plan are:

- Local Government Act (NSW) 1993
- Local Government Amendment (Planning and Reporting) Act 2009
- Local Government (Finance Plans and Reporting) Regulation 2010
- AASB116

## 8. PLAN IMPROVEMENT AND MONITORING

### 8.1. Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required cashflows identified in this asset management plan are incorporated into the organisation's long term financial plan and Community/Strategic Planning processes and documents,
- 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	Record and report on expenditures, with separate costs for operations, maintenance and capture capital expenditures as renewal or upgrade/new.	DTS	Staff and time allocation.	Yearly
2	Continue the development of the corporate asset register, in which financial calculations including calculation of annual depreciation are undertaken by council.	DTS/ DCS	Staff and time allocation	As required by auditors
3	Linking of the customer service system to the corporate asset register to link requests to asset records.	DTS/ DCS	Staff and time allocation	Continuous
4	Continue to Improve project cost accounting to record costs against the asset component and develop valuation unit rates.	DTS/ DCS	Staff and time allocation	Continuous
5	Review the accuracy and currency of asset data.	DTS/ DCS	Staff and time allocation	Continuous
6	<p>Review methodology for determining remaining life, with detail assessment for assets requiring renewal in the medium term (next 10-20 years).</p> <p>An outcome should be that the remaining lives from the asset register will generate a renewal scenario aligning with the Works Program and Long Term Financial Plan.</p>	DTS/ DCS	Staff and time allocation	As required by auditors

	(Scenario 1 described in this asset management plan will match Scenario 3)			
7	Continue to review the procedures for maintaining the Asset and Financial Registers	DTS/ DCS	Staff and time allocation	As required by auditors
8	Carry out an asset management maturity audit to ensure compliance with the national asset management framework and IPR guidelines.	DTS/ DCS	Staff and time allocation	As required by auditors

### 8.3. Monitoring and Review Procedures

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

The Plan has a life of 4 years and is due for revision and updating within 12 months of each Council election.

## 9. REFERENCES

DVC, 2006, *Asset Investment Guidelines*, Glossary, Department for Victorian Communities, Local Government Victoria, Melbourne, <http://www.dpcd.vic.gov.au/localgovernment/publications-and-research/asset-management-and-financial>.

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IPWEA, 2008, *NAMS.PLUS Asset Management* Institute of Public Works Engineering Australia, Sydney, [www.ipwea.org.au/namsplus](http://www.ipwea.org.au/namsplus).

IPWEA, 2009, *Australian Infrastructure Financial Management Guidelines*, Institute of Public Works Engineering Australia, Sydney, [www.ipwea.org.au/AIFMG](http://www.ipwea.org.au/AIFMG).

IPWEA, 2011, *Asset Management for Small, Rural or Remote Communities* Practice Note, Institute of Public Works Engineering Australia, Sydney, [www.ipwea.org.au/AM4SRRC](http://www.ipwea.org.au/AM4SRRC).



## **10. APPENDICES**

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10 year Capital Renewal Works Program

Appendix C Planned Upgrade/Exp/New 10 year Capital Works Program A

Appendix D Abbreviations

Appendix E Glossary

## **11. Appendix A Maintenance Response Levels of Service**

To be developed.

**12. Appendix B Projected 10 year Capital Renewal Works Program**

### **13. Appendix C Planned Upgrade/Exp/New 10 year Capital Works Program**

Under Development.

## 14. Appendix D 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
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

## 15. Appendix E Glossary

### Annual service cost (ASC)

#### 1) Reporting actual cost

The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.

#### 2) For investment analysis and budgeting

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 operations, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.

### Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

### Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

### 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 (AM)

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.

### Average annual asset consumption (AAAC)\*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service

potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

### Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

### 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 expenditure - expansion

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

### Capital expenditure - new

Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

#### Capital expenditure - renewal

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability 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 generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

#### Capital expenditure - upgrade

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 operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

#### 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

#### Capitalisation threshold

The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

#### 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

Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

#### 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, including 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.

#### Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value.

#### Depreciated replacement cost (DRC)

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

#### Depreciation / amortisation

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

#### Economic life

See useful life definition.

#### Expenditure

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

#### Fair value

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

#### Funding gap

A funding gap exists whenever an entity has insufficient capacity to fund asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current funding gap means service levels have already or are currently falling. A projected funding gap if not addressed will result in a future diminution of existing service levels.

#### 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 that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from

the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate 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.

#### Key performance indicator

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

#### Level of service

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

#### Life Cycle Cost

1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual operations, 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 operations, maintenance and capital renewal expenditure incurred in providing the service in a



particular year. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of life cycle sustainability.

Loans / borrowings

See borrowings.

Maintenance

All actions necessary for retaining an asset as near as practicable to its original condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- 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.

- Reactive maintenance

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

- Significant maintenance

Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.

- Unplanned maintenance

Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance and renewal gap

Difference between estimated budgets and projected required expenditures for maintenance and renewal of assets to achieve/maintain specified service levels,

totalled over a defined time (e.g. 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

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)

The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

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.

#### Operations expenditure

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

#### Operating expense

The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

#### Pavement management system

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

#### 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).

#### 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 operations and maintenance expenditure.

#### Recurrent funding

Funding to pay for recurrent expenditure.

#### Rehabilitation

See capital renewal expenditure definition above.

#### Remaining useful life

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

#### Renewal

See capital renewal expenditure definition above.

#### Residual value

The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

#### 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 total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

## Service potential remaining

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. 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 (Depreciated Replacement Cost/Depreciable Amount).

## Strategic Longer-Term Plan

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

## Specific 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.

## 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.

## Value in Use

The present value of future cash flows expected to be derived from an asset or cash generating unit. 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 net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary