

Resourcing Strategy 2015-2025

Incorporating
Asset Management Plans
2015-2025
Organisational
Development Strategy
2013-2017 (revised)
Long Term Financial Plan
2015-2025

Richmond
Valley
Council





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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Executive Summary	4
Asset Management Strategy	4
Long Term Financial Plan	4
Organisational Development Strategy	5
Asset Management	5
Introduction	5
Purpose of Asset Management	6
Integrated Planning	6
Developing Levels of Service	8
Predictive planning	9
Forecasting Demand	9
Infrastructure Guidelines	10
Asset Consumption	11
Depreciation Issues	11
Financial Planning	13
Risk Management	14
Asset Management Plans	14
Key Infrastructure Statistics	15
Asset Revenue and Expense Profiles	16
Long Term Financial Planning	19
Financial Sustainability	19
Preparation of the Plan	20
Alignment with Council's Delivery Program and Operational Plan	20
Long Term Financial Plan Objectives	20
Organisational Development	20
Developing a high performance business	21
Building capacity and capability	21
Developing talented individuals and teams	21
Improving our service	22
Appendices	
Consolidated Results	Appendix A
Building and Other Structures	Appendix B
Stormwater Drains	Appendix C
Roads and Traffic Management	Appendix D
Sewerage Network	Appendix E
Water Supply Network	Appendix F
Organisational Development Strategy (revised)	Appendix G
Long Term Financial Plan	Appendix H

Executive Summary

This resourcing strategy outlines the relationship between finances, people and assets as the foundation of resource stewardship and the sustainability of services delivered for the Richmond Valley Community. Council performance is driven by the key directions, strategies and actions included in the plans bounded by this strategy.

This resourcing strategy integrates our Organisational Development Strategy, Financial Management and Asset Management with each essential to achieving the objectives in our Community Strategic Plan, Richmond Valley Towards 2025.

The focus of this plan is on growing our future together through the responsible management of trusted resources and to provide agreed services which support the fabric of modern living.

Council currently has an operating budget of \$53.5 million and a full time workforce of 250 persons. Council operates an asset portfolio valued at \$703 million, owns \$45 million worth of land and utilises \$25 million of plant and equipment to enable our operations.

This Resourcing Strategy provides the context and details of our planning for the period 2015-2025 as expressed in the following three planning documents.

Asset Management Strategy

The primary intention of asset management is to maintain and care for infrastructure assets which meet the needs and services of local residents. A reliable infrastructure network builds social trust and provides the foundation for socio-economic activities. Asset management has many goals including:

- Ø Providing current liveability by: creating, maintaining, operating, rehabilitation and disposal of depleted assets,
- Ø Preserving future liveability through sustainable actions, and
- Ø Achieving this in the most cost effective manner.

Asset management is directed by a framework of legislative and regulatory requirements which emphasise prudent resource usage limiting our impact on natural capital resources. Australian Standards for infrastructure influence the design and resilience of infrastructure assets thereby improving mitigation to the effects of natural events. Therefore the objective of asset management is to establish the guide posts for planning, constructing and operating the infrastructure essential in providing the services that supports our community.

Long Term Financial Plan

Financial management is about generating sufficient revenues approximately equal to the costs of running asset-intensive networks. The fundamental objective is to develop the sustainable and cost effective funding streams needed to acquire, maintain and renew assets over the forecast period. Therefore asset management and financial management have a close relationship as expressed through key metrics.

Key linkages include capacity to finance the desired Levels of Service, demand management, risk management and community affordability through rates, user pays and developer contributions.

Funding is supplemented through special grants, transfers between reserved funds and the prudent usage of debt to smooth the cyclical costs of infrastructure, renewal and maintenance.

Council's Long Term Financial Plan (LTPF) is a detailed process influenced by asset planning, community aspirations for quality services and their ability to fund desired services. In turn, financial management is about providing operating and capital works, responsibly by ensuring financial sustainability.

Financial managers exercise judgement to predict future outcomes, which must be expressed with a high degree of confidence. This is strengthened by international and Australian Accounting Standards (AASB) that ensures a robust presentation that is complete, neutral and error free.

Organisational Development Strategy

Council requires a well-skilled and cohesive group of people to plan, operate and manage its multifaceted and diverse nature of public interest programs. Council has been modernising its organisation and how it operates for the past few years, refreshing the culture and renewing structures, systems and processes to develop a successful culture and business practices to deliver our commitments to the community.

Council serves our community by growing our future together. This is an open and transparent process that listens to community needs and achieves stated objectives through consistent, innovative and responsible activities that add value to our community.

Council's Community Strategic Plan, Richmond Valley Towards 2025, articulates the priorities and aspirations for the Richmond Valley community. These priorities require the right people, money and assets. An integrated approach to planning ensures that the three aspects of resource planning support each other and tell the same story with respect to capacity, affordability and the performance and value generated from council infrastructure to grow our community.

Resourcing decisions influence operational and delivery planning and the responsibilities for ensuring the continuity, reliability and performance of our roads, water and sewerage and other services that make living in the Richmond Valley rich in heritage, lifestyle and opportunities.

Asset Management

Introduction

The Richmond Valley is located in the Northern Rivers region of North East NSW, 726 km north of Sydney and 228 km south of Brisbane. Located on the banks of the Richmond River the region supports a variety of agricultural industries, primarily beef, sugar cane and wheat. Richmond Valley Council was formed in February 2000 as the result of amalgamation between Casino Council and Richmond River Shire Council.

Council spreads across 3,050 square kilometres with six townships, major urban areas are Casino and Evans Head and the villages are Woodburn, Coraki, Broadwater, Rileys Hill and Rappville. As at 2011, the resident population was 22,700 persons with a skew towards blue collar occupations.

The Valley's natural environment is cherished by both residents and visitors alike. Our community values the rural atmosphere its peaceful lifestyle and the outstanding natural attributes and

biodiversity of this area. The community message is clear, our people want a sustainable region with access to facilities and services that provide choice and a healthy lifestyle.

Council embraces its role as a leader in the provision of reliable services by providing the essential infrastructure to promote business and economic development across the region. Our vision is to work and engage with people across the region, to gather insights and to develop a resilient and robust economy which reflects a strong sense of community.

Richmond Valley presents a friendly and relaxed place with access to natural beauty and peaceful living. This is countered by general business and employment issues afflicting most regional locations in Australia. Council plans to build on our strengths and commit towards thoughtful development, thereby establishing the region as a liveable and sustainable place.

Purpose of Asset Management

Asset Management (AM) is the day to day activities that drive strategic goals. The purpose of AM is to deliver the required Level of Service (LoS) from infrastructure assets in the most cost effective manner, for both present and future users. AM is an organisational commitment to a performance orientated culture. Aging networks and the growing demand for network expansion is causing some concern for public organisations and their ability to fund sound and reliable infrastructure assets.

The public sector plays a unique role in serving the community interest through developing systems and tools to anticipate and manage context. AM activities are generally wide and complex and involve elements of convention, legislation, policy requirements and public expectations. Key to this success is a culture of good working relationships, internal controls and capacity development, ensuring a clear direction with shared understanding between the key functional areas of Council.

Public organisations serve the public interest by aggregating community resources to deliver a network of services supporting the fabric of daily living and promoting general wellbeing. The basic purpose of public service is customer satisfaction and trust, which can be measured through the perceived benefits and value for money. Public interest is an eclectic mix of engaging with, developing, performing, complying and informing all stakeholders on public expectations.

Integrated Planning

The majority of Council infrastructure was built when essential housing and infrastructure was the priority. Early planning provided little or no analysis for matching maintenance and renewals expenditure to the future affordability of the community. Additionally past understandings of asset management did not consider the longer term cumulative effects of infrastructure decisions.

The NSW Department of Local Government's Integrated Planning and Reporting Framework focuses on improving local communities through a planning function which considers the three aspects of resourcing constraints.

- Ø Strategic Planning ponders the big picture, this is where the abstract and important objectives are discussed, resolved and formalised.
- Ø Strategy attempts to create future order, it is considered judgements and the long term visioning of direction, aspiration and desired position.
- Ø Tactical Planning provides consistency, linking the objectives, values, processes, priorities and practical aspects of delivery.

- Ø Operational Planning is about achieving customer expectations. With an emphasis on delivery it combines people, money and assets to create value for the community.
- Ø Figure 1 illustrates this process.

Therefore Council planning's primary aim is the best use of resources through the deployment of staff and disbursements of revenue, to deliver the priorities expressed in Council's delivery program. Council has developed a scenario based approach to financial and asset management decisions which tells the same story across all community planning efforts.

In its simplest form, community aspirations and concerns are compiled from satisfaction surveys and public consultation. Measures of importance and satisfaction are assessed within a quadrant analysis which allows management to form a picture of what 'is' working well and the areas requiring attention.

Regulatory and best practices combined with community desired LoS, indicate the scale and cost of infrastructure requirements. On top of this the continuing care and provision of existing infrastructure assets results in Council establishing a 10 year works program.

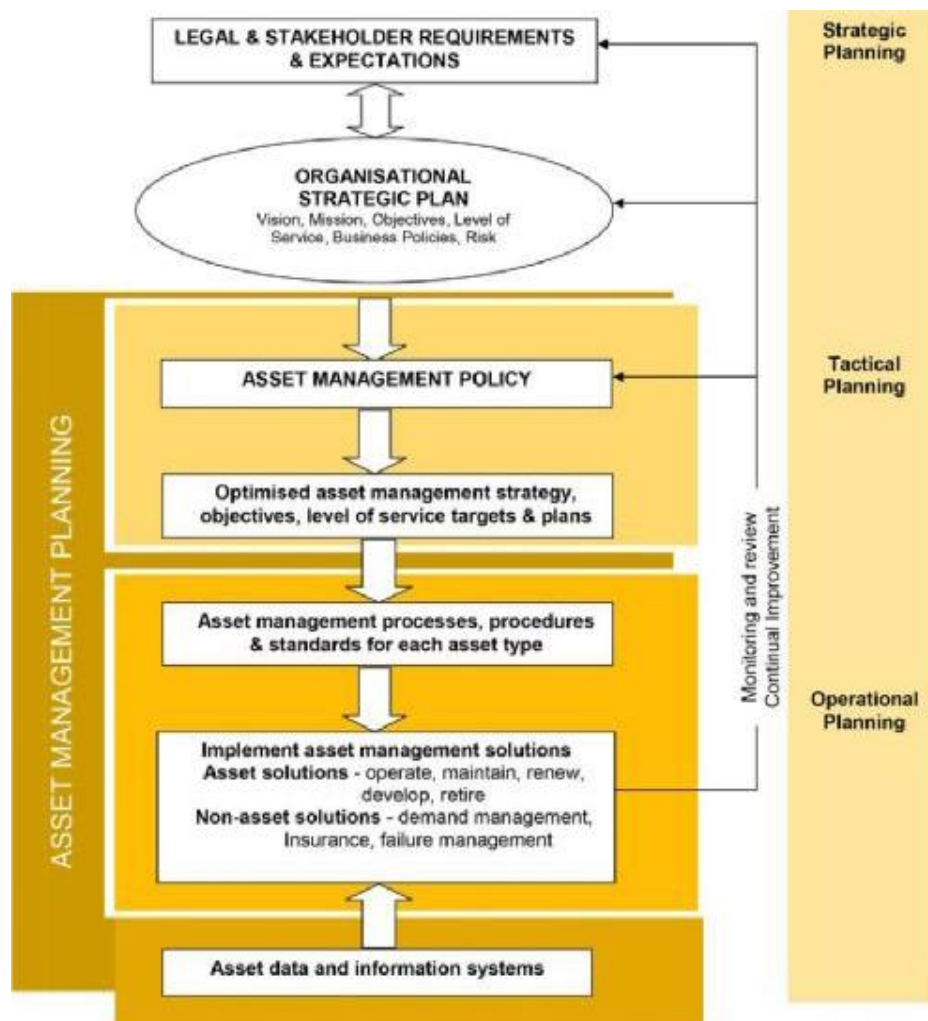


Figure 1: Strategic Asset Management Planning Process
(International Infrastructure Management Manual, 2006)

Developing Levels of Service

The reliability and sureness of infrastructure networks is expected until an event or trend reduces expected performance. The loss of drinking water supplies, failure of sewerage treatment plants, bursting of a mains pipeline, loss of a major arterial road or a bridge collapse, are unanticipated with low public acceptability. Customer value is therefore a combination of convenience, dependability and timeliness.

Council develops measures LoS through understanding the needs of their broader community through connecting with and listening to locals. Community values and expectations are considered along with regulatory and quality standards developing priorities which are a measurable form of value.

LoS describe an intention to deliver value attributes like quality, accessibility, attractiveness and affordability. When achieved they convey credibility and trust by ensuring infrastructure networks provide the services and values expected by residents.

Therefore LoS indicators shape the development of Council's four year delivery plans. These represent a contract between elected representatives and management to provide value to their constituents through services and community development.

Community wellbeing is a combination of social, safety, prosperity and natural outcomes. Therefore a continuing objective for Council is to cultivate a place of business that attracts industry, provides employment and preserves the quality and attractiveness of its environment. This process is continuing and iterative as not all outcomes can be achieved concurrently.

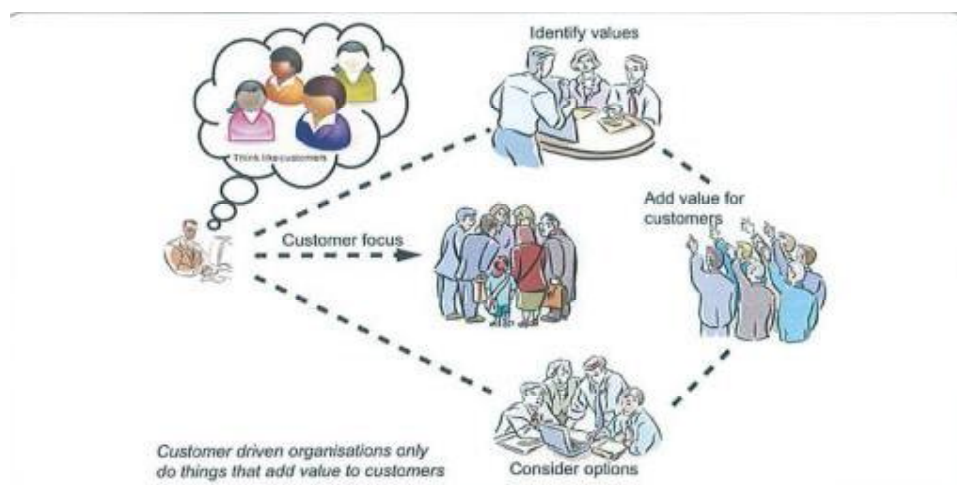


Figure 2: Adding Value to Customers

Council has significant responsibilities and powers given to it under the Local Government Act. This includes the ability to raise revenues through rates and user pay services in return for providing the general platforms for community wellbeing.

Management employs a long term approach to caring for existing asset networks, renewing aging assets and securing resources for new infrastructure without imposing too heavy a tax burden on its residents.

Predictive planning

Predictive planning is a process which matches the costs associated with maintaining existing assets and building new assets within the affordability of local residents. This is an iterative process with two main objectives:

1. Reduce the risk of asset failure to a level that is acceptable to both community and legislative expectations.
2. Preserve the integrity of asset networks for both present and future generations. Aspirations mostly exceed willingness to pay for such assets and therefore Council takes a balanced approach to achieve the best mix of services across its different asset classes.

Infrastructure planning is about balance, context and priority with resourcing constraints real and limiting. Council operates five major classes of assets, with present priorities focusing on the connectivity and supply of essential roads and bridges and the dependability of water and sewerage services.

Larger planning issues including water security and better infrastructure mitigations against flooding, droughts and rising sea levels will require significant monies. Realistically, they can only be improved incrementally over longer time frames. Adequate mitigation is beyond the immediate means of most local governments. It is more a process of steering community behaviours and perceptions so that they understand these distant concerns.

Asset management identified the costs to provide, to care for and operate service generating assets like roads, water and sewerage and drainage networks. Asset costs consist of recurring OMA and ongoing consumption (depreciation). This reduces remaining service potential, and ultimately influences the quantum of future capital expenditure.

Capital based costs represent the expenditure required to sustain, renew and or expand the service potential of infrastructure networks.

The lifecycle of an asset begins with the identification or the need for an asset and includes the building, operating and decommissioning of the asset and any physical liabilities thereafter. The objective is to look at the lowest long term cost rather than seeking short term savings when making decisions. Sustainable financial management is about managing community outcomes and providing assets and services with the lowest long term cost.

Forecasting Demand

Demand has many factors such as growth, expectations, technology, standards and social trends. Forecasting demand is underpinned by developing clearly articulated drivers with high levels of confidence based on observed evidence, user needs and their willingness to pay.

Infrastructure performance and the quality of its services are dependent on the integrity of structures, ongoing care through preventative and restorative activities, and expansive activities to accommodate community development.

Decisions regarding Council assets rely on accurate information systems and reliable techniques to produce knowledge from collated data. Council has invested in quality information systems. These systems control the integrity of information and maintain structured data sources which are used to anticipate the factors of demand.

- Ø Council has invested in quality information systems, including Technology One for finance, ratings and document management.
- Ø Council operates Asset Master for controlling various asset registers and applying the correct accounting treatments to asset movements.
- Ø Council operates supporting technologies like MapInfo, SQL server, professional drawing programs, Microsoft and Adobe products and publishing technologies.

Asset decisions are based on attributes which are the result of various technical characteristics. Asset attributes have a degree of tolerance requiring subjective professional knowledge to determine their value. Variations due to specific technical characteristics are understandable, but from policy perspective wide variations in key attributes like design lives can produce ambiguity in benchmarking decisions.

Infrastructure Guidelines

Guidelines including the International Infrastructure Management Manual and Australian Standards provide technical and design quality parameters for built structures. Understanding the interconnection between asset attributes and financial movements drives good asset management decisions:

- Ø Infrastructure guidelines result in an ideal Design Life for an asset that may be variable dependent upon local conditions or exposures to infrequent weather events.
- Ø Constructing assets in accordance with relevant technical standards requires a modern equivalent cost of materials, plant and labour; this is called the Current Replacement Cost of an asset.
- Ø Each asset has the potential to deliver services equivalent to the Depreciable Amount of its current replacement cost over its entire design life.
- Ø Long lived assets are often complex assets, that is they consist of various components with different rates of decay.
- Ø Therefore some assets have a non-depreciating component, their Residual Value which is a base component from which the complex asset can be renewed.
- Ø The service potential of an asset is 'used up' or consumed at a rate which reflects its depreciation. Therefore at a point in time an asset will have a remaining service potential, its Depreciated Replacement Cost (less any residual value) which is the sum of its original built cost less the cumulative effect of 'used up' service consumption over the years since construction.
- Ø The remaining service potential of a complex asset at point 'x' in its lifecycle is current replacement cost less accumulated depreciation less any residual value.
- Ø Assets Remaining Useful Life represents the number of future years that an asset will continue to deliver services and is simply its design life minus its current age.
- Ø Another important attribute is an asset Condition Rating which is a subjective measure quantifying the remaining service potential, state of performance, structural integrity and inherent risk in a single measure.
- Ø Assets are graded from 1 to 5, with condition 1 representing very good for periods up to 45% of their useful lives. Assets deteriorate through conditions 2 to 5 with level 5 signifying an asset in a very poor state.
- Ø A condition rating of 6 implies that the asset has no remaining service potential and should be renewed or decommissioned.
- Ø The grading approach emphasises significant renewal programs as the assets deteriorate through conditions 4 and 5.

- Ø As assets deteriorate increasing rates of maintenance are required to care for assets until a critical point when the asset will require renewal.
- Ø Figure 3 illustrates the relationship between costs over an assets lifecycle.

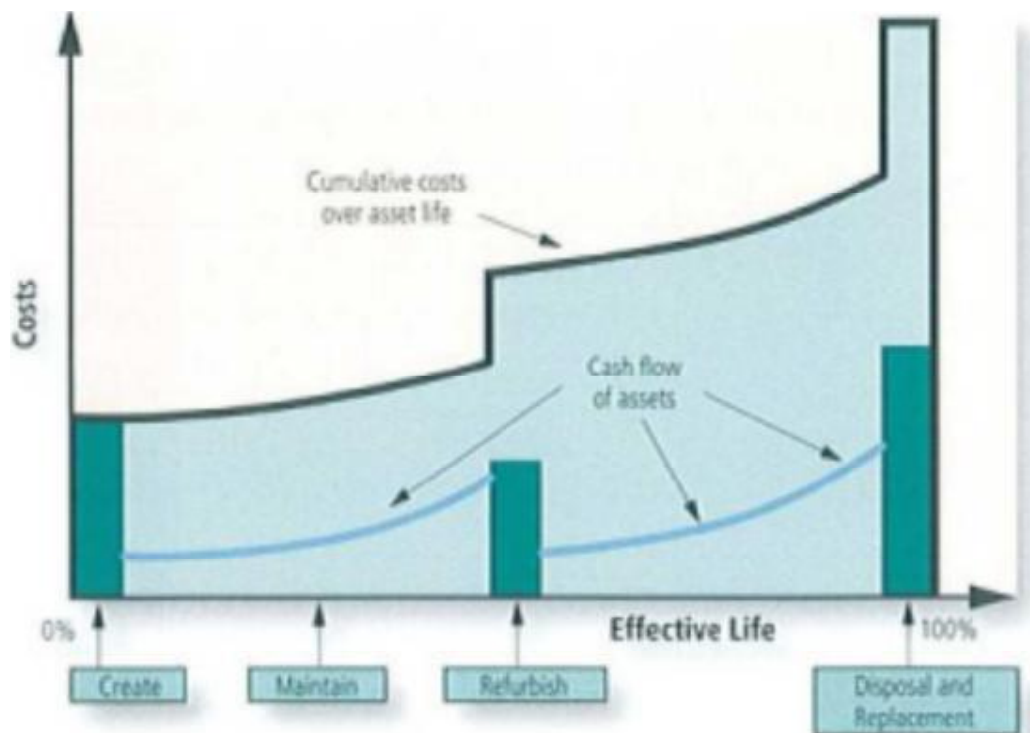


Figure 3: Lifecycle Cost for Infrastructure Assets

Asset Consumption

The rate of asset consumption or depreciation ideally should reflect its rate of usage. This introduces complexities for financing and management processes. Depreciation is an important issue for public policy formulation given that it accounts for approximately one quarter of local government expenditures in NSW and influences a Council's Financial Stability Ratios (FSR) and ultimately assessments of the current Fit for the Future (FFF).

Depreciation Issues

The primary purpose of depreciation is to match the cost of productive assets to the revenues earned from that asset over its useful life. For public assets, depreciation is an indicator for how much expenditure is required to preserve the integrity for a network of assets. Publicly owned assets have the following distinctive characteristics:

1. They do not produce cash flows,
2. They cannot be sold,
3. They have exceedingly long lives (or uncertain lives), and
4. Depreciation does not involve cash flows.

The absence of cash transactions explains why depreciation may be an instrument to smooth results or present different views on FSR to policy makers.

Inconsistencies surrounding design lives result in one council having a road surface life of 100 years against other councils 15 to 25 years, with the latter having lower measures of FSR. Similar issues exist for underground assets with variations from 70 years to 200.

Council in consultation with professional valuers has introduced modified patterns of depreciation to better match the physical consumption of potential services to the remaining useful lives of each asset.

Management's assertion is that council assets will deteriorate at a slow rate during for the first half of its lifecycle before increasing at a faster rate in its second half. That is it follows a convex curve of depreciation versus generally accepted straight line methods.

The benefits of this approach include a better approximation of remaining service potential in asset networks and ideally an accurate estimation of annual consumption or depreciation. This approach has made a positive impact on Council's financial indicators and operating performance.

However the method is complex and is driven by asset condition assessment, therefore aging networks that have deteriorated further through their lifecycles will have much higher rates of decay than newer assets. In simple terms untreated assets in condition 5 are being consumed at a rate 8.5 times faster than newer assets because of their reduced service potential.

Therefore it is important to understand that modified patterns of depreciation can vastly improve operating and performance figures for local Councils, but also increase the complexity of management planning and financing activities. This can be further complicated by the cyclical nature of long life assets having wide ranges for their design lives, meaning that certain assets will renew at rates five to seven times faster than longer life assets.

Possible situations in distant planning will see the aligning of many fast decaying asset types (that is they are all in or nearing a condition 5 state). The preservation of infrastructure is a function of matching renewals with actual deterioration of networks. This is expressed as a Renewal Ratio which is a measure that when equal to 1.0 indicates council is preserving network performance for future generations.

Future scenarios indicate that many assets classes and their condition profiles will align. This will result in decay rates 3, 4 or 8 times faster than current rates of consumption. The bottom line is the application of modified depreciation patterns will intricate the task of managerial planning, asset management and financing decisions and require significant expertise.

Therefore resourcing is a constant process of identifying the quantum of work and spreading scarce people, materials, operating plant and monetary assets; with the objective of smoothing out fluctuating asset decisions. Figure 4 illustrates the relationship between financial movements.

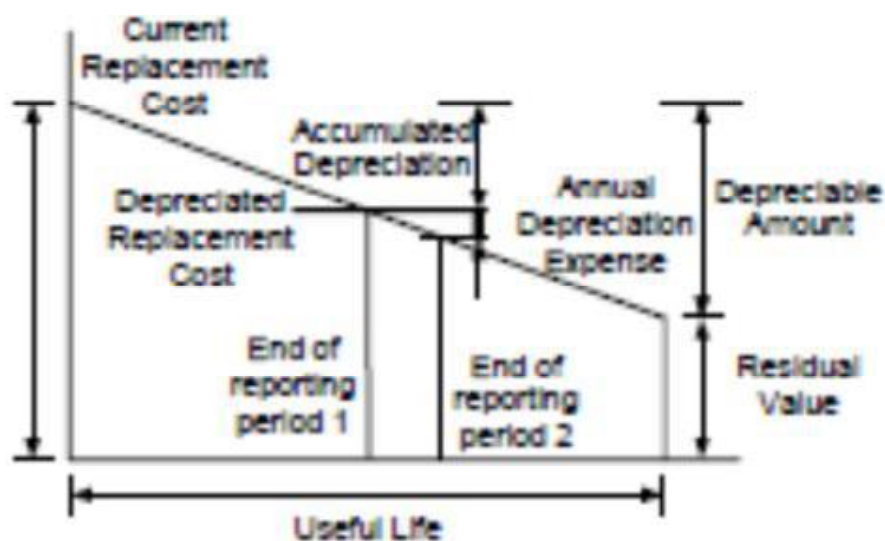


Figure 4: Asset Financial Movements

Financial Planning

The physical attributes of design lives, remaining useful lives, residual values and rates of consumption are all reflected in fair value financial valuations, which in turn reflect remaining service potential. The algorithmic process for the rate of physical depreciation is complex and therefore not totally explained in this document however, the important observation is that at any point along a depreciation curve an assets total value (Current Replacement Cost) consists of an Accumulated Depreciation amount and a remaining Depreciated Replacement Cost or its Written Down Value.

This means that all being equal, the effects of inflation on the modern equivalent costs to renew assets (indexation effect) and increasing rates of depreciation shows the cost of doing business will increase in future years.

Financial planning assesses the ability to afford against the costs to provide. It works until a suitable position is arrived at which best balances community wide aspirations.

The cost of financing is reflected in rates and user pay fees for various services. This is completed by federal assistance grants, developer contributions, debt instruments and the careful management of reserve funds to spread the financing capacity of council.

Management observed that Council business was performing below average and trending down, with insufficient financial resources to provide and maintain the LoS desired by the community. In consultation with residents a long term approach to sustainability was agreed.

Council's financial health has been boosted by a Special Rates Variation (SRV) for the years 2015 – 2019 which has steadied its overall performance. Rigorous planning has focused on Council achieving a sustainable position at the end of its LTFP.

Councillors, management and finance officers have projected financial information and determined that a sustainable position in 2025 can be achieved by supplementing the current SRV with a CPI plus 1.6% rates indexation for the period 2020-2025.

The end result is an asset position that reduces network risk to an acceptable level and is renewing assets at a rate comparable to rate they are being consumed.

Risk Management

The financing and asset management functions align with a demonstrated commitment to understand problems, classify sensitivities and prioritise solutions. Risk management enumerates the consequences and probabilities of future events and is about managing possible risk which reflects the organisations risk position.

For public organisations acting as agents for the responsible delivery of essential services, Councils primary duty of care is to provide appropriate standards of service, to minimise failures and to protect the wellbeing of the community all while providing public value.

Risk has many forms, some predictable and strengthened by legislative instruments. Other risks are infrequent and uncertain which means that are either too costly or unlikely to adequately plan for now, but should be considered for their likelihood and therefore consequences may increase with time. Risk management is a statistically known distribution of outcomes employing rational expectations and mechanistic methods to influence decisions.

Council has improved the risk process by engaging independent professional valuers to inspect and deduce risk. This observational process is complemented by technologies like pipe inspection software which improves our understanding of underground assets which are not directly observable.

Asset valuations are conducted on a five yearly cycle providing the best evidence for the current state of networks and the resulting resourcing requirements to maintain a sustainable network.

Asset Management Plans

Council has produced five Asset Management Plans (AMPs). These plans provide detailed assessments across Council's five asset classes (Buildings, Roads, Drains, Sewer and Water). A consolidated AMP provides a general snapshot of financial and asset management findings for the Council.

Council's AMP's are supplemented by an asset management review, being a more general overview of best practice asset care and financial planning principles.

Council is predicted to perform favourably over the 20 year outlook. Council infrastructure assets on average have a remaining useful life of 55% of their expected design lives and 82% remaining service potential (measured as Written Down Value divided by Current Replacement Cost). This reflects modified depreciation patterns which attempt to more accurately match the consumption profiles of long life assets.

Council focus is the long term care and preservation of infrastructure which ultimately involves a balance between affordability and the effectiveness of various networks. The individual AMP's demonstrate the achievement of financial and asset management objectives as a whole.

With \$703 million worth of Infrastructure, Council has an annual bill of \$30 million to provide and care for its infrastructure assets. The Asset Renewal Funding ratio is a critical indicator of infrastructures long term stability, an ideal indicator is 1.0, therefore Council's indicator of 1.01 is favourable.

Another critical indicator is the Bring to Satisfactory (BTS) measure which should be less than 2% of the asset network. This measure communicates Council's capacity to manage infrastructure risk, which is the prevention of failure for critical assets through an adequately funded renewables program.

Council has a BTS measure of 0.06 for the Stormwater drainage network and BTS measures of 0.0 for the other networks and 0.0 for the whole Infrastructure network.

Infrastructure \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
Buildings	\$16,675	\$3,099	\$94,668	\$9,004	\$21,659		0.77
Roads	\$62,282	\$4,077	\$390,813	\$32,206	\$51,565		1.21
Sewer	\$24,238	\$1,583	\$134,056	\$17,851	\$26,592		0.91
Drains	\$3,493	\$355	\$35,532	\$5,653	\$6,908	0.06	0.51
Water	\$13,435	\$1,276	\$95,709	\$5,349	\$13,445		1.00
Infrastructure	\$120,123	\$10,390	\$750,777	\$70,064	\$120,169		1.00
General	\$82,450	\$7,531	\$521,013	\$46,864	\$80,132		1.03

Table 1: RVC Infrastructure Measures

Key Infrastructure Statistics

- Ø Number of Assets - 68,371.
- Ø Current Replacement Cost of asset base - \$703 million.
- Ø Annual depreciation - \$8.3 million.
- Ø Depreciated Replacement Cost \$580 million, 82% of the fair values, reflecting high residual values and modified depreciation schedules for long lived assets.
- Ø 57% of all assets have a condition rating of 1 or 2.

The good news for Council is the modernity of its Infrastructure networks, with 60% of assets constructed in the last 25 years. Only 17% of Council assets were constructed before 1970, but the number of sewer assets constructed before 1970 is 35%.

This results in a network with an average condition rating of 2.3. 57% of Council's infrastructure assets are rated condition 1 or 2 and only 20% are in a condition 4 or 5 state. In 10 years' time the network will still have a satisfactory condition of 2.9.

The good condition of Council assets is reflected in future renewals, with 43% of assets being suitable (not requiring replacement) until after 2050. A further 25% of assets have remaining lives extending to the 2040s, with the remaining 32% of assets reaching the end of their useful lives in the next 25 years.

For the planning period covered by this LTFP, Council assets will increase in value to \$967 million, representing total growth of 38% with 2% attributed to new works and 36% being the future value effect. Annual depreciation will increase by 51% to \$12.5 million which is modest depreciation rate increase from 1.22% in 2015 to 1.30% in 2025.

The modified depreciation effect is most noticeable in the financial periods 2021 and 2022 when the depreciation rate increases to 1.40%. This can be primarily attributed to sewer assets moving into faster decaying conditions.

Asset Revenue and Expense Profiles

Council's infrastructure program is funded by a mix of revenues, special grants and contributions and transfers from the consolidated general fund for Roads, Buildings and Drains and reserve funds for the water and sewer businesses.

Asset Lifecycle profiles for the each class and combined are shown in following graphs. The balance of funding for each asset class represents transfers from the general, sewer or water reserve fund. Annual consumption of assets (depreciation) is shown on the right axis. The Stormwater and Buildings profiles clearly illustrate the underfunding effect on asset decay versus asset renewals.

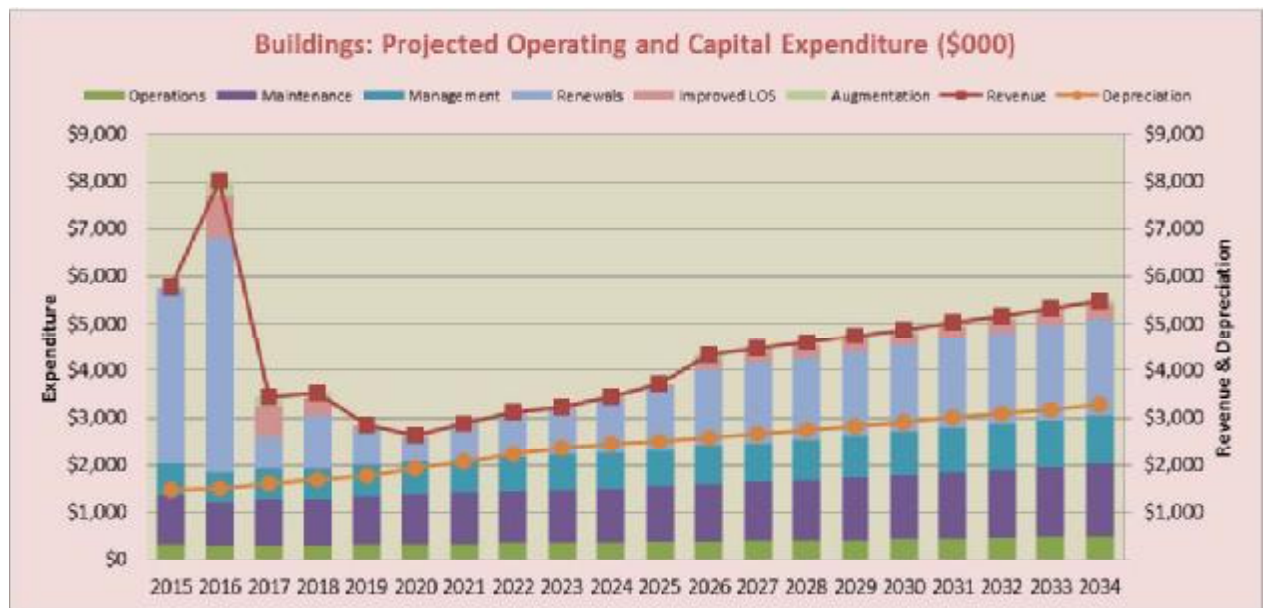


Figure 5a: Projected Operational and Capital Expenditures - Buildings

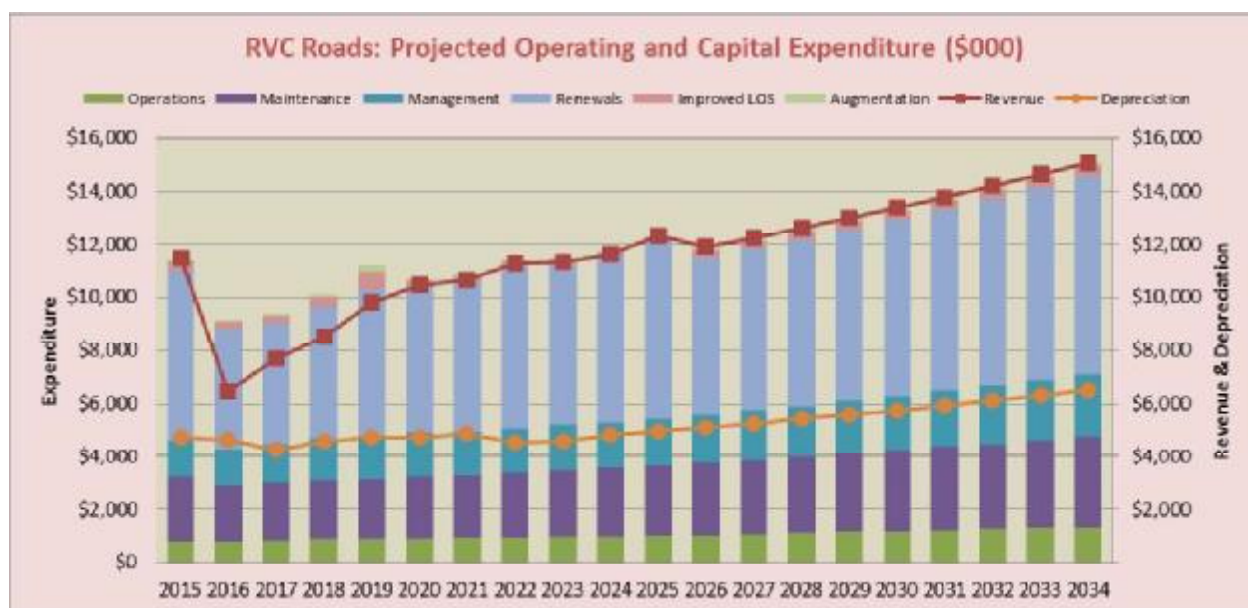


Figure 5b: Projected Operational and Capital Expenditures - Roads

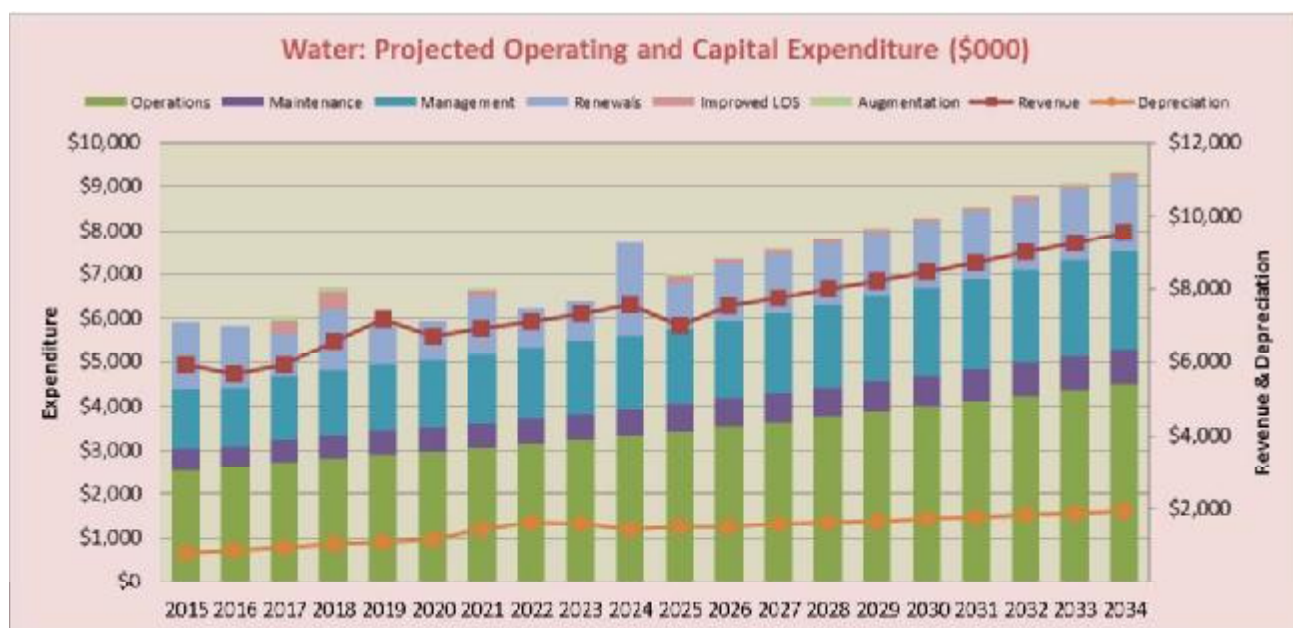


Figure 5c: Projected Operational and Capital Expenditures – Water

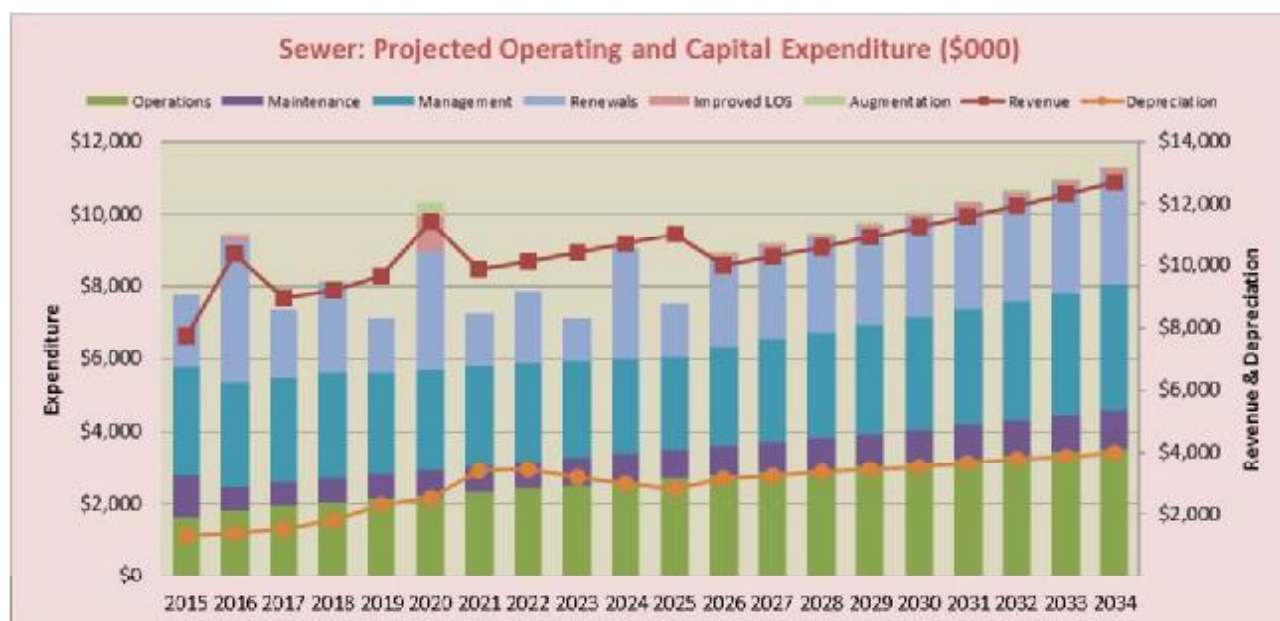


Figure 5d: Projected Operational and Capital Expenditures – Sewer

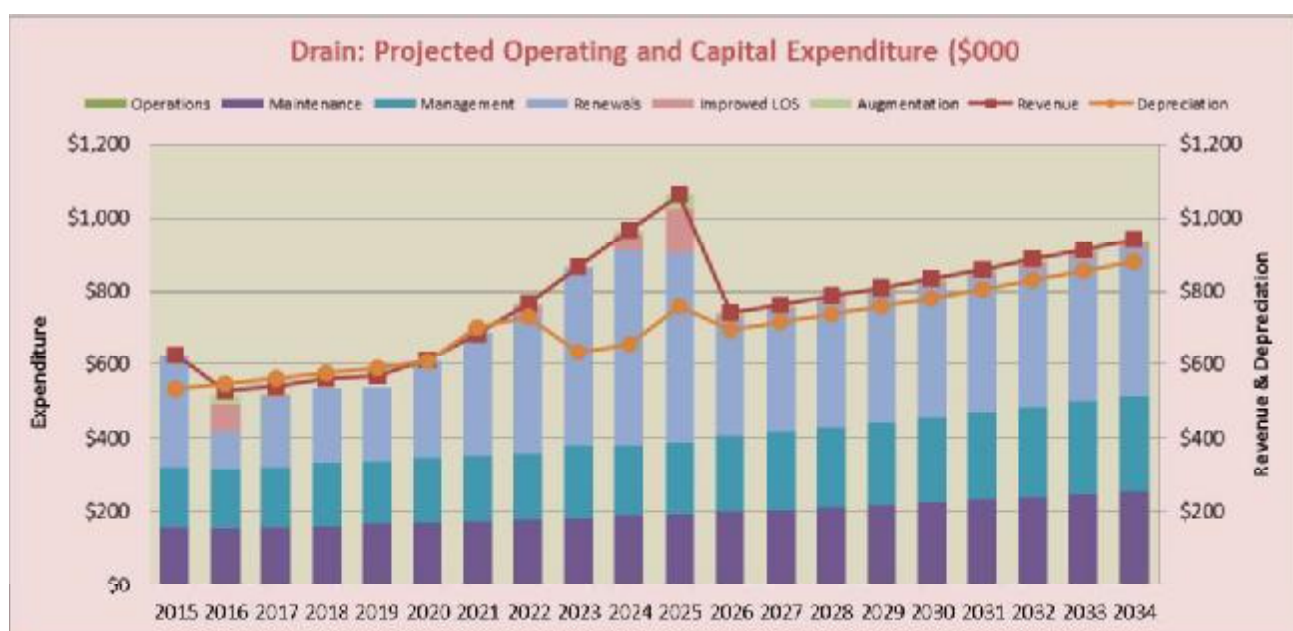


Figure 5e: Projected Operational and Capital Expenditures – Drains

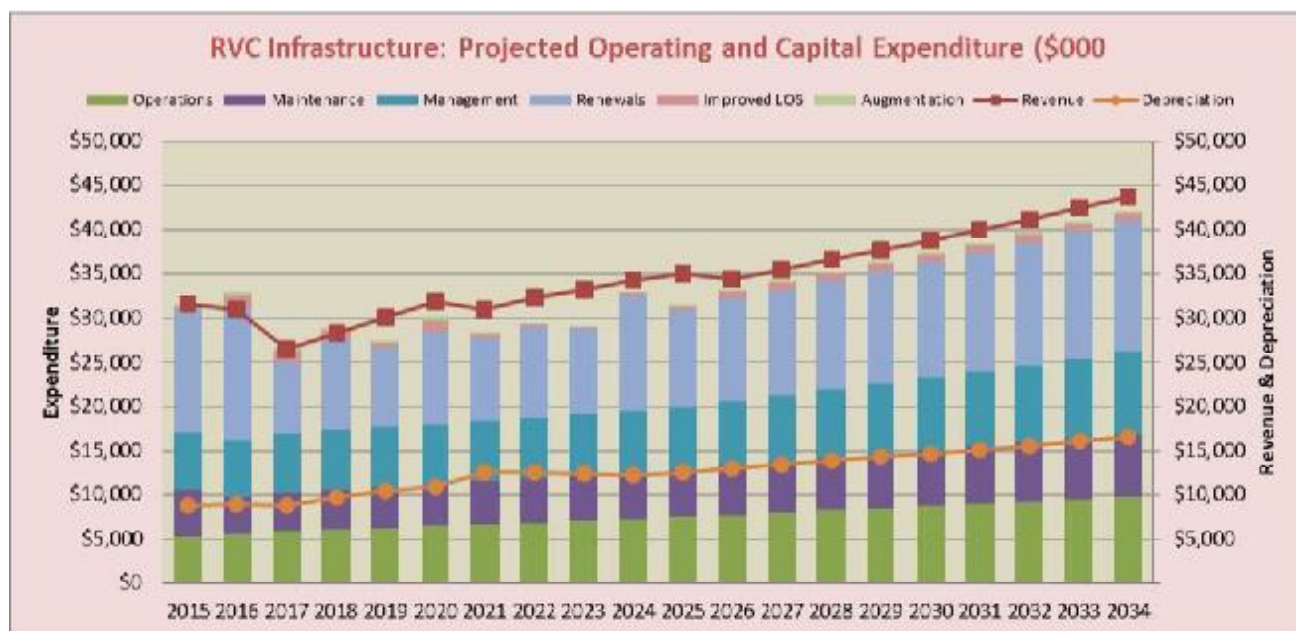


Figure 5f: Projected Operational and Capital Expenditures – RVC Infrastructure

Long Term Financial Planning

The LTFP has been prepared as a component of the Council's Resourcing Strategy and its role is to ensure the Council has a financially sustainable long term vision.

The LTFP and particularly its capacity to incorporate various scenarios for discussion with the community, is an invaluable tool in preparing Council for its current and future roles, managing community expectations and becoming financially sustainable in the long term.

Financial Sustainability

Financial sustainability is one of the key issues facing local government due to several contributing factors including cost shifting from other levels of government, ageing infrastructure and constraints on revenue growth.

Council, as an organisation, must responsibly manage its resources to ensure its long-term sustainability. This management includes not only ensuring assets be maintained but also making decisions about how to manage conflicting demands on resources, such as staff and money. The LTFP assists in developing the framework, information and service priorities to help inform those decisions.

The LTFP is a guide for future action providing the opportunity for Council to identify financial issues and their potential longer term impact as early as possible. It represents the point where long-term community aspirations and goals are tested against financial realities. It is also where Council and the community may decide what resources Council needs to fulfil its responsibilities.

Our LTFP will support our budgetary decision-making and indicates there are challenges for the future as Council strives to deliver the same level of service and maintain infrastructure.

Preparation of the Plan

The LTFP is prepared by drawing on information contained within Council's Community Strategic Plan, Delivery Program and Operational Plan in conjunction with a number of assumptions, estimates and forecasts in relation to population, revenue growth, cost increases and future economic conditions. The LTFP is accompanied by the Organisational Development Strategy and Asset Management Plans to provide a view as to how the aspirations of our community can be delivered, maintained and the financial cost of doing so.

Forecasts regarding our workforce have been identified in the Organisational Development Strategy with the challenges and financial impacts of issues such as an ageing workforce, are addressed in the LTFP through the management of the Employee Leave Entitlements Reserve.

The service levels, asset maintenance and renewal requirements outlined in the Asset Management Plan have determined the capital expenditure and maintenance expenditure components of the LTFP. The objectives of the asset management plans need to correlate with the LTFP objectives and demonstrate how Council proposes to renew and maintain its assets into the future.

Council is committed to discussions with the community regarding Long Term Financial Planning.

Alignment with Council's Delivery Program and Operational Plan

As part of the Resourcing Strategy, the LTFP needs to support and align to the actions proposed in the Delivery Program and Operational Plan. Those actions have been prepared on the basis of the direction established by the community as part of the Community Strategic Planning processes undertaken by Council.

Long Term Financial Plan Objectives

The objectives of the LTFP are to inform decision-making which responds to the community direction established via the Community Strategic Plan.

The LTFP includes projected income and expenditure, balance sheet, cash flow statements and the planning assumptions used to develop the plan. This will enable financial modelling (analysis of how different factors change the plan) to be discussed with the community and considered by Council in future decision-making.

Organisational Development

Richmond Valley Council's Organisational Development Strategy underpins our Delivery Program to ensure we have the right people, capability and culture to deliver efficient, quality services to our community.

Council is committed to developing a culture of performance and innovation to respond to the challenges that face the sector and position us as a benchmark local government organisation shaping positive change in our community and across the region.

Council has been modernising the organisation and the way we operate over the past three years, refreshing the culture and renewing structures, systems and processes to develop a winning culture and business practices to enable us to realise our commitments to the community.

Developing a high performance business

Providing an optimal structure for change and growth is one enabler of organisational performance. Council has undergone significant structural change to develop a customer facing organisation with an outcome focus. A high performing leadership team has been developed and coupled with an engaged and enabled staff the organisation stands on a strong foundation to manage change and shape a sustainable future.

Council has invested over \$1.7 million to implement an integrated Corporate Information System to improve service provision. Ongoing business improvement initiatives are in place to continually improve efficiency, effectiveness and productivity and service level reviews are conducted as part of the planning and prioritising activities in consultation with the community. Renewal of our technology systems and processes is providing quality data for informed decision-making with dashboard reporting of key performance indicators supporting management to proactively identify challenges and opportunities.

A Project Management Office and project management framework is in place to enable efficient and effective delivery of projects. This approach facilitates cross-collaboration of teams, innovation and action-learning. Within this context coaching or extracting learning and knowledge transfer from the immediate work challenges is a value added activity.

“One stop” Customer Service Centres with extended hours supports a customer focussed organisation. New call centre and customer request management systems, utilising leading edge software, ensure the community can contact Council in an efficient and effective manner.

Building capacity and capability

It is commonly understood that culture can make or break organisations. Council is building a successful culture to drive strong performance and strengthen reputation, innovation and service delivery.

Council has been refreshing the culture and promoting economic development and civic pride with a number of initiatives that align with priority strategic goals. One such initiative is our Youth Employment Strategy (YES) designed to address an aging workforce and youth unemployment by attracting local youths to develop a career at Council. In 2014/2015, 21 local high school students said “yes” to scholarships, apprenticeships and traineeships as part of the YES initiative, an ongoing strategy.

Complementing the YES initiative, Council also created employment opportunities by reducing reliance on contractors and directly employing more local people and investing in plant and equipment. In addition, Council works with community organisations and educational institutions to provide opportunities for work placements, volunteers and work experience with ongoing employment opportunities on occasion.

Developing talented individuals and teams

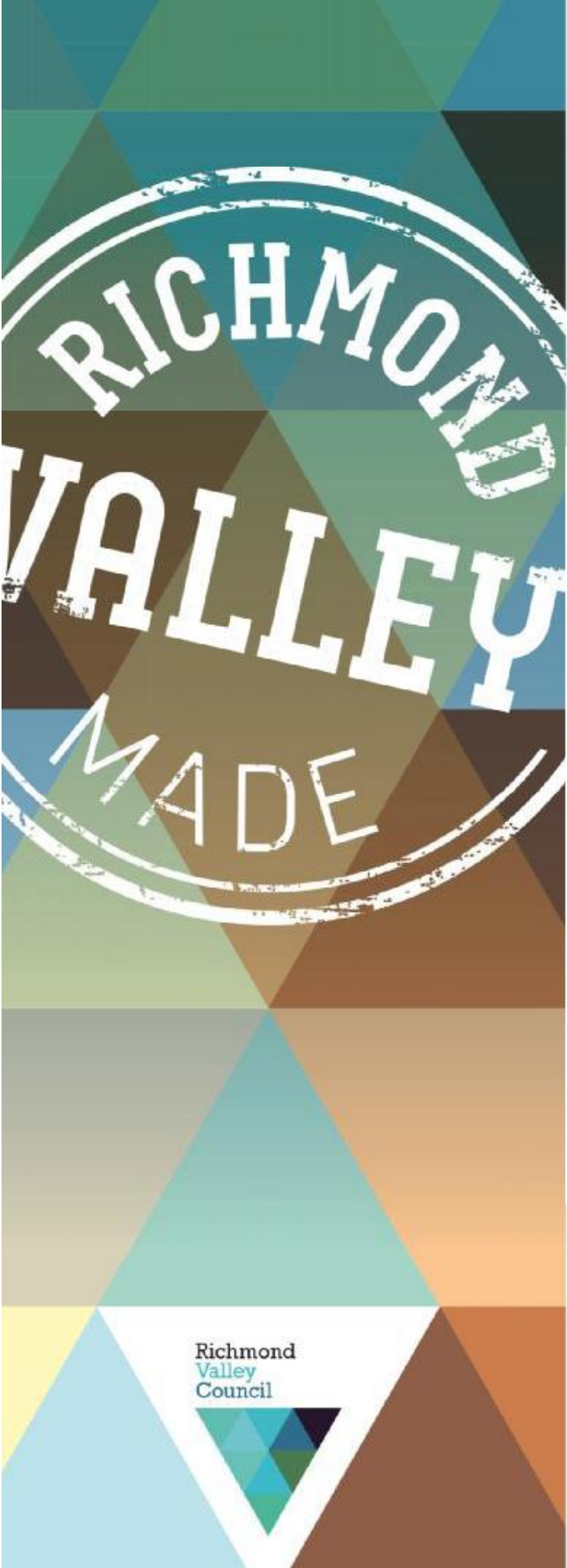
Council recognises that organisational success is based on our people’s ability to perform. Attracting and developing the right people and recognising the benefits of a diverse workforce are critical to the success of our culture. A rebranding exercise ensures we create the right impression from the outset and an extensive induction process quickly develops a good understanding and sense of engagement with Council’s business.

Council fosters an environment of learning and development and invests over \$500,000 annually for training and talent management initiatives. Formal leadership development programs focus on developing a high performance leadership group. Initiatives to develop our emerging leaders,

supported by mentoring programs, forms part of our succession plan to retain talented people and build innovation and capability into the senior leadership team.

Improving our service

Council must continually adapt to meet the changing service expectations of the community whilst achieving efficiency savings across Council. This requires an ongoing review and scrutiny of all Councils operations. Operating in an environment of change is now the norm and developing an adaptable and flexible culture will enable us to respond to the need for continual improvement and sustain a high performing organisation.

The logo features a circular emblem with the words "RICHMOND VALLEY MADE" in a white, distressed, sans-serif font. The emblem is set against a background of overlapping triangles in various shades of teal, green, and brown. Below the emblem, the Richmond Valley Council logo is visible, consisting of a stylized triangle made of smaller triangles in blue, green, and brown, with the text "Richmond Valley Council" above it.

Appendix A Asset Management Plan 2015-2025

Consolidated Results

Customer Service. Initiative. Teamwork. Communication. Reliability. Accountability.



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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Executive Summary	4
Introduction.....	6
Asset Values	6
Depreciation Methodology	7
Levels of Service	8
Demand Management.....	9
Background Data.....	9
Physical Parameters.....	10
Asset Planning.....	10
Asset Conditions.....	13
Financial Summary	14

Executive Summary

This consolidated Asset Management Plan (AMP) provides a general snapshot of financial and asset management practices for Council. More detailed assessments are provided in the five AMP's for each asset class (Buildings, Roads, Drains, Sewer and Water) and are supplemented by a general overview of best practice asset care principles.

Council is predicted to perform favourably over the 10 year outlook. Infrastructure assets on average have a remaining useful life of 55% of their expected design lives and 82% remaining service potential (measured as Written Down Value divided by Current Replacement Cost). This reflects modified depreciation patterns which have been developed to more accurately match the consumption profiles of long life assets.

Council's infrastructure assets are grouped into general fund assets (Buildings, Land Improvements, Roads and Drainage) and Water Utilities (Water and Sewer). This approach is consistent with consolidated reporting requirements. These planning documents integrate Council's budget, Long Term Financial Planning (LTFP) and asset management processes. This results in detailed and integrated modelling which produces consistent predictions for all three processes and provides better information for executive decision making consideration.

A focus of Council is the long term care and preservation of infrastructure which ultimately involves consideration between affordability and the Level of Service (LoS) of assets. These AMPs demonstrate a balance of financial and asset management objectives as a whole. This is achieved via the approved Special Rates Variation (SRV) scheme allowing increased resourcing capacity for the first block of five years and 1.6% above CPI rates indexation for the second block of five years.

With \$703 Million worth of Infrastructure, Council has an annual bill of \$30 million for the operation and care of assets that contribute towards the community. Funding for asset programs is a mix of own source revenues, grants and contributions, debt instruments and the flows of capital to and from restricted reserves. Overall financial health or Asset Management Financial Indicator measures resource capacity (funding availability) versus the resourcing requirements to deliver infrastructure services. Councils measure of 1.04 is healthy.

Executive Summary - What Does it Cost? (\$000)		10 Yr
10 Year total (Ops, Maint, Renewal Upgrades)		\$298,189
10 Year Average Cost		\$29,819
10 Year Total LTFP budget		\$312,279
10 Year Average LTFP Budget		\$31,228
10 Year AM Financial Indicator		105%
10 year average net improvement		\$1,409

The Asset Renewal Funding Ratio is an indicator of infrastructures long term stability. An ideal indicator is 1.0, therefore Councils indicator of 1.01 is favourable. Council's general fund has a renewables measure of 1.03 with the important measure of road quality, 0.76 for Buildings and Other Structures and 0.51 for Drainage network. The Water network has a Renewables Ratio of 0.99 and the Sewer networks measure is 0.96, resulting in an infrastructure renewables ratio of 1.01. This

means that Council is replacing the service potential of infrastructure at a rate slightly greater than it is being consumed.

Another critical indicator is the Bring to Satisfactory (BTS) measure which should be less than 2% of the asset network. This represents Council's capacity to manage infrastructure risk, which is the prevention of failure for critical assets through an adequately funded renewables program. Council has a BTS measure of 0.06 for the Stormwater drainage network and a BTS measure of 0.0 for the other networks and 0.0 for the whole infrastructure network.

An integrated planning approach increases the level of maturity in aligning financial movements across the disciplines of financial forecasting, long term planning and the renewing of assets. This approach increases the confidence of works planning and delivery.

General observations for RVC's infrastructure include:

- Ø Number of Assets - 68,371.
- Ø Current Replacement Cost of asset base - \$703 million.
- Ø Annual depreciation - \$8.3 million.
- Ø Depreciated Replacement Cost \$580 million, 82% of the fair values, reflecting high residual values and modified depreciation schedules for long life assets.
- Ø 57% of all assets have a condition rating of 1 or 2.
- Ø 23% of assets have a condition rating of 3, while 20% of assets have deteriorated to conditions 4 or 5.

Introduction

The provision and care of long life assets requires an integrated approach to the financial and planning perspectives of Infrastructure networks. This is driven by community expectations for reliability, timeliness, safety and the surety of general services that support modern society. Council is entrusted with community resources to operate and care for long life assets and to provide the best value by managing these assets.

Infrastructure is capital intensive and therefore requires a principled and professional approach to its planning, building, operation and the ongoing management of the assets. Financial capacity is an element of community expectations and the affordability through rates and user charges. Council demonstrates prudent management through supporting funding mechanisms to coordinate the long term affordability of cyclical infrastructure needs.

To achieve this, Council needs an understanding of the key factors influencing the resourcing costs of infrastructure based services. These include community aspirations, future demand factors, regulatory practices and a clear knowledge of asset deterioration rates which reduce the service potential of infrastructure networks. Therefore, good stewardship demonstrates the ability to respond to immediate and future needs, to reduce infrastructure risk to an acceptable level and to understand the financial issues by regulating the monetary flows through sound fiscal management.

Asset Values

The worth or value of an asset must reflect its remaining service potential. This presents some contention as key attributes like design life, remaining useful life, residual value, asset condition and pattern of consumption are subjective and only become more accurate as long lived assets reach the latter stages of their lifecycle. Many of Council's assets are considered as complex assets (that is assets like a road will have components with vastly different attributes). Therefore Council will componentise a road into a road seal, pavement structure and base earthworks. Residual value is a measure of an assets structure that can be reused when the asset is renewed. Historical evidence provides the best indication of complex asset attributes, however judgements vary based on differing conditions for each local government area.

Accounting standards stipulate an accruals basis for revenues and expenses which requires professional judgement to estimate non-cash expenses like depreciation. Straight line depreciation is the easiest to apply and understand, however Council has adopted a convex depreciation curve approach based on research from CPA Australia and APV Australia (Council's independent professional valuer). This method as discussed below meets the criteria for audit opinion and in managements view reflects the pattern of consumption for local assets.

This approach increases the complexity of planning and management decisions, but when backed by mature asset management systems it provides a more reflective and accurate assessment of Council's future asset management needs. It is supported by Council's integrated approach to financial and asset planning which provides good evidence for the care and preservation of asset networks, and based on frequent reviews (Council's four year fair valuation cycle) will continue to refine the subjective nature of professional judgements as complex assets age.

Depreciation Methodology

Estimations for future depreciations are a key factor when considering the financial and capital planning aspects within Council's integrated planning approach. Council engages independent and qualified valuers to determine the fair value of land, infrastructure and major plant on a regular basis (IAW AASB 13 Fair Value and AASB 116 Property Plant and Equipment).

The main inputs used to derive fair values are the condition of assets and their pattern of consumption. The Commercial valuers use professional judgment to observe the condition of assets (a sampling approach in combination with the accuracy of data and internal controls used in Council's asset information system). Figure 1 illustrates the consumption profile of a long life asset.

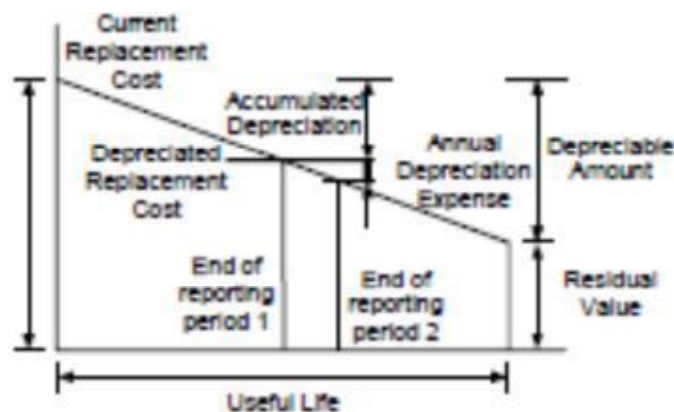


Figure 1: Depreciation Profile for Long Lived Assets

IAW AASB 116, the depreciation of complex assets determines the:

- Ø Current replacement cost (CRC) - the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset with the same economic benefits or service potential,
- Ø Depreciable Amount (DA) - CRC for depreciable assets less residual value (RV),
- Ø Depreciated Replacement Cost (DRC) - CRC less accumulated depreciation, and
- Ø Asset valuations - the methodology the valuer adopted a modified depreciation pattern results in asset valuations as a percentage (DRC/CRC) being higher than the age percentage (RUL/Useful Life).

Paragraph 60 of *IAW AASB 116* allows depreciation assumptions to reflect the most appropriate pattern of consumption for an entities asset.

For long lived assets, Council estimates asset consumption (depreciation) based on either low, moderate, high or extreme pattern. This reflects the consumption of these assets which retain their serviceability for longer periods, therefore declining at an increasing rate towards the end of the useful life. The following table shows the relationship between asset condition, the period for each condition and the different patterns of consumption.



The rate of consumption is a primary factor influencing economic and resource planning and the effectiveness of services delivered from infrastructure. Council's approach to asset consumption is mature and complex. It demonstrates a sound knowledge of current and medium term operational and asset care requirements. It does however require a closer focus on predicting longer term needs.

Modified depreciation patterns utilise a higher level of complexity to calculate the physical depreciation of assets based on their expected lifecycles, their point on the depreciation curve and their rate of consumption. Council's integrated approach to financial management and asset care has produced the best evidence for future financial planning.

Long life assets have modified depreciation schedules reflecting reduced consumption patterns in earlier years and increasing consumption as the asset integrity declines towards end of useful life.

Levels of Service

Technical LoS is a function of ongoing serviceability (Operations, Maintenance and Administration (OMA)) and renewing of depleted assets. Council factors 60% of budget for OMA or serviceability costs (\$199.3 million), 37% for renewing depleted assets (\$121.4 million) and 4% for building new assets (\$11.9 million) over the LTFP. Total program depreciation of \$120 million and total asset End of Life assets \$70 million results in a renewals ratio of 1.01 and a Bring to Satisfactory (BTS) ratio of 0.0.

Table 1 shows the technical LoS expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and the evaluation of service levels performance, costs and risk management of resources available in the LTFP.

Infrastructure \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
Buildings	\$16,675	\$3,099	\$94,668	\$9,004	\$21,659		0.77
Roads	\$62,282	\$4,077	\$390,813	\$32,206	\$51,565		1.21
Sewer	\$24,238	\$1,583	\$134,056	\$17,851	\$26,592		0.91
Drains	\$3,493	\$355	\$35,532	\$5,653	\$6,908	0.06	0.51
Water	\$13,435	\$1,276	\$95,709	\$5,349	\$13,445		1.00
Infrastructure	\$120,123	\$10,390	\$750,777	\$70,064	\$120,169		1.00
General	\$82,450	\$7,531	\$521,013	\$46,864	\$80,132		1.03

Table 1: Infrastructure Levels of Service

Demand Management

Opportunities identified for demand management include monitoring community expectations to determine LoS and analysing costs to match the community's long term affordability. There is a gap between community aspirations and their willingness to pay for services. It is the responsibility of Council to articulate the evidence presented in asset and financial planning, therefore managing this expectations gap.

Financial results from best practices applied to Infrastructure management identify that 92% of capital expenditure will be required to maintain the existing network of assets. The remaining 8% or \$10.3 million has been allocated for new and improved services (see table 2).

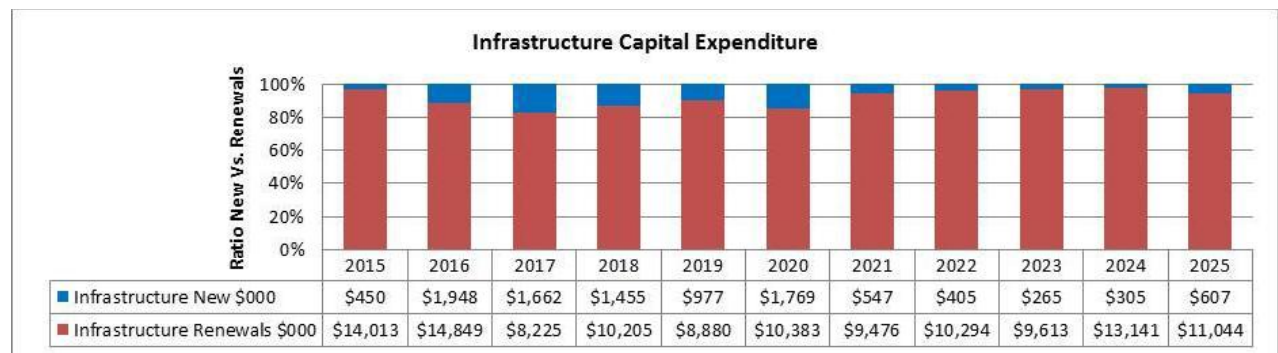


Table 2: New Assets from Growth

Background Data

Council maintains five classes of infrastructure assets (Table 3) consisting of 68,371 unique assets with a Fair Value Current Replacement Cost (CRC) of \$703.5 million and a Depreciable Replacement Cost (DRC) of \$463.3 million. Other interesting attributes include Roads and Traffic Management assets spanning 2,886 kilometres and 1579 kilometres of pipes for water, sewerage and stormwater drainage requirements. Council provides 521 kilometres of sealed roads and 546 kilometres of unsealed roads.

Type	No Of Assets	New	Age	RUL	Distance m	Area sqm	Age %	Value %
Buildings	2,144	0	19	23	0		50%	80.1%
Roads	22,637	183	17	23	2,885,982	13,882,056	57%	84.5%
Drains	6,411	0	37	41	78,596		52%	70.6%
Sewer	13,630	1,126	39	38	1,277,349		50%	81.3%
Water	23,549	700	18	38	222,793		68%	84.6%
Land	495							
Total	68,866	2,009	129	163	4,464,720	13,882,056	55%	83%

Type	Opening CRC	Reval	Additions	Annual Dep	Closing CRC	Depr Amoun	Accum Dep	WDV
Buildings	87,260	638	2,469	1,397	90,367	60,344	18,010	72,357
Roads	348,907	10,744	2,487	4,569	362,138	186,374	56,220	305,918
Drains	45,285	2,147	0	546	47,432	47,432	13,938	33,494
Sewer	109,697	3,480	8,465	1,056	121,641	100,321	22,686	98,955
Water	77,110	2,624	2,203	767	81,937	68,779	12,599	69,338
Land	45,669	-1,118			44,551			44,551
Total	713,927	18,515	15,623	8,335	748,065	463,250	123,452	624,613

Table 3: Asset Statistics

Physical Parameters

The age profile of infrastructure assets shows that significant construction took place in the post-World War 2 time period. It is likely that much of this infrastructure may be well through its useful life, and will require renewal in the near future. The profile also indicates that the age data on infrastructure requires development/investigation. Figure 2 examines the data by time periods.

Asset Construction (CRC \$000)	Pre 1970s	1970s	1980s	1990s	2000s	Total
Buildings	\$15,643	\$12,595	\$16,351	\$9,431	\$36,347	\$90,367
Roads	\$37,542	\$23,141	\$43,856	\$133,350	\$124,249	\$362,138
Sewer	\$43,151	\$2,645	\$6,411	\$25,203	\$44,230	\$121,641
Drains	\$13,727	\$12,230	\$7,328	\$5,837	\$8,311	\$47,432
Water	\$10,757	\$11,002	\$25,962	\$12,696	\$21,519	\$81,937
Total	\$120,819	\$61,614	\$99,908	\$186,518	\$234,656	\$703,515

Figure 2 Asset Construction Data (\$000)

The majority (60%) of Infrastructure Assets have been constructed in the last 25 years. This provides some assurance that the networks are reasonably sound. The age profile of each asset class is shown in Figure 3.

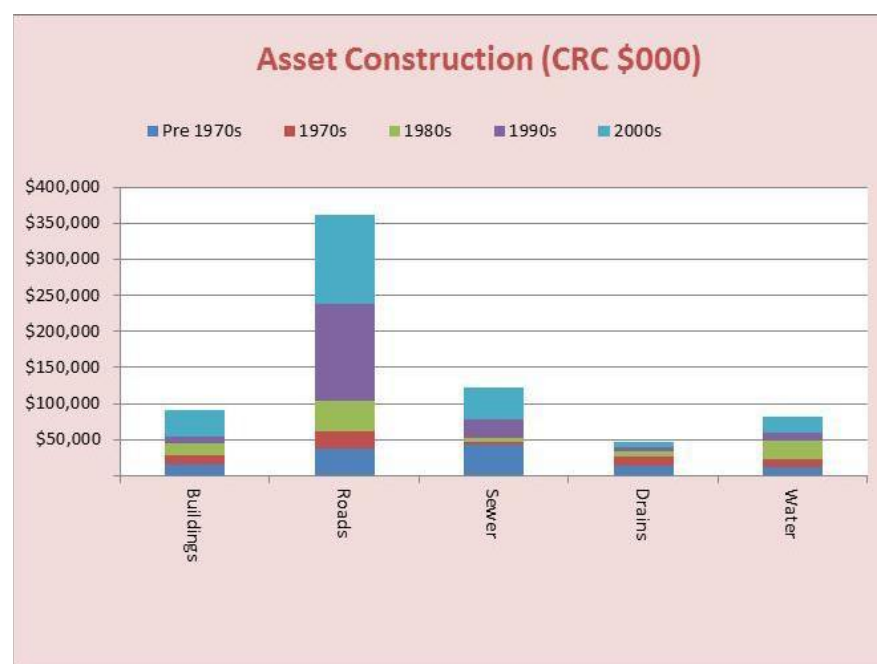


Figure 3: Asset Age Profile

Asset Planning

Planning future works relates directly to renewals due and resourcing capacity. Over the LTFP period Council estimates \$32.2 million of road assets requiring renewal and has allocated 1.74 times this amount to allow for contingencies, unexpected works and cost increases. The following tables display financial movements for EOL Disposals, Renewals and Depreciation values (000s) for each asset program this current LTFP. These tables produce the key BTS and Renewals Ratios.

Council demonstrates a mature and integrated approach towards budget development, LTFP and capital works planning. This approach is influenced by best practice management and the future sustainability of Council businesses. Council's asset and financial planning primary consideration includes replacement of end of life assets represented as a BTS ratio and the preservation of assets represented as a Renewals Ratio.

The following tables provide a time series for EOL disposal values and depreciation values which measures the consumption of assets. The table with capital renewals presents Councils approach to achieving benchmark ratios of less than 0.02 for BTS and 1.0 for asset renewals. The series of written down values represents remaining service potential in network assets.

Infrastructure EOL \$000	2015 Disp	2016 Disp	2017 Disp	2018 Disp	2019 Disp	2020 Disp	2021 Disp	2022 Disp	2023 Disp	2024 Disp	2025 Disp	Total
Buildings				\$3	\$10	\$436		\$303	\$157	\$444	\$46	\$1,399
Roads	\$609	\$1,380	\$1,797	\$617	\$1,651	\$1,371	\$6,394	\$3,298	\$9,699	\$1,786	\$3,604	\$32,206
Sewer	\$7,083	\$142	\$109	\$12		\$52	\$16		\$4,330	\$3,653	\$2,455	\$17,651
Drains	\$2,795	\$45				\$10		\$7	\$1,224	\$1,572	\$1	\$5,653
Water	\$62	\$65	\$173	\$17	\$128	\$462	\$96	\$14	\$446	\$3,349	\$536	\$5,349
Total	\$10,549	\$1,631	\$2,078	\$649	\$1,788	\$2,332	\$6,507	\$3,622	\$15,855	\$10,805	\$6,642	\$62,459

Table 4.1: Capital End of Life Disposal Values (\$000)

Infrastructure Renewals \$000	2015 Add	2016 Add	2017 Add	2018 Add	2019 Add	2020 Add	2021 Add	2022 Add	2023 Add	2024 Add	2025 Add	Total
Buildings	\$3,745	\$4,947	\$661	\$1,117	\$775	\$458	\$702	\$880	\$940	\$1,126	\$1,324	\$16,675
Roads	\$6,422	\$4,492	\$4,533	\$4,962	\$5,530	\$5,512	\$5,633	\$6,096	\$6,084	\$6,309	\$6,710	\$62,282
Sewer	\$2,005	\$3,910	\$1,871	\$2,511	\$1,501	\$3,235	\$1,489	\$2,023	\$1,185	\$3,057	\$1,451	\$24,238
Drains	\$305	\$100	\$190	\$200	\$200	\$263	\$332	\$375	\$484	\$529	\$514	\$3,493
Water	\$1,535	\$1,400	\$970	\$1,415	\$875	\$915	\$1,320	\$920	\$920	\$2,120	\$1,045	\$13,435
Total	\$14,013	\$14,849	\$8,225	\$10,205	\$8,880	\$10,383	\$9,476	\$10,294	\$9,613	\$13,141	\$11,044	\$120,123

Table 4.2: Capital Renewals Values (\$000)

BTS communicates the quantum of assets that are at risk or require immediate attention to restore their serviceability. With Council implementing professional revaluations on a five yearly cycle, Councils control systems have dependable data on the current state of assets. Therefore calculation of BTS is a simple calculation of the total value of EOL assets in year (x) less the value of renewals in that year compared to the total WDV of the asset class.

The Renewables Ratio communicates the preservation of asset integrity. Asset consumption as measured by depreciation reflects the loss of future service potential in infrastructure assets. In accordance with AASB 116 p60, Council estimates asset consumption most closely reflecting real life deterioration rates. This increases the complexity of financial calculations and will ultimately focus attention on best practice maintenance and renewals programs to preserve asset integrity.

An ideal renewables ratio is 1.0. This simply means that the value of renewables in year (x) matches the consumption of asset in that year. The LTFP process has focused on a sustainable asset position at the end of 10 years across all community assets. This is reflected in improving Renewables Ratios each year. For the LTFP period RVC Infrastructure has a renewables ratio of 1.03.

Infrastructure Depreciation \$000	2015 Dep	2016 Dep	2017 Dep	2018 Dep	2019 Dep	2020 Dep	2021 Dep	2022 Dep	2023 Dep	2024 Dep	2025 Dep	Total
Buildings	\$1,475	\$1,521	\$1,606	\$1,710	\$1,779	\$1,927	\$2,074	\$2,233	\$2,376	\$2,445	\$2,513	\$21,659
Roads	\$4,731	\$4,666	\$4,278	\$4,578	\$4,742	\$4,743	\$4,905	\$4,534	\$4,601	\$4,831	\$4,957	\$51,565
Sewer	\$1,292	\$1,397	\$1,507	\$1,801	\$2,313	\$2,515	\$3,384	\$3,455	\$3,165	\$2,962	\$2,801	\$26,592
Drains	\$535	\$550	\$564	\$578	\$593	\$609	\$703	\$731	\$635	\$655	\$757	\$6,908
Water	\$788	\$858	\$928	\$1,049	\$1,085	\$1,168	\$1,431	\$1,614	\$1,588	\$1,435	\$1,501	\$13,445
Total	\$8,821	\$8,992	\$8,882	\$9,717	\$10,512	\$10,961	\$12,497	\$12,566	\$12,365	\$12,327	\$12,529	\$120,169

Table 4.3: Capital Depreciation Values (\$000)

Infrastructure WDV \$000	2015 WDV	2016 WDV	2017 WDV	2018 WDV	2019 WDV	2020 WDV	2021 WDV	2022 WDV	2023 WDV	2024 WDV	2025 WDV	Total
Buildings	\$76,086	\$82,471	\$84,349	\$86,249	\$87,392	\$88,103	\$88,878	\$89,711	\$90,489	\$91,389	\$92,446	\$92,446
Roads	\$313,593	\$319,596	\$326,228	\$333,182	\$341,082	\$348,534	\$356,084	\$364,610	\$373,097	\$381,737	\$390,813	\$390,813
Sewer	\$102,426	\$107,884	\$111,268	\$115,094	\$117,504	\$122,879	\$124,425	\$126,477	\$128,038	\$131,718	\$134,056	\$134,056
Drains	\$32,130	\$32,381	\$32,623	\$32,855	\$33,076	\$33,350	\$33,603	\$33,906	\$34,389	\$34,961	\$35,532	\$35,532
Water	\$72,026	\$74,550	\$77,071	\$80,095	\$82,128	\$84,175	\$86,612	\$88,344	\$90,149	\$93,359	\$95,709	\$95,709
Total	\$596,262	\$616,882	\$631,540	\$647,474	\$661,183	\$677,040	\$689,602	\$703,047	\$716,162	\$733,164	\$748,555	\$748,555

Table 4.4: Capital Written Down Values (\$000)

Asset Renewal (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050s	Total
Buildings	\$2,929	\$10,778	\$20,364	\$11,548	\$14,725	\$60,344
Roads	\$11,905	\$26,720	\$13,676	\$61,793	\$72,280	\$186,374
Sewer	\$5,686	\$17,264	\$13,075	\$20,459	\$43,838	\$100,321
Drains	\$318	\$5,609	\$4,598	\$12,909	\$23,998	\$47,432
Water	\$246	\$5,615	\$9,553	\$9,045	\$44,319	\$68,779
Total	\$21,084	\$65,986	\$61,266	\$115,754	\$199,160	\$463,250

Table 4.5: Predicted Capital Renewals (\$000)

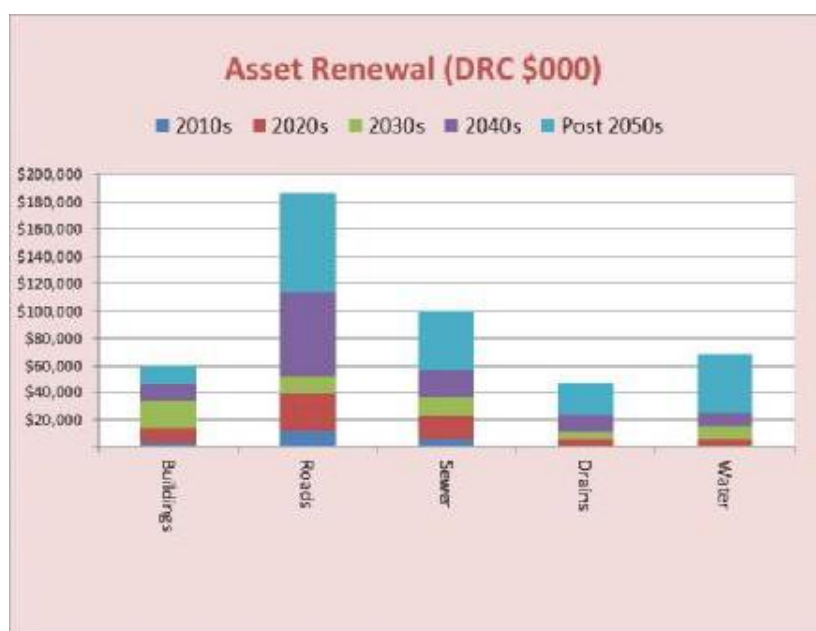


Figure 4: Asset Renewals Profile

Asset Conditions

Council has moved to independent fair value valuations of asset networks across a five yearly cycle. Road and Traffic Management were valued in 2013 and coincided with modified consumption profiles for long lived assets. Stormwater assets were revalued in 2014 and Land and Building assets in 2015.

The condition profile of Infrastructure assets is shown in Figure 5. 57% of council assets have a current condition rating of 1 or 2, while 19.7% have condition ratings of 4 or 5 indicating a network in reasonable condition.



Figure 5: Asset Condition Rating Profile



Figure 6: Asset Condition Rating Profile

Financial Summary

Council's infrastructure program is funded by a mix of special grants and contributions and funding from the consolidated general fund. Operating expenditure (OpEx) includes Operations, Maintenance and Management Activities (OMA). Capital expenditure (Capex) includes renewals program, improved LoS programs and augmentation programs. The following table and graphic illustrate financial movements across Councils infrastructure networks.

Table 4.6 provides a summary of cash flows for 20 years. Cash flow predictions are based on current business expectations with 3% indexation for revenue and expense streams beyond the LTFP. Annual operating expenditure (OpEx) includes operations, maintenance and management activities (OMA). Capital expenditure (Capex) includes renewals program, improved LOS programs and augmentation programs.

Funding for the roads program includes operating budgets, capital grants and contributions and internal transfers from the general fund. This means a shortfall is balanced transfer from restricted assets and a surplus will result in a transfer to restricted assets. For the next 10 years the roads program will require \$8.4 Million from restricted funding to achieve desired LoS.

Asset Lifecycle profiles for Roads and Traffic Management is shown in Figure 4.6, this illustrates the flow of funds for operating and capital expenditures over the forward period. The balance of funding for Roads and Traffic Management represents transfers from the general reserve fund. Annual consumption of assets (depreciation) is shown on the right axis.

Values (\$000)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	\$31,552	\$31,068	\$26,619	\$28,408	\$30,074	\$31,870	\$31,046	\$32,425	\$33,202	\$34,329
Operations	\$5,296	\$5,569	\$5,866	\$6,056	\$6,257	\$6,463	\$6,670	\$6,882	\$7,101	\$7,326
Maintenance	\$5,269	\$4,282	\$4,409	\$4,499	\$4,656	\$4,752	\$4,871	\$4,989	\$5,107	\$5,234
Management	\$6,525	\$6,367	\$6,640	\$6,843	\$6,777	\$6,849	\$6,854	\$6,913	\$7,057	\$6,948
Depreciation	\$8,821	\$8,992	\$8,882	\$9,717	\$10,512	\$10,961	\$12,497	\$12,566	\$12,365	\$12,327
Renewals	\$14,013	\$14,849	\$8,225	\$10,205	\$8,880	\$10,383	\$9,476	\$10,294	\$9,613	\$13,141
Improved LOS	\$338	\$1,461	\$1,247	\$1,091	\$733	\$1,327	\$410	\$304	\$199	\$229
Augmentation	\$113	\$487	\$416	\$364	\$244	\$442	\$137	\$101	\$66	\$76
Program Position	0	1,947	2,129	2,780	252	1,401	4,029	6,969	11,028	12,403
Values (\$000)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	\$35,109	\$34,513	\$35,549	\$36,615	\$37,714	\$38,845	\$40,011	\$41,211	\$42,447	\$43,721
Operations	\$7,571	\$7,772	\$8,006	\$8,246	\$8,493	\$8,748	\$9,010	\$9,281	\$9,559	\$9,846
Maintenance	\$5,377	\$5,553	\$5,719	\$5,891	\$6,068	\$6,250	\$6,437	\$6,630	\$6,829	\$7,034
Management	\$7,013	\$7,371	\$7,592	\$7,820	\$8,054	\$8,296	\$8,545	\$8,801	\$9,065	\$9,337
Depreciation	\$12,529	\$13,078	\$13,470	\$13,875	\$14,291	\$14,719	\$15,161	\$15,616	\$16,084	\$16,567
Renewals	\$11,044	\$11,572	\$11,919	\$12,277	\$12,645	\$13,025	\$13,415	\$13,818	\$14,232	\$14,659
Improved LOS	\$455	\$778	\$802	\$826	\$851	\$876	\$902	\$929	\$957	\$986
Augmentation	\$152	\$259	\$267	\$275	\$284	\$292	\$301	\$310	\$319	\$329
Program Position	15,899	17,106	18,350	19,631	20,950	22,309	23,708	25,150	26,635	28,164

Table 4.6: Projected Operating and Capital Expenditure

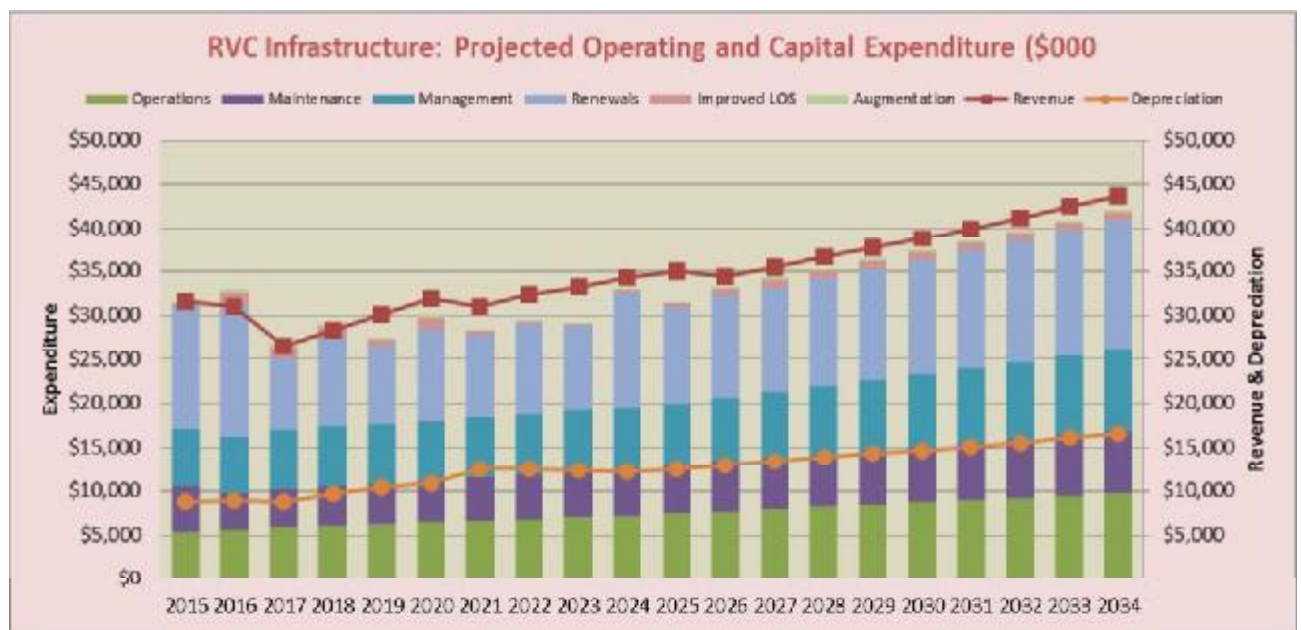


Figure 7: Projected OpEx and Capex (\$000)



Appendix B

Asset Management Plan

2015-2025

Buildings and Other
Structures

Customer Service. Initiative. Teamwork. Communication. Reliability. Accountability.



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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Executive Summary.....	4
1. Introduction	5
1.1 Asset Management Plan.....	5
1.2 Background.....	6
Objectives of Asset Management	6
2. Service Levels	8
2.1 Developing Levels of Service.....	9
Community Levels of Service	9
Technical Levels of Service	10
2.2 Customer Research and Expectations	11
2.3 Key Assumptions made in Financial Forecasts.....	13
Forecast Reliability and Confidence	13
3. Future Demand	14
3.1 Demand Management Plan.....	14
3.2 Demand Management Plan.....	15
4. Lifecycle Management Plan	16
4.1 Background Data.....	16
4.2 Physical Parameters.....	17
Asset Renewals	18
4.3 Asset Conditions	22
4.4 Financial Summary	24
4.5 Sustainability of Service Delivery	25
Long term - Life Cycle Cost.....	25
Medium term – 10 year financial planning period.....	26
Medium Term – 5 year financial planning period.....	26
Long Term Financial Plan Works Program.....	26
5. Risk Management	27
6. Plan Improvement and Monitoring	27
6.1 Accounting Standards and Regulations	27
6.2 Asset management system	28
Required changes to asset management system arising from this AM Plan	28
7. References.....	30

Executive Summary

This Total Asset Management Plan addresses the responsible management of medium term operational and capital works necessary to comply with legal and regulatory frameworks and to achieve agreed Buildings and Other Structures program performance levels. The objective is to provide reliable networks that contribute towards the social, economic and environmental indicators of a regional hub. An asset plan is a crucial element of the strategic planning process providing cascading outcomes that align with strategic plans.

Council's Buildings and Other Structures program is predicted to perform satisfactorily over the 20 year horizon. Buildings and Other Structures network assets on average have a remaining useful life 50% of their expected lifecycles. Total revenues equal \$42.7 million, operating and management expenses equal \$22.9 million and capital works equal \$19.7 million. The Asset Renewal Funding ratio is a critical indicator of the Buildings and Other Structures programs long term stability, an ideal indicator is 1.0; therefore RVC's indicator of 0.77 is marginal.

Executive Summary - What Does it Cost? (\$000)	10 Yr
10 Year total (Ops, Maint, Renewal Upgrades)	\$38,973
10 Year Average Cost	\$3,897
10 Year Total LTFP budget	\$38,973
10 Year Average LTFP Budget	\$3,897
10 Year AM Financial Indicator	100%
10 year average net improvement	\$0

General observations for the local Building and Other Structures unit include:

- Ø Number of Assets - 2,144.
- Ø Current Replacement Cost of asset base - \$90.4 million.
- Ø Depreciated Replacement Cost \$60 million, 67% of the fair values, reflecting high residual values and modified depreciation schedules for long lived assets.
- Ø Annual depreciation - \$1.4 million
- Ø Percentage of assets with condition rating of 1 or 2 is a satisfactory at 58%.
- Ø Percentage of network assets due for renewal in next 10 years is 21%.

The Buildings and Other Structures program competes with Road and Stormwater assets for funding. The current budget and Long Term Financial Planning process focused attention on roads infrastructure which impacts the resourcing available for Buildings and Other Structures assets.

1. Introduction

The Richmond Valley is located in the Northern Rivers region of North East NSW, 726 km north of Sydney and 228 km south of Brisbane. Located on the banks of the Richmond River the region supports a variety of agricultural industries, primarily beef, sugar cane and wheat. Richmond Valley Council was formed in February 2000 as the result of amalgamation between Casino Council and Richmond River Shire Council.

Council spreads across 3,050 square kilometres with six townships. Major urban areas are Casino and Evans Head and the villages are Woodburn, Coraki, Broadwater, Rileys Hill and Rappville. As at 2011, the resident population was 22,700 persons with a skew towards blue collar occupations. Richmond Valley is preparing to be one of the fastest growing areas in regional NSW with economic stimulus emerging from natural resource discoveries (uncertainty surrounds coal seam and natural gas developments).

The Region is expected to experience population growth (0.51% pa), decreasing occupancy rates and an ageing population. The number of dwellings in the Council LGA is expected to increase from 9,150 in 2011 to 10,750 in 2031, an increase of 1,600 dwellings at an average growth rate of 0.81% p.a.

Richmond Valley is in a sub-tropical area, characterised by hot humid summers and mild winters. Average rainfall ranges from 1,650 mm along the coast strip, to less than 1,025 mm over inland areas. The LGA is prone to natural disasters having had five Natural Disaster Declarations since 2009. Council is located on a flood plain and heavy rainfall can trigger flood events, while climate change and rising sea levels impact coastal areas and increase unpredictability.

The Richmond Valley is a region of balance where every individual, family and business has the opportunity to be successful.; It is an attractive place to live and play but as with most rural centres struggles to compete with the employment opportunities of the capital cities. This is reflected with a general decline of the working age cohort and professional occupations but does experience a large retiree and tree change population. This is consistent with the ALGA State of the Regions stylised fact number five that applies to the majority of LGA's.

The major issues facing Council generally include prosperity and economic development for individuals and the region. The community is engaged in the longer term prospects for the region with a focus on financial management and the provision of quality infrastructure networks. Council and the local business chamber are aligned in their purpose to provide employment, opportunities and lifestyle for the people of the Richmond Valley.

Timber and forestry and the associated production and manufacturing industries are creating strong demand for industrial development. A 58 hectare industrial development at North Casino (Intermodal Freight Handling Facility) has been approved by Council. Other major developments include coal seam methane gas fields and reticulation as a "green" energy source and an electrical power plant in the Casino area.

1.1 Asset Management Plan

An Asset Management Plan (AMP) provides understanding of the options, risks and consequences associated with managing large scale infrastructure, having an articulated basis for community engagement, expectations, priorities, funding levels and the related trade-offs and a strong understanding of the capital, operating and maintenance expenditures to be incorporated into the long term strategic planning process.

Planning assists Council to deliver services derived from a network of infrastructure assets including transport, recreation, stormwater drainage, community buildings, water supply and sewerage. The *Local Government Act 1993* requires NSW Councils to prepare asset management plans and annual reports.

1.2 Background

This plan demonstrates responsive management of Buildings and Other Structures, associated services, compliance with regulatory requirements, and to communicate the funding needed to provide the required levels of service over a 10 year planning period.

This plan is to be read with the Council's Strategic Plans, Business Continuity Plan, Risk Management, Long Term Capital Works Plan and Community Strategic Plan.

Objectives of Asset Management

Council exists to provide long-term quality services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our vision is:

We will ensure the Richmond Valley is well positioned for the future – socially, environmentally and economically, with all the right ingredients to be a primary regional hub in NSW.

Our mission is:

To develop and operate infrastructure networks that supports the fabric of a modern vibrant society. Our aim is to provide reliable networks that build trust and dependency not only within their network, but also between one network and another network.

Our goal is:

In managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Ø Providing a defined level of service and monitoring performance;*
- Ø Managing the impact of growth through demand management and infrastructure investment;*
- Ø Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service;*
- Ø Identifying, assessing and appropriately controlling risks; and*
- Ø Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.*

Key elements of this plan are:

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

Legislation	Requirement
Local Government Act	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.
Public Works and Procurement Act 1912	Sets out the role of the Department of Water and Energy (DWE) and Department of Commerce in the planning and construction of new assets.
Heritage Act, 1977	An Act to conserve the environmental heritage of the State. Several properties are listed under the terms of the Act and attract a high level of maintenance cost, approval and monitoring.
Environmental Planning and Assessment Act 1979	An Act to institute a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Work Health and Safety Act 2011 and Workers Compensation Act 1987	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work and covering injury management, emphasising rehabilitation of workers particularly for return to work. Council is to provide a safe working environment and supply equipment to ensure safety.
Public Health Act 2010	An Act relating to the maintenance of proper standards of health for the public. Council operations need to be carried out in a manner that protects public health.
Independent Pricing and Regulatory Tribunal Act 1992	The Act empowers the Independent Pricing and Regulatory Tribunal (IPART) which sets principles and guidelines related to charging for water supply.
Competition Policy including Competition Policy Reform Act 1995	Council is subject to prohibition on anti-competitive behaviour, according to the Trade Practices Act.
Threatened Species Conservation Act 1995	An Act to conserve threatened species, populations and ecological communities of animals and plants.

Protection of the Environment Operations Act 1997	Council is required to exercise due diligence to avoid environmental impact and among others are required to develop operations emergency plans and due diligence plans to ensure that procedures are in place to prevent or minimise pollution.
Water Management Act 2000	An Act to provide for the protection, conservation and ecologically sustainable development of the water sources of the State, and for other purposes. Allows Council to levy developer charges and addresses water sharing and environmental flows.
Building Code of Australia	The goal of the BCA is to enable the achievement of nationally consistent, minimum necessary standards of relevant, health, safety (including structural safety and safety from fire), amenity and sustainability objectives efficiently.
Building Fire and Safety Regulation 1991	This Act sets out the regulations for things such as means of escape, Limitation of people in buildings, Fire and evacuation plans and testing of special fire services and installations.
Dangerous Goods Safety Management Act 2001	This act sets out the safe use, storage and disposal of dangerous goods
Electrical Safety Act 2002	This act sets out the installation, reporting and safe use with electricity
Environmental Planning and Assessment Act 1979 (POPE)	This act sets out requirements in respect to Planning Legislation
Building Regulation 2003	This act sets out requirements in respect to Building Requirements
Plumbing and Drainage Act 2002	This act sets out requirements in respect to Plumbing Requirements
Plant Protection Act 1989	This act sets out requirements in respect to Flora Protection
Fire and Rescue Service Act 1990	This act sets out requirements in respect to Emergency Services for Fire and Rescue
Valuation of Land Act 1916	This act sets out requirements in respect Land Valuation
Public Records Act 2002	The requirements in respect maintaining Public Records

Table 1.1: Legislative Requirements

2. Service Levels

For Council, serving customers and the community is our principal objective. Our first priority is to understand their needs, wants, values, concerns and what aspects of services are important to them.

Understanding customer concepts of value is achieved by understanding their expectations and preferences. Typically customers perceive the value provided by a service as the benefits they receive less their contributions in the form of rates and service charges. That is, a customer's utility or satisfaction level increases when their benefits exceed the costs they pay. Customers want to maximise their utility through saving time, reliability and consistency of service, safety and wellbeing.

Customers want services that are easy to use, that simplify their lives and provide lifestyle satisfaction. However customer value is a compromise between their perceived benefit and their willingness to contribute financially towards these benefits. Asset and service attributes like healthy, timeliness, 'safe and reliable', convenience and quality are intrinsic with best practice Asset Management, but they are not always tangible to the consumer. Public organisations need to communicate these attributes and/or the consequences resulting from their removal if the community cannot afford them.

2.1 Developing Levels of Service

Levels of Service (LoS) are key business drivers; they influence the range, quality and quantity of assets and services provided. LoS indicators are usually based on the following:

- Ø Customer expectations and willingness to pay,
- Ø Legislative and environmental compliance which impose standards of service, and
- Ø The business context including strategic objectives, available resources and financial constraints.

LoS statements describes local Council's intention to deliver customer services in terms of quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost. Statements should be written so customers can relate to them. Councils are accountable through a customer satisfaction measure and a technical performance measure.

The relationship between costs and LoS depends on the type of activity. Some infrastructures have a steep initial cost with minimal servicing costs while other services will have higher proportions of operational and maintenance type costs. Costing needs to be meaningful and understandable, the cost per user should represent a tangible benefit or a better LoS.

Community Levels of Service

Service levels are defined as either customer LoS or technical LoS. Community LoS measure how the community receives the service and whether the organisation is providing community value.

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

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

The organisation's current and expected community service levels are detailed in Table 2.1 which shows the agreed expected community levels of service based on resource levels in the current Long Term Financial Plan (LTFP) and community consultation/engagement.

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY OUTCOMES				
Key findings from a customer satisfaction survey find that largest performance gaps for resident satisfaction were maintaining local roads, economic development and financial management.				
COMMUNITY LEVELS OF SERVICE				
Quality	Look well maintained and clean At a quality or standard suitable for their purpose	Customer surveys Customer requests	To be provided from the Resident Survey	Requests received should not increase annually
Function	Easy to access Fit for their use	Customer surveys Customer requests	To be provided from the Resident Survey	Requests received should not increase annually
Safety	Free from hazards	Number of injury accidents (Accident History)	Should commence monitoring trend to determine if accidents are increasing	Accidents attributable to building condition should be reduced annually

Table 2.1: Community Level of Service

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 Council undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

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

Service and AMPs, implement and control technical service levels to influence the customer service levels.¹

¹ IPWEA, 2011, IIMM, p 2.22

Buildings Levels of Service

Technical LoS is a function of ongoing serviceability (Operations, Maintenance and Administration (OMA)) and renewing of depleted assets. Council allocates 54% of budget for OMA or serviceability costs (\$22.9 million), 39% for renewing depleted assets (\$16.5 million) and 7% for new assets (\$3.1 million) over the LTFP.

The LTFP Buildings and Other Structures program allocates \$16.7 million for budgeted renewals, \$3.1 million for new works with a total program depreciation of \$21.6 million and total asset disposals of \$9 million. This results in a Buildings and Other Structures Renewals Ratio of 0.76 and a Bring to Satisfactory (BTS) ratio of 0.0. Floor Finish assets have a BTS Ratio of 0.86 and Open Space Recreational assets has a BTS of 0.34 over the LTFP.

Table 2.3 shows the technical level of service expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and the trade-off of service levels performance, costs and risk management of resources available in the LTFP.

Buildings \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
Floor Finish	\$230	\$45	\$1,359	\$1,399	\$1,315	0.86	0.18
Facility Roads	\$773	\$143	\$4,488	\$109	\$686		1.13
Open Space/Recreational Ass	\$492	\$95	\$2,752	\$1,425	\$2,212	0.34	0.22
Fire Services	\$84	\$15	\$512		\$37		2.26
Land Improvement	\$140	\$26	\$771	\$47	\$194		0.72
Mechanical Services	\$505	\$94	\$2,692	\$142	\$812		0.62
Roof	\$2,538	\$470	\$14,385	\$419	\$2,835		0.90
Other Structures	\$2,773	\$522	\$14,538	\$2,496	\$5,747		0.48
Swimming Pool	\$1,346	\$248	\$7,989	\$1,233	\$919		1.46
Structural Shell	\$7,778	\$1,437	\$45,085	\$1,734	\$6,893		1.13
Lift	\$16	\$3	\$98		\$10		1.68
Program	\$16,675	\$3,099	\$94,668	\$9,004	\$21,659		0.77

Table 2.3: Buildings Levels of Service (\$000)

2.2 Customer Research and Expectations

Council engaged Micromex to conduct the Richmond Valley Council Community Research 2013². The poll from a sample of residents revealed their level of satisfaction with Council's services. Council sought to examine community attitudes and perceptions towards current and future services and facilities provided by Council. Key objectives of the research included:

- Ø To assess and establish the community's priorities and satisfaction in relation to Council activities, services and facilities,
- Ø To identify the community's overall level of satisfaction with Council's performance, and
- Ø To identify the community's level of satisfaction with regards to contact they have had with Council staff.

² Micromex Research, 2013, Richmond Valley Council Community Research

Overall, the research has found a generally positive result for Council, with 29 of the 32 services/facilities/criteria rated as being of 'moderate satisfaction' to 'very high satisfaction'.

At an overall level, residents expressed a 'moderate' level of satisfaction with the performance of Council, with 82% of the respondents giving a rating of 'somewhat satisfied' to 'very satisfied'. Only 4% of residents indicated that they were 'not at all satisfied' with Council's performance.

Compared to an *All of NSW measure and Regional Councils*, Richmond Valley has performed better than average. The most recent community satisfaction survey reported satisfaction levels for the following services in Table 2.4. The community is generally satisfied with services provided by Council and is very satisfied with the regional water supply service.

Item	Importance	Performance	Gap
General Facilities and Services			
Facilities and services for seniors	5.73	3.82	1.91
Facilities and services for the disabled	5.80	3.61	2.18
Youth facilities and events	5.66	3.26	2.40
Library services	5.78	5.28	0.50
Council buildings and resources provided for community use (eg public halls)	5.53	3.96	1.57
Public toilets provided by Council in parks	5.89	3.04	2.84
Playgrounds, playing fields and ovals	5.82	4.02	1.80
Parks and gardens	5.56	3.65	1.91
Swimming pools	5.45	4.20	1.25

Table 2.4: Community Satisfaction Survey Levels

Library services received positive performance ratings from respondents across the board.

Respondents indicated high levels of dissatisfaction with Council's provision of Public Toilets in Parks (Gap mean of 2.84), Youth facilities and events (2.40), and Facilities and services for the disabled (2.18).

Since this survey was undertaken, Council has provided additional toilets in the CBD of Casino and increased the operational and renewal expenditure through additional income raised in the 2014/14 Special Rates Variation (SRV).

2.3 Key Assumptions made in Financial Forecasts

Forecast Reliability and Confidence

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale³ in accordance with Table 2.5

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

Table 2.5: Data Confidence Grading System

Key assumptions made in this AMP and risks that these may change are shown in Table 2.6

Key Assumptions	Risks of Change to Assumptions
Use of existing inventory data	Data set is reliable; monetary movements have a confidence level of A.
Use of existing valuations and useful lives	Design lives confidence level A RUL confidence level B, some slight deviation observed when applying modified pattern asset movements over the LTFP.
Use of current expenditure information as best as this can be determined	Confidence level A. RVC has integrated asset schedule.

Table 2.6: Key Assumptions made in AM Plan and Risks of Change

³ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

The estimated confidence level for and reliability of data used in this AMP is shown in Table 2.7.

Data	Confidence Assessment	Comment
Demand drivers	TBD	Need calibration
Growth projections	Highly Reliable	ABS and NSW DPI
Operations expenditures	Highly Reliable	Low variations over four years
Maintenance expenditures	Highly Reliable	Low variations over four years
Projected Renewal exps. - Asset values	Reliable	Dataset complete with some expected errors
- Asset residual values	Reliable	Dataset complete with some expected errors

Table 2.7: Data Confidence Assessment for Data used in AM Plan

3. Future Demand

Demand management is an action plan to improve usage and efficiency for buildings and facilities throughout Council. The capacity of an organisation is dependent on quantitative analysis and best judgements across the many factors impacting on service delivery. Issues include asset integrity, preventative maintenance, periodic renewal and network expansion to accommodate community development.

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

Population is expected to increase modestly over the next 25 years, therefore not influencing demand for new assets. A general issue with infrastructure delivery is the increasing costs of doing business. Rising costs are a factor of increased resourcing costs (labour and materials), WHS awareness and a more focused regulatory environment.

Infrastructure assets are subject to increasing environmental affects, resulting in new technologies and improved materials. New construction methods are designed to lessen susceptibility to damage from the environment, as well as to minimise induced impacts on the environment. In combination the cost to provide and care for assets is increasing faster than the community's ability to fund provision.

3.1 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability and the timely renewal of assets that have reached end of life. Council continues to invest in information systems and evidence based data including conditions ratings, remaining useful life, depreciation patterns which improve the infrastructure and long term financial planning functions.

The potential benefits of demand management programs include sustainable usage patterns, delaying investment in new infrastructure and to reduce the operational costs of reticulated water services.

Local Water Utilities (LWUs) can balance demand management initiatives with supply side works and achieve triple bottom line benefits including: lower rates (Typical Residential Bill TRB) for their customers, a more secure water supply and increase residual water for environment uses.

3.2 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability, and the timely renewal of assets that have reached end of life. Council continues to invest in information systems and evidence based data including conditions ratings, remaining useful life, depreciation patterns which improve the infrastructure and long term financial planning functions.

Opportunities identified for demand management include monitoring community expectations to determine LoS and analysing the cost of provision to determine the long term affordability. There is a gap between community aspirations and their willingness to pay for these services. It is the responsibility of Council to articulate the evidence presented in asset and financial planning, therefore narrowing the expectations gap.

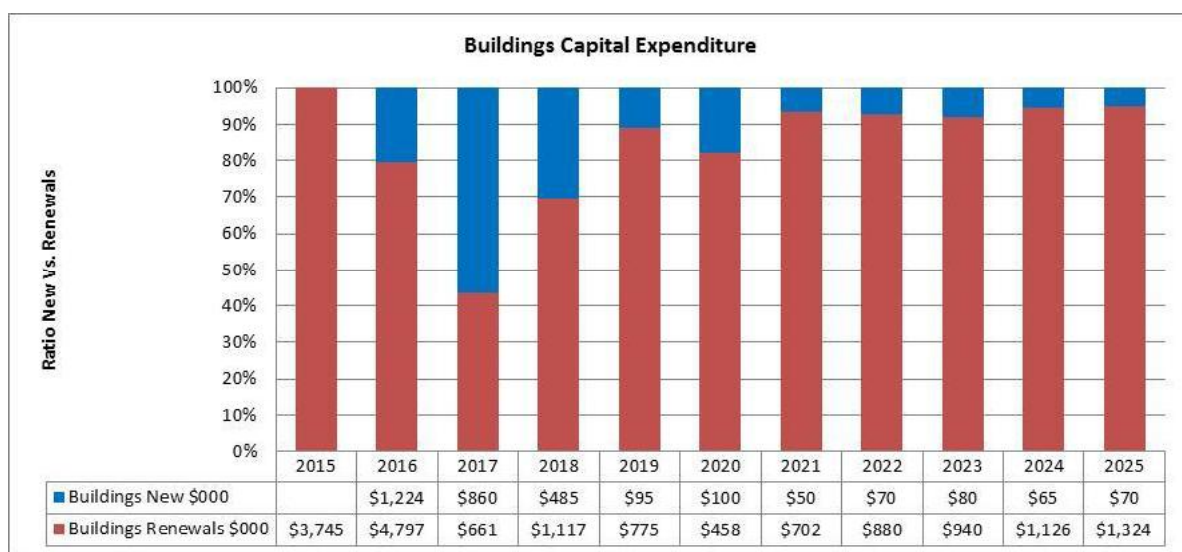


Figure 3.2 New Assets from Growth

Financial results from best practices applied to the Buildings and Other Structures program identify that 84% of capital expenditure will be required to maintain the existing network of asset (figure 3.2). A total of \$3.1 million has been allocated for new and improved serviceability of buildings and structures. It is important to note that acquiring additional assets from growth or by provision of additional infrastructure services, will ultimately commit Council to fund ongoing operations and maintenance costs. These future costs should be identified and considered in developing forecasts of future operating and maintenance costs.

4. Lifecycle Management Plan

A Lifecycle Asset Management Plan details how Council plans to manage and operate buildings and structures at the agreed LoS while optimising lifecycle costs. The objective is to look at the lowest long term cost rather than seeking short term savings when making decisions. Sustainable financial management is about managing community outcomes by providing assets and services with the lowest long term cost.

4.1 Background Data

The Council Buildings and Other Structures network includes four asset classes consisting of 2,144 unique assets with a Fair Value Current Replacement Cost (CRC) of \$90.4 million and a Depreciable Replacement Cost (DRC) \$60.3 million. The remaining useful life (RUL) for all buildings and structures as a percentage of total life is 50% (table 4.1). The recent buildings revaluation resulted in a net \$0.5 million increase to the fair value of buildings. But interestingly there was a \$10.4 million movement from the structural shell component towards other building components.

Type	No Of Assets	New	Age	RUL	Dep Pattern	Age %	Value %
Floor Finish	48		17	11	Moderate	61%	57.8%
Facility Roads	181		13	39	Moderate	27%	90.4%
Open Space/Recreational Assets	285		16	16	Straight	59%	59.7%
Fire Services	11		5	28	Low	14%	93.9%
Land Improvement	24		9	35	Moderate	22%	84.9%
Mechanical Services	38		11	17	Low	42%	87.0%
Roof	200		32	18	Low	79%	81.4%
Other Structures	1,024		17	23	Straight	50%	76.7%
Swimming Pool	103		16	28	Moderate	42%	92.4%
Structural Shell	229		33	28	Moderate	48%	80.9%
Lift	1		3	23	Moderate	12%	98.8%
Grand Total	2,144	0	19	23		49.9%	80.1%

Table 4.1: Buildings Asset Statistics (\$000)

Long lived assets have modified depreciation schedules reflecting reduced consumption patterns in earlier years and increasing consumption as the asset integrity declines towards end of useful life (Figure 4.1). Standard lifecycle asset terms include:

- Ø Current Replacement Cost (CRC) - the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset with the same economic benefits or service potential,
- Ø Depreciable Amount (DA) - CRC for depreciable assets less residual value (RV),
- Ø Depreciated Replacement Cost (DRC) - CRC less accumulated depreciation, and
- Ø Asset valuations by the valuer employ a modified depreciation pattern which results in asset valuations as a percentage (DRC/CRC) being higher than the age percentage (RUL/Useful Life).

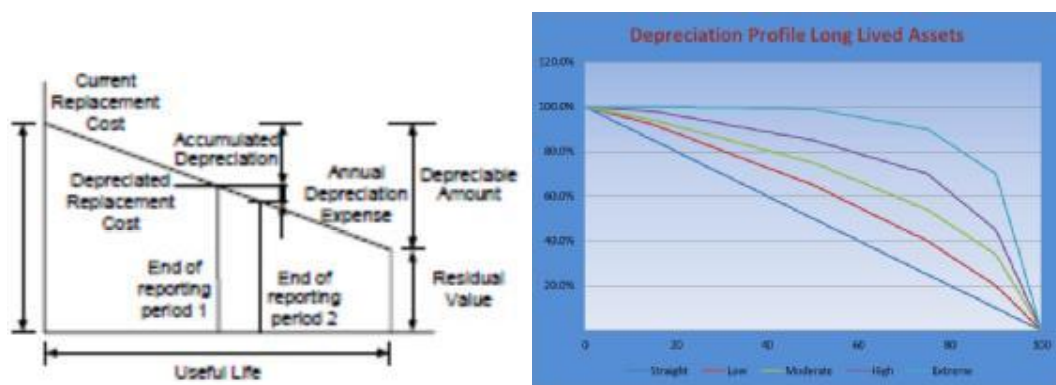


Figure 4.1: Depreciation Profile for Long Lived Assets

Council Buildings and Other Structures position (Table 4.2) shows the fair value of assets (CRC) is \$90.4 million and DRC or the Written Down Value (WDV) totalling \$72.3 million. Annual depreciation of \$1.4 million reflects an asset consumption rate of 1.15%. The asset renewal funding ratio⁴ is 0.76 which indicates Council plans to renew assets at half the rate they are being consumed, thereby decreasing asset stock by \$0.5 million per year.

Type (\$000)	Opening CRC	Reval	Additions	Annual Dep	Closing CRC	Depr Amount	Accum Dep	WDV
Floor Finish	\$788	\$1,390		\$114	\$2,178	\$1,932	\$919	\$1,259
Facility Roads	\$3,585	\$0	\$32	\$35	\$3,617	\$2,252	\$348	\$3,269
Open Space/Recreational	\$4,456	\$4	\$66	\$182	\$4,526	\$4,526	\$1,824	\$2,702
Fire Services	\$174	\$179	\$8	\$2	\$361	\$108	\$22	\$339
Land Improvement	\$686	\$2	\$32	\$12	\$720	\$720	\$109	\$611
Mechanical Services	\$1,364	\$1,096	\$41	\$44	\$2,500	\$1,952	\$324	\$2,176
Roof	\$4,657	\$8,324	\$109	\$189	\$13,089	\$6,545	\$2,439	\$10,650
Other Structures	\$15,306	\$56	\$1,550	\$336	\$16,912	\$14,711	\$3,940	\$12,972
Swimming Pool	\$6,647			\$48	\$6,647	\$3,972	\$506	\$6,141
Structural Shell	\$49,523	-\$10,405	\$631	\$435	\$39,749	\$23,606	\$7,578	\$32,171
Lift	\$75	-\$8		\$0	\$67	\$20	\$1	\$67
Grand Total	\$87,260	\$638	\$2,469	\$1,397	\$90,367	\$60,344	\$18,010	\$72,357

Table 4.2: Buildings Asset Values (\$000)

4.2 Physical Parameters

The age profile of infrastructure assets shows that significant construction took place in the post-World War 2 time period. It is likely that much of this infrastructure will be well through its useful life, and will require renewal in the near future. The profile also indicates that the age data on infrastructure requires development.

⁴ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Figure 4.2 examines the data by time periods. This graphic illustrates that the Buildings and Other Structures network is reasonable modern, 17% of assets were constructed pre 1970 and 40% have been constructed this century.

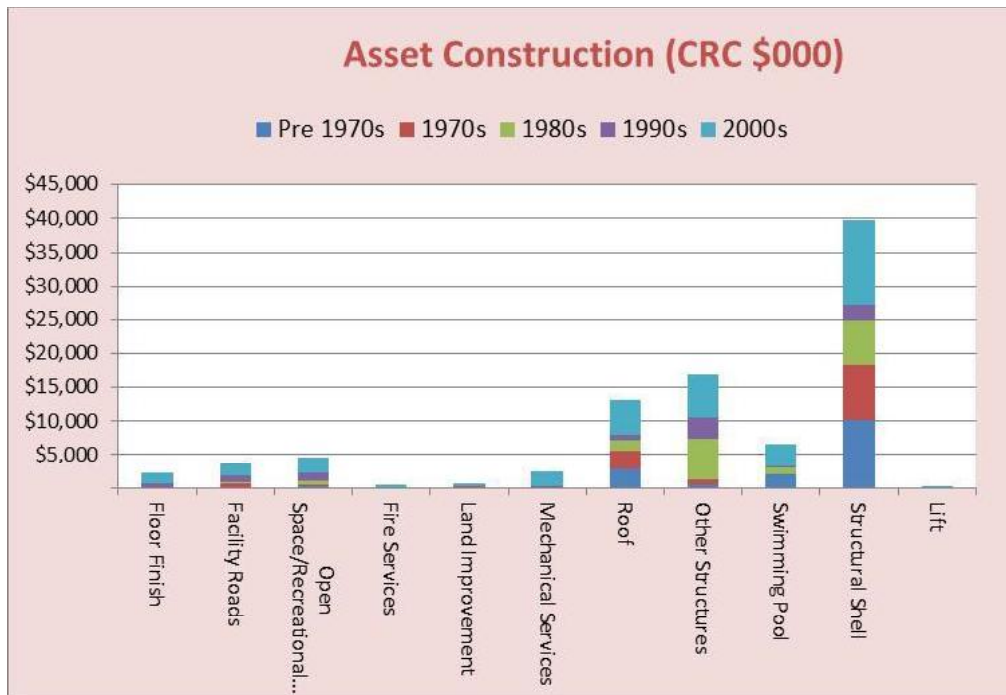


Figure 4.2: Asset Age Profile

Asset Renewals

Council's asset register provides RUL's for each asset which can be used to predict the capital renewals by decade (Table 4.3). Council's Buildings and Other Structures network has a current backlog of works (\$15.1 million) based on restoring assets with condition ratings 3-5 to a satisfactory level. Council employs professional valuers to provide a risk adjusted fair valuation assessment for each asset class, therefore a more appropriate estimation of backlog or BTS is end of life assets due in year (x) less capital renewals divided by the remaining service potential of the assets in the network. This methodology results in no backlog or a BTS measure of 0.0.

Asset Construction (CRC \$000)	Pre 1970s	1970s	1980s	1990s	2000s	Total
Floor Finish	\$4	\$33	\$83	\$540	\$1,517	\$2,178
Facility Roads	\$87	\$471	\$230	\$1,034	\$1,796	\$3,617
Open Space/Recreational Assets	\$197	\$168	\$678	\$1,167	\$2,316	\$4,526
Fire Services					\$361	\$361
Land Improvement		\$190	\$43	\$77	\$410	\$720
Mechanical Services				\$179	\$2,321	\$2,500
Roof	\$2,887	\$2,716	\$1,484	\$808	\$5,194	\$13,089
Other Structures	\$402	\$791	\$6,188	\$3,123	\$6,409	\$16,912
Swimming Pool	\$1,972	\$48	\$1,035	\$129	\$3,464	\$6,647
Structural Shell	\$10,095	\$8,179	\$6,610	\$2,374	\$12,492	\$39,749
Lift					\$67	\$67
Total	\$15,643	\$12,595	\$16,351	\$9,431	\$36,347	\$90,367

Table 4.3: Buildings Construction data (\$000)

For the forward period asset renewals are quite variable with 18% of renewals during the 2020s, 34% in the 2030s and 19% in the 2040s. This is contrary to other asset classes' in general business, indicating the care of Building and Other Structures assets will require almost double the resourcing effort anticipated this LTFP.

Asset Renewal (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050s	Total
Floor Finish	\$517	\$1,217	\$43	\$131	\$24	\$1,932
Facility Roads	\$32	\$93	\$893	\$453	\$781	\$2,252
Open Space/Recreational Assets	\$268	\$1,280	\$1,607	\$514	\$856	\$4,526
Fire Services			\$20	\$40	\$48	\$108
Land Improvement	\$26	\$15	\$89	\$241	\$349	\$720
Mechanical Services	\$2	\$129	\$1,130	\$691		\$1,952
Roof	\$576	\$715	\$3,161	\$1,625	\$467	\$6,545
Other Structures	\$646	\$2,093	\$6,045	\$2,680	\$3,247	\$14,711
Swimming Pool	\$677	\$428	\$583	\$1,083	\$1,201	\$3,972
Structural Shell	\$184	\$4,809	\$6,772	\$4,090	\$7,750	\$23,606
Lift			\$20			\$20
Total	\$2,929	\$10,778	\$20,364	\$11,548	\$14,725	\$60,344

Table 4.3.1: Capital Renewal Schedule (\$000)

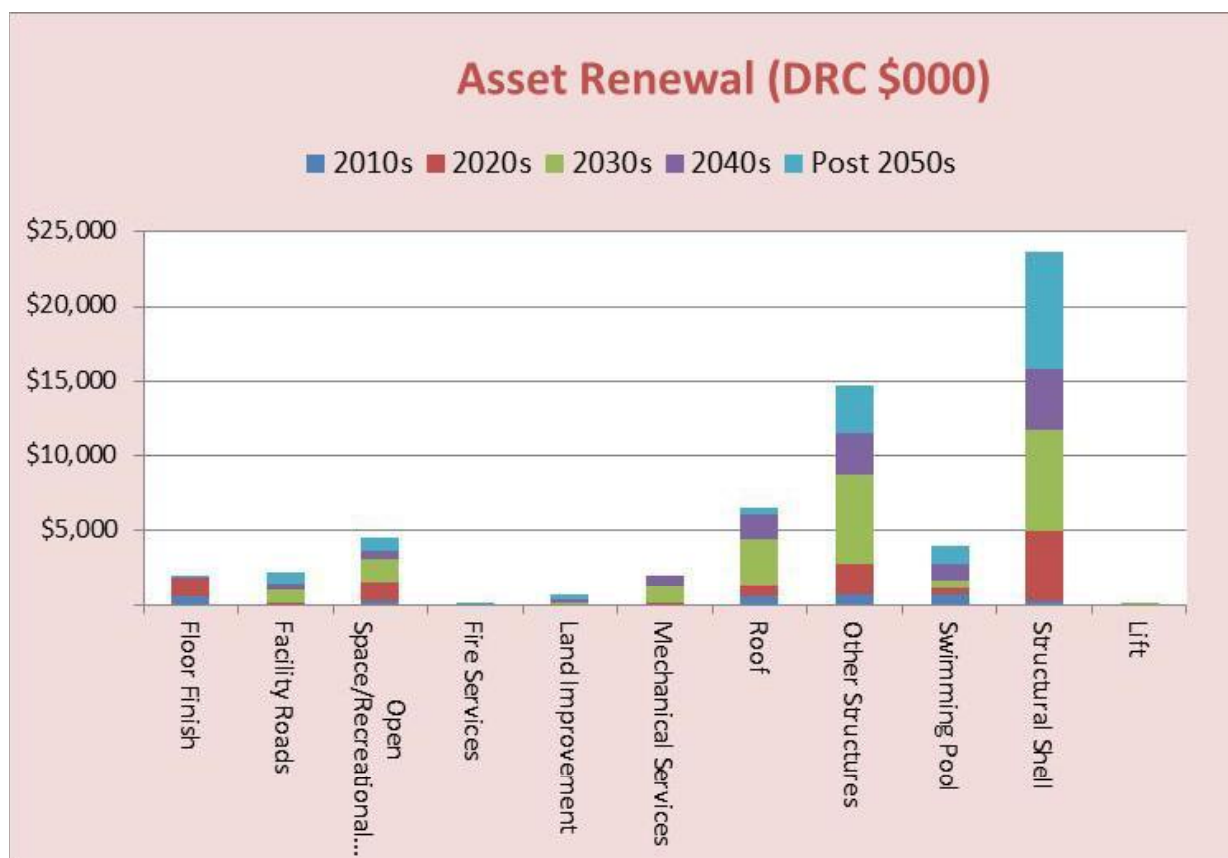


Figure 4.4: Asset Renewals Profile

Planning forward works is a function of renewals due and resourcing capacity. Over the LTFP period Council has \$9 million of Buildings and Other Structures assets requiring renewal and has allocated 1.84 times this amount \$16.5 million, to preserve the network. The following tables display asset financial movements for EOL Disposals, Renewals and Depreciation values (000s) for each program this current LTFP. These tables produce the key BTS and Renewals Ratios discussed below.

Council demonstrates a mature and integrated approach towards budget development, long term financial planning and capital works planning. This approach is influenced by best practice management and the future sustainability of Council businesses. Asset and financial planning primary considerations include replacement of end of life assets represented as a BTS Ratio BTS and the preservation of assets represented as a Renewals Ratio.

The following tables provide a time series for EOL disposal values, proposed capital renewals, annual depreciation values (which measure the consumption of assets) and WDV's (which measure the remaining service potential of assets). The table with capital renewals presents councils approach to achieving benchmark ratios of less than 0.02 for BTS and 1.0 for asset renewals.

Buildings EOL \$000	2015 Disp	2016 Disp	2017 Disp	2018 Disp	2019 Disp	2020 Disp	2021 Disp	2022 Disp	2023 Disp	2024 Disp	2025 Disp	Total
Floor Finish				\$3	\$10	\$436		\$303	\$157	\$444	\$46	\$1,399
Facility Roads	\$30			\$3		\$37				\$18	\$22	\$109
Open Space/Recreational Assets	\$27	\$13	\$111	\$98	\$48	\$283	\$70	\$76	\$177	\$297	\$226	\$1,425
Fire Services												
Land Improvement					\$29	\$5				\$4	\$10	\$47
Mechanical Services	\$2							\$56			\$84	\$142
Roof	\$3	\$154			\$4	\$96			\$162			\$419
Other Structures	\$445	\$16	\$39	\$66	\$112	\$698	\$98	\$65	\$55	\$192	\$710	\$2,496
Swimming Pool	\$595		\$62	\$43							\$533	\$1,233
Structural Shell		\$274				\$28		\$244	\$114	\$806	\$267	\$1,734
Lift												
Total	\$1,102	\$457	\$213	\$213	\$202	\$1,583	\$167	\$744	\$665	\$1,761	\$1,897	\$9,004

Table 4.4.1: Capital End of Life Disposal Values (\$000)

Buildings Renewals \$000	2015 Add	2016 Add	2017 Add	2018 Add	2019 Add	2020 Add	2021 Add	2022 Add	2023 Add	2024 Add	2025 Add	Total
Floor Finish	\$67	\$82	\$10	\$15	\$10	\$5	\$7	\$8	\$8	\$9	\$10	\$230
Facility Roads	\$170	\$226	\$30	\$52	\$36	\$21	\$33	\$42	\$45	\$54	\$64	\$773
Open Space/Recreational Assets	\$132	\$165	\$21	\$33	\$22	\$12	\$17	\$20	\$21	\$23	\$26	\$492
Fire Services	\$18	\$24	\$3	\$6	\$4	\$2	\$4	\$5	\$5	\$6	\$7	\$84
Land Improvement	\$32	\$42	\$6	\$9	\$6	\$4	\$6	\$7	\$8	\$9	\$11	\$140
Mechanical Services	\$115	\$152	\$20	\$34	\$23	\$14	\$21	\$26	\$28	\$33	\$39	\$505
Roof	\$564	\$748	\$100	\$170	\$118	\$70	\$107	\$135	\$145	\$174	\$206	\$2,538
Other Structures	\$648	\$848	\$112	\$188	\$129	\$75	\$114	\$140	\$147	\$173	\$200	\$2,773
Swimming Pool	\$292	\$390	\$53	\$90	\$63	\$38	\$58	\$73	\$79	\$96	\$114	\$1,346
Structural Shell	\$1,704	\$2,266	\$305	\$520	\$363	\$216	\$334	\$423	\$454	\$547	\$646	\$7,778
Lift	\$4	\$5	\$1	\$1	\$1	\$0	\$1	\$1	\$1	\$1	\$1	\$16
Total	\$3,745	\$4,947	\$661	\$1,117	\$775	\$458	\$702	\$880	\$940	\$1,126	\$1,324	\$16,675

Table 4.4.2: Proposed Capital Renewals Values (\$000)

BTS communicates the quantum of assets that are at risk or require immediate attention to restore their serviceability. With Council implementing best practice through professional revaluations on a five yearly cycle, Council's control systems have dependable data on the current state of assets. Therefore calculation of BTS is a simple calculation of the total value of EOL assets in year (x) less the value of renewals in that year compared to the total WDV of the asset class. For the LTFP period the Buildings and Other Structures network has a BTS measure of 0.0.

The Renewables Ratio communicates the preservation of asset integrity. Asset consumption as measured by depreciation reflects the loss of future service potential in infrastructure assets. In accordance with AASB 116 p60, Council estimates asset consumption most closely reflecting their real world deterioration rates. This increases the complexity of financial calculations and will ultimately focus attention on best practice maintenance and renewals programs to preserve asset integrity.

An ideal renewables ratio is 1.0. This simply means that the value of renewables in year (x) matches the consumption of asset in that year. The LTFP process has focused on a sustainable asset position at the end of 10 years across all community assets. This is reflected in improving Renewables Ratios each year. For the LTFP period, the Buildings and Other Structures network has a Renewables Ratio of 0.76, in effecting depleting the remaining service potential of assets by \$0.5 mill per year or \$5.1 million this LTFP. Council aims to achieve a general fund Renewables Ratio of 1.0 across the combined buildings, roads and stormwater classes. The net result is that Buildings and Other Structures and the Drainage networks' suffer this LTFP with Roads and Traffic Management assets having higher priorities.

Buildings Depreciation \$000	2015 Dep	2016 Dep	2017 Dep	2018 Dep	2019 Dep	2020 Dep	2021 Dep	2022 Dep	2023 Dep	2024 Dep	2025 Dep	Total
Floor Finish	\$121	\$142	\$150	\$158	\$155	\$130	\$127	\$106	\$86	\$69	\$70	\$1,315
Facility Roads	\$37	\$44	\$40	\$50	\$50	\$60	\$60	\$72	\$79	\$81	\$89	\$606
Open Space/Recreational Assets	\$194	\$221	\$224	\$228	\$212	\$211	\$204	\$197	\$177	\$168	\$176	\$2,212
Fire Services	\$2	\$2	\$3	\$3	\$3	\$3	\$4	\$4	\$4	\$4	\$4	\$37
Land Improvement	\$13	\$16	\$18	\$25	\$16	\$16	\$16	\$17	\$19	\$18	\$20	\$194
Mechanical Services	\$47	\$54	\$61	\$68	\$73	\$75	\$82	\$85	\$88	\$90	\$89	\$812
Roof	\$200	\$199	\$210	\$228	\$237	\$259	\$280	\$294	\$297	\$309	\$322	\$2,835
Other Structures	\$349	\$409	\$435	\$455	\$447	\$489	\$588	\$634	\$654	\$647	\$641	\$5,747
Swimming Pool	\$51	\$54	\$54	\$60	\$67	\$95	\$100	\$111	\$121	\$110	\$97	\$919
Structural Shell	\$460	\$380	\$402	\$428	\$510	\$588	\$611	\$712	\$851	\$947	\$1,004	\$6,893
Lift	\$0	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$10
Total	\$1,475	\$1,521	\$1,606	\$1,710	\$1,779	\$1,927	\$2,074	\$2,233	\$2,376	\$2,445	\$2,513	\$21,659

Table 4.4.3: Capital Depreciation Values (\$000)

Buildings WDV \$000	2015 WDV	2016 WDV	2017 WDV	2018 WDV	2019 WDV	2020 WDV	2021 WDV	2022 WDV	2023 WDV	2024 WDV	2025 WDV	Total
Floor Finish	\$1,354	\$1,359	\$1,274	\$1,179	\$1,073	\$982	\$893	\$822	\$768	\$730	\$691	\$1,359
Facility Roads	\$3,449	\$3,766	\$3,876	\$3,984	\$4,059	\$4,121	\$4,189	\$4,260	\$4,330	\$4,406	\$4,488	\$4,488
Open Space/Recreational Assets	\$2,684	\$2,752	\$2,654	\$2,551	\$2,438	\$2,311	\$2,190	\$2,075	\$1,977	\$1,888	\$1,793	\$2,752
Fire Services	\$365	\$401	\$415	\$430	\$440	\$450	\$460	\$472	\$484	\$497	\$512	\$512
Land Improvement	\$645	\$697	\$708	\$714	\$722	\$728	\$735	\$744	\$751	\$760	\$771	\$771
Mechanical Services	\$2,342	\$2,535	\$2,581	\$2,624	\$2,641	\$2,647	\$2,652	\$2,660	\$2,666	\$2,676	\$2,692	\$2,692
Roof	\$11,460	\$12,468	\$12,783	\$13,099	\$13,304	\$13,444	\$13,597	\$13,769	\$13,954	\$14,157	\$14,385	\$14,385
Other Structures	\$13,164	\$14,143	\$14,315	\$14,483	\$14,538	\$14,499	\$14,394	\$14,271	\$14,132	\$14,022	\$13,943	\$14,538
Swimming Pool	\$5,932	\$6,499	\$6,715	\$6,937	\$7,100	\$7,215	\$7,345	\$7,484	\$7,622	\$7,789	\$7,989	\$7,989
Structural Shell	\$34,619	\$37,773	\$38,948	\$40,163	\$40,991	\$41,620	\$42,333	\$43,063	\$43,713	\$44,369	\$45,085	\$45,085
Lift	\$72	\$78	\$81	\$83	\$85	\$87	\$89	\$91	\$93	\$95	\$98	\$98
Total	\$76,086	\$82,471	\$84,349	\$86,249	\$87,392	\$88,103	\$88,878	\$89,711	\$90,489	\$91,389	\$92,446	\$94,668

Table 4.4.4: Capital Written Down Values (\$000)

Buildings and Other Structures Assets Funding Profile

The 10 year funding for Buildings and Other Structures capital works totals \$19.6 million, \$3.1 million or 16% for scheme augmentation and \$16.5 million for renewals programs.

4.3 Asset Conditions

Asset conditions are monitored on a rotating asset class schedule. This is a recent development at Council and it ensures that all assets will receive an observational rating once every five years. The road network of assets were rated in 2012, stormwater in 2014 and land and building assets in 2015. The condition profile of our Buildings and Other Structures assets is shown in Figure 4.5. 58.3% of Council assets have a current condition rating of 1 or 2 generally reflecting a network in average condition.

Figures 4.5 and 4.5.1 illustrate the current condition profile for each asset type as a percentage with the black diamond showing the average condition (right hand scale) for each asset. Using Structural Shells as an example in 2014, 22% of assets have a condition rating of 1 or 2 and only 6% are rated condition 5, the black diamond indicating an average condition of 3.2. By 2025 21% of assets have a condition rating of 1 or 2 while 28% are rated condition 5, resulting in a weighted average condition of 3.7. This will have an impact on Council's capacity to adequately fund its renewables ratio.



Figure 4.5: Asset Condition Rating Profile



Figure 4.5.1: Asset Condition Rating Profile

4.4 Financial Summary

Council's operates the Buildings and Other Structures as a component of the general fund with a restricted reserves fund to meet Capex under and over expenditure requirements. Council revenue streams include access and usage charges, grants revenue, developer service charges and interest on restricted reserves. OpEx include operations, maintenance and management activities. Capex includes renewals program, improved LoS programs and augmentation programs. Table 4.6 provides a summary of cash flows for 20 years.

Values (\$000)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	\$5,782	\$8,023	\$3,450	\$3,534	\$2,865	\$2,634	\$2,873	\$3,119	\$3,236	\$3,456
Operations	\$336	\$306	\$318	\$319	\$329	\$343	\$350	\$358	\$366	\$374
Maintenance	\$1,019	\$926	\$964	\$966	\$998	\$1,038	\$1,061	\$1,084	\$1,108	\$1,133
Management	\$683	\$621	\$646	\$647	\$668	\$696	\$711	\$726	\$742	\$759
Depreciation	\$1,475	\$1,521	\$1,606	\$1,710	\$1,779	\$1,927	\$2,074	\$2,233	\$2,376	\$2,445
Renewals	\$3,745	\$4,947	\$661	\$1,117	\$775	\$458	\$702	\$880	\$940	\$1,126
Improved LOS		\$918	\$645	\$364	\$71	\$75	\$38	\$53	\$60	\$49
Augmentation		\$306	\$215	\$121	\$24	\$25	\$13	\$18	\$20	\$16
Program Position	0	0	0	0	0	0	0	0	0	0
Values (\$000)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	\$3,710	\$4,337	\$4,467	\$4,601	\$4,739	\$4,881	\$5,028	\$5,179	\$5,334	\$5,494
Operations	\$382	\$397	\$408	\$421	\$433	\$446	\$460	\$473	\$488	\$502
Maintenance	\$1,158	\$1,202	\$1,238	\$1,275	\$1,313	\$1,352	\$1,393	\$1,435	\$1,478	\$1,522
Management	\$776	\$805	\$829	\$854	\$880	\$906	\$933	\$961	\$990	\$1,020
Depreciation	\$2,513	\$2,594	\$2,672	\$2,752	\$2,834	\$2,919	\$3,007	\$3,097	\$3,190	\$3,286
Renewals	\$1,324	\$1,629	\$1,677	\$1,728	\$1,780	\$1,833	\$1,888	\$1,945	\$2,003	\$2,063
Improved LOS	\$53	\$241	\$248	\$256	\$263	\$271	\$279	\$288	\$296	\$305
Augmentation	\$18	\$80	\$83	\$85	\$88	\$90	\$93	\$96	\$99	\$102
Program Position	0	16	32	49	67	84	103	122	142	162

Table 4.6: Projected Operating and Capital Expenditure (\$000)

Cash flow predictions are based on current business expectations with 5% as the indicator for revenue streams and 3% for expense streams. Developer service pricing also provide some uncertainty for revenue flows. The LWU business demonstrates a healthy state over the forward LTFP period.

Funding for Buildings and Other Structures includes operating budgets, capital grants and contributions and internal transfers from the restricted general fund. This means a shortfall is balanced by transfers from restricted assets and a surplus will result in a transfer to restricted assets.

Operating expenditure (OpEx) includes operations, maintenance and management activities (OMA). Capital expenditure (Capex) includes renewals program, improved LOS programs and augmentation programs. Asset Lifecycle profiles for Buildings and Other Structures is shown in Figure 4.7. The balance of funding for Buildings and Other Structures represents transfers from the general reserve fund. Annual consumption of assets (depreciation) is shown on the right axis.

Asset Lifecycle profiles for Buildings and Other Structures are shown in Figure 4.7. This illustrates the flow of funds for operating and capital expenditures over the forward period. Annual consumption of assets (depreciation) is shown on the right axis.

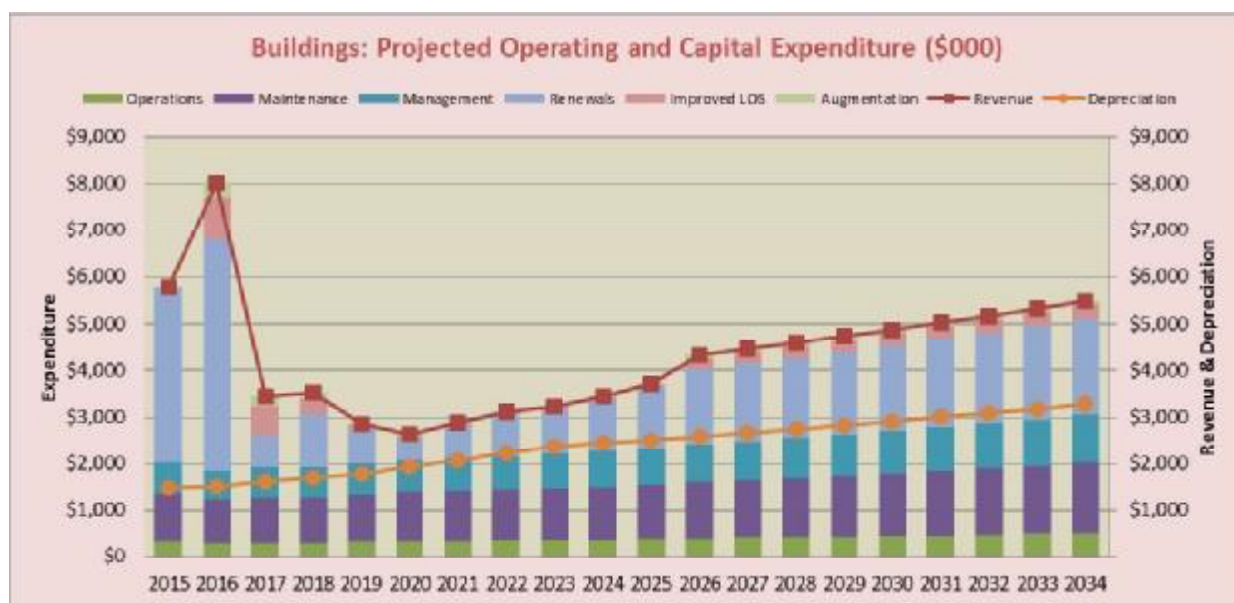


Figure 4.7: Projected OpEx and Capex

4.5 Sustainability of Service Delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over five and 10 years of the planning period.

Asset Renewal Funding Ratio⁵ - 0.77

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 77% of the funds required for the optimal renewal and replacement of its assets.

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 asset life cycle. Life Cycle Costs include operations and maintenance expenditure and asset consumption (depreciation expense).

Life Cycle Costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is \$3.9 million per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years). The 10 year Average LTCM indicator is \$3.9 million per year

⁵ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

A shortfall between Life Cycle Costs and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is \$0 per year (negative = gap, positive = surplus).

10 Year AM Financial Indicator - Life cycle expenditure is 100% of life cycle costs.

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 Costs, 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 AMP identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed LoS 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 AMP, a gap is generally due to increasing asset renewals for ageing assets.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first five years of the planning period is \$4.7 million on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$4.7 million on average per year giving a five year average funding surplus of \$0. This indicates that Council expects to have 100% of projected expenditures required to provide the services shown in this AMP.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the AMP and ideally over the 10 year life of the LTFP.

Long Term Financial Plan Works Program

Council's LTCW program has an 11 year (current Budget plus LTFP) figure of \$42.7 million for the Buildings and Other Structures program. The asset register indicates \$16.7 million of assets or 84% of the program will be renewals over the forward planning period. The balance of the program is divided 75% into improved levels of service and 25% for scheme augmentation. Therefore 12% of the program or \$2.3 million is for LoS improvements and 4% or \$775,000 is for scheme augmentations over the planning period.

5. Risk Management

Asset management is about managing strategic and operational risks. The greatest strategic risk is whether a Council is sustainable. Efficient asset management contributes to risk minimisation by providing reliable and relevant information to decision makers. Risk management is the demonstrated commitment to understand problems, to classify sensitivities, to prioritise solutions and to contain the adverse consequences of threats to an acceptable level.

A primary consideration when selecting risk protection and practices is to ensure that the costs incurred are not greater than the benefits gained. Factors affecting risk include the consequences of service failure, identification of significant and critical assets, and options to mitigate impact or reduce harm.

Risks are generally identified and classified by the consensus approach through workshops or risk management tools (risk spectrum or risk matrix approach). These tools systematically quantify risk attributes into a risk factor, economic deprivation, social disruption or environmental impact. Risk is associated with consequences completely enumerated in terms of probability. The consensus approach seeks answers to the types and source of risk, severity levels, possible outcomes and the scale of impact. Advanced techniques include 'what if' scenario type answers that seek to describe varying effects of events affecting a few customers through to widespread and unacceptable community risks.

6. Plan Improvement and Monitoring

Asset systems is an outward function which interacts across the organisation and attempts to consolidate operational plans, risk management plans, business continuity planning, emergency response planning with higher level strategic and governance objectives. Overall the function is still developing and seeking regular appropriate input from the various asset delivery areas of Council which remain focused on their primary objectives.

This restricts some asset planning outcomes but will rise in importance when quality AMPs align with higher strategic goals and provide a clear line of sight between operational, maintenance and asset rehabilitation initiatives. It is the intention of Council to ensure that the practices documented within the Asset Plans are a prime focus of culture within the workplace, so that the links from service delivery to long term strategic plans remain strong

6.1 Accounting Standards and Regulations

In accounting for Council's assets, the following statutory requirements shall be adhered to:

- Ø NSW Local Government Act 1993,
- Ø NSW Code of Accounting Practice and Financial Reporting (updated annually),
- Ø Australian Accounting Standards, UIG Consensus Views and other prescribed requirements and standards,
- Ø AASB 13 Fair Value Measurement,
- Ø AASB 116 Property Plant and Equipment,
- Ø AASB 5 Assets Held for Sale, and
- Ø AASB 136 Impairment.

6.2 Asset management system

Council operates an integrated SQL based Asset Management System. The core programs include MapInfo a GIS asset information system and Asset Master, an Asset hierarchy and financial movements register. The programs are supported by MS office programs and information provided by Councils financial management systems. The financial systems are primarily managed by Council's financial section. It is the responsibility of all persons with expenditure roles to ensure that costing is allocated to the correct account numbers so that financial reporting will be accurate and reliable.

The strength of the Asset Master process is the unique identifiers for each asset, accurate plans for work teams and detailed financial history of individual assets. Council has expanded its asset management and asset data team given the expansive task of data entry and data management. This is a continuing process that will produce more insight and accuracy into asset conditions, predictive strategies and financial observations.

Asset registers

Council utilises the Asset Master system from Open Office Australia. This system was deployed in 2012 and is continually being refined to produce quality asset information. Council systems are generally connected through an SQL server but often financial reporting is performed at a higher level. This is accomplished by excel reports exported by the various asset management and financial management systems.

All construction and maintenance costs are recorded in the Technology 1 Financial Management System. Capital costs are generally costed to a series of cost account numbers that can be related to a particular asset construction project. Personnel performing asset management system data functions require a high level of rounded numeracy and literacy skills. Although the functions have a high level of repetitive function primarily due to the scale of asset numbers accuracy is required with each process. Council systems are SQL driven requiring some scripting knowledge and also general abilities with financial data, accounting interpretations and knowledge of Australian Accounting Standards.

Required changes to asset management system arising from this AM Plan

Council manages a wide range of physical assets. These assets provide a range of services to the Richmond Valley community. In order to better manage its assets, Council has implemented an Integrated Asset Management System (AMS) namely Asset Master by Open Office. Asset Master enables Council to collect and store asset data and to manage its infrastructure maintenance and replacement programs.

Council's objectives in the implementation and consequent management of Asset Master are as follows:

- Ø To have a central repository for all asset data,
- Ø To undertake life cycle management of all Council asset categories,
- Ø To facilitate an asset management culture,
- Ø To reduce the overall costs and risks associated with Council assets, and
- Ø To provide the ability to add advanced asset management functionality as the Council matures with respect to asset management.

Monitoring and Review Procedures

This AMP will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide these services as a result of budget decisions.

The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into Council's LTFP.

The AMP has a life of four years (Council election cycle) and is due for a complete revision and updating within one year of each Council election.

Performance Measures

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

- Ø The degree to which the required projected expenditures identified in this AMP are incorporated into Council's LTFP,
- Ø 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 AMP,
- Ø The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans, and
- Ø The Asset Renewal Funding Ratio achieving the target of 1.0.

7. References

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/AIFMG.

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

Richmond Valley Council, Community Strategic Plan 2013 – 2025',

Richmond Valley Council Strategic Business Plan for Water Supply and Sewerage Services,

RVC Strategic Planning FINMOD Analysis and Tariff Review – Water Supply Services

Richmond Valley Council - Annual Plan and Budget



Appendix C

Asset Management Plan

2015-2025

Stormwater Drains



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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Executive Summary.....	5
1. Introduction	6
1.1 Asset Management Plan.....	6
1.2 Background.....	7
Objectives of Asset Management	7
1.3 Integrated Water Cycle Management.....	8
1.4 Legislative Requirements.....	9
2. Service Levels	11
2.1 Developing Levels of Service.....	11
Community Levels of Service	11
Technical Levels of Service	12
Stormwater Levels of Service	13
2.2 Customer Research and Expectations	13
2.3 Key Assumptions made in Financial Forecasts.....	14
Forecast Reliability and Confidence	14
3. Future Demand	16
3.1 Demand Management Plan.....	16
4. Lifecycle Management Plan.....	17
4.1 Background Data.....	17
4.2 Physical Parameters.....	19
Asset Renewals	19
Stormwater Assets Funding Profile.....	22
4.3 Asset Conditions	22
4.4 Financial Summary	24
4.5 Sustainability of Service Delivery	25
Long term - Life Cycle Cost.....	25
Medium term – 10 year financial planning period.....	26
Medium Term – 5 year financial planning period.....	26
Long Term Financial Plan Works Program.....	26
5. Risk Management	27
Flood Management.....	27
Stormwater.....	28
6. Plan Improvement and Monitoring	28

6.1 Accounting Standards and Regulations	28
6.2 Asset management system	28
7. References.....	31

Executive Summary

This Total Asset Management Plan addresses the responsible management of medium term operational and capital works necessary to comply with legal and regulatory frameworks and to achieve storm water program performance levels. The objective is to provide reliable networks that contribute towards the social, economic and environmental indicators of a regional hub. An asset plan is a crucial element of the strategic planning process providing cascading outcomes that align with the Integrated Water Cycle Management (IWCM) strategy and Strategic water plans.

Council's Stormwater program is predicted to perform marginally over the 20 year horizon. Drainage network assets on average have a remaining useful life 52.4% of their expected lifecycles. Total revenues equal \$7.8 million, operating and management expenses equal \$3.8 million and capital works equal \$3.8 million. The Asset Renewal Funding Ratio is a critical indicator of the stormwater programs long term stability, an ideal indicator is 1.0; therefore RVC's indicator of 0.51 is poor.

Executive Summary - What Does it Cost? (\$000)	10 Yr
10 Year total (Ops, Maint, Renewal Upgrades)	\$6,632
10 Year Average Cost	\$663
10 Year Total LTFP budget	\$6,725
10 Year Average LTFP Budget	\$673
10 Year AM Financial Indicator	101%
10 year average net improvement	\$9

General observations for the local water unit include:

- Ø Number of Assets - 6,411.
- Ø Current Replacement Cost of asset base - \$47.4 million.
- Ø Annual depreciation - \$0.5 million.
- Ø Percentage of assets with condition rating of 1 or 2 is a satisfactory at 49%.
- Ø Percentage of network assets due for renewal in next 10 years is 6%.

The Stormwater program competes with Road and Building assets for funding. The current budget and Long Term Financial Planning process focused attention on roads and building infrastructure which impacts the resourcing available for drainage assets.

1. Introduction

The Richmond Valley is located in the Northern Rivers region of North East NSW, 726 km north of Sydney and 228 km south of Brisbane. Located on the banks of the Richmond River the region supports a variety of agricultural industries, primarily beef, sugar cane and wheat. Richmond Valley Council was formed in February 2000 as the result of amalgamation between Casino Council and Richmond River Shire Council.

Council spreads across 3,050 square kilometres with six townships. Major urban areas are Casino and Evans Head and the villages are Woodburn, Coraki, Broadwater, Rileys Hill and Rappville. As at 2011, the resident population was 22,700 persons with a skew towards blue collar occupations. Richmond Valley is preparing to be one of the fastest growing areas in regional NSW with economic stimulus emerging from natural resource discoveries (uncertainty surrounds coal seam and natural gas developments).

The Region is expected to experience population growth (0.51% pa), decreasing occupancy rates and an ageing population. The number of dwellings in the Council LGA is expected to increase from 9,150 in 2011 to 10,750 in 2031, an increase of 1,600 dwellings at an average growth rate of 0.81% p.a.

Richmond Valley is in a sub-tropical area, characterised by hot humid summers and mild winters. Average rainfall ranges from 1,650 mm along the coast strip, to less than 1,025 mm over inland areas. The LGA is prone to natural disasters having had five Natural Disaster Declarations since 2009. Council is located on a flood plain and heavy rainfall can trigger flood events, while climate change and rising sea levels impact coastal areas and increase unpredictability.

The Richmond Valley is a region of balance where every individual, family and business has the opportunity to be successful.; It is an attractive place to live and play but as with most rural centres struggles to compete with the employment opportunities of the capital cities. This is reflected with a general decline of the working age cohort and professional occupations but does experience a large retiree and tree change population. This is consistent with the ALGA State of the Regions stylised fact number five that applies to the majority of LGA's.

The major issues facing Council generally include prosperity and economic development for individuals and the region. The community is engaged in the longer term prospects for the region with a focus on financial management and the provision of quality infrastructure networks. Council and the local business chamber are aligned in their purpose to provide employment, opportunities and lifestyle for the people of the Richmond Valley.

Timber and forestry and the associated production and manufacturing industries are creating strong demand for industrial development. A 58 hectare industrial development at North Casino (Intermodal Freight Handling Facility) has been approved by Council. Other major developments include coal seam methane gas fields and reticulation as a "green" energy source and an electrical power plant in the Casino area.

1.1 Asset Management Plan

An Asset Management Plan (AMP) provides understanding of the options, risks and consequences associated with managing large scale infrastructures, having an articulated basis for community engagement, expectations, priorities, funding levels and the related trade-offs and a rigorous

understanding of the capital, operating and maintenance expenditures to be incorporated into the long term strategic planning process.

Planning assists organisations to deliver services derived from a network of infrastructure assets including transport, recreation, stormwater drainage, community buildings, water supply and sewerage. *The Local Government Act 1993* requires NSW Councils to prepare AMPs and annual reports.

Many of Council's stormwater planning initiatives is driven by the IWCM. IWCM is a 30 year strategic planning tool for Local Water Utilities (LWUs). IWCM enables utilities to manage their water services in a holistic manner; it deals with the complex linkages between the different elements of the water cycle. This is consistent with the NSW Best Practice Management of Water Supply and Sewerage Framework.

1.2 Background

This plan demonstrates responsive management of stormwater assets, associated services, compliance with regulatory requirements, and to communicate the funding needed to provide the required levels of service over a 10 year planning period.

This plan is to be read with Council's IWCM Strategy Plan, Long Term Capital Plan and Community Strategic Plan.

Objectives of Asset Management

Council exists to provide long-term quality services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our vision is:

We will ensure the Richmond Valley is well positioned for the future – socially, environmentally and economically, with all the right ingredients to be a primary regional hub in NSW.

Our mission is:

To develop and operate infrastructure networks that supports the fabric of a modern vibrant society. Our aim is to provide reliable networks that build trust and dependency not only within their network, but also between one network and another network.

Our goal is:

In managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Ø *Providing a defined Level of Service (LoS) and monitoring performance,*
- Ø *Managing the impact of growth through demand management and infrastructure investment,*

- Ø *Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,*
- Ø *Identifying, assessing and appropriately controlling risks, and*
- Ø *Having a Long Term Financial Plan (LTFP) which identifies required, affordable expenditure and how it will be financed.*

Key elements of this plan are:

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

1.3 Integrated Water Cycle Management

IWCM is a 30 year strategic planning tool for LWUs enabling them to manage their urban sewer water and stormwater services in a holistic manner within a catchment context. LWUs have the goal of providing an appropriate, affordable, cost-effective and sustainable urban stormwater network that meet community needs, protect public health and the environment and make best use of regional resources.

IWCM involves looking at the three components of the urban water services (water supply, sewerage and stormwater) in an integrated way when identifying all the IWCM issues and developing scenarios to address these issues. The scenarios are evaluated and compared on the basis of their social, environmental and economic impacts. Council completed its IWCM Strategy Plan in 2008.

The objectives of the Strategy are:

- Ø Improve land use management through education and demonstration,
- Ø Maximise high value (priority to substitution of potable water) reuse,
- Ø Increase the number of alternative water sources,
- Ø Improved security of urban water supply, and
- Ø Provide the highest level of service relative to users' willingness to pay.

The issues addressed by the Strategy are:

- Ø Council must implement sustainable effluent reuse with end user requirements considered,
- Ø Existing land use practices and urban impacts are affecting surface water quality,
- Ø There is a need for sustainable stormwater / rainwater reuse, and
- Ø Climate change may adversely alter the rainfall and temperature patterns of the study area.

The IWCM Strategy has set the future direction for Council by addressing a number of priority issues identified by Council staff, government agencies and the local community. The implementation of the strategy is reliant on Council's commitment to the capital works program developed as well as its ability to maintain financial stability in the future. The capital works program associated with the adopted strategy has set the direction for Council's LTFP. Council will need to continuously develop, implement and review the components of the IWCM Strategy to ensure it is successful.

Performance monitoring is an essential part of the IWCM process to ensure that the implementation of strategies which have been identified have been successful at addressing the water cycle issues. Annual reporting to the Office of Water should provide an indication of the success of Council's IWCM Strategy and the other Best-Practice planning documents in achieving sustainability and progress in meeting Council's business goals and social and environmental responsibilities.

1.4 Legislative Requirements

As a local government owned business, LWUs are subject to a number of legislative obligations and requirements. The Local Government Act establishes the conformance criteria which enables sustainable performance achievements.

Through the NSW Government's *Country Towns Water Supply and Sewerage Program*, Sections 283 to 322 of the *Water Management Act 2000*, and Sections 56 to 66 of the *Local Government Act 1993*, the Minister for Water is responsible for overseeing the performance of LWUs. The NSW Best-Practice Management (BPM) guidelines encourage continuing improvement and identify criteria for monitoring performance.

Goal 22 under the NSW Governments 10 year plan is to protect our natural environment and improve the health of wetlands and catchments through actively managing water. Water reforms in NSW included the implementation of the Water Management Act 2000, the development of 63 water sharing plans (improving the management of water resources) and a National Water Initiative (NWI) that commits NSW to achieving sustainability in the use of its water resources¹.

The BPM of Water Supply and Sewerage Framework implements 19 requirements towards the effective and efficient delivery of LWUs services. This framework promotes continuing improvement in sustainable water conservation practices, water demand management and appropriate, affordable and cost-effective water supply.

National requirements include: Australian Drinking Water Guidelines, 2011; National Water Initiative (reforms and pricing principles); National Urban Water Planning Principles; and the COAG Strategic Framework for Water Reform. Table 1.1 provides an overview of relevant legislations and their guidance towards sustainable LWUs outcomes.

¹ EPA, 2012, NSW State of the Environment.

Legislation	Requirement
Local Government Act	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.
Public Works and Procurement Act 1912	Sets out the role of the Department of Water and Energy (DWE) and Department of Commerce in the planning and construction of new assets.
Soil Conservation Act 1938	An Act to make provision for the conservation of soil resources and farm water resources and for the mitigation of erosion. It addresses preservation of watercourse environments.
Environmental Planning and Assessment Act 1979	An Act to institute a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Work Health and Safety Act 2011 and Workers Compensation Act 1987	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work and covering injury management, emphasising rehabilitation of workers particularly for return to work. Council is to provide a safe working environment and supply equipment to ensure safety.
Public Health Act 2010	An Act relating to the maintenance of proper standards of health for the public. Council operations need to be carried out in a manner that protects public health.
Independent Pricing and Regulatory Tribunal Act 1992	The Act empowers the Independent Pricing and Regulatory Tribunal (IPART) which sets principles and guidelines related to charging for water supply.
Competition Policy including Competition Policy Reform Act 1995	Council is subject to prohibition on anti-competitive behaviour, according to the Trade Practices Act.
Threatened Species Conservation Act 1995	An Act to conserve threatened species, populations and ecological communities of animals and plants.
Protection of the Environment Operations Act 1997	Council is required to exercise due diligence to avoid environmental impact and among others are required to develop operations emergency plans and due diligence plans to ensure that procedures are in place to prevent or minimise pollution.
Water Management Act 2000	An Act to provide for the protection, conservation and ecologically sustainable development of the water sources of the State, and for other purposes. Allows Council to levy developer charges and addresses water sharing and environmental flows.

Table 1.1: Legislative Requirements

2. Service Levels

For Council, serving customers and the community is our principal objective. Our first priority is to understand their needs, wants, values, concerns and what aspects of services are important to them.

Understanding customer concepts of value is achieved by understanding their expectations and preferences. Typically customers perceive the value provided by a service as the benefits they receive less their contributions in the form of rates and service charges. That is, a customer's utility or satisfaction level increases when their benefits exceed the costs they pay. Customers want to maximise their utility through saving time, reliability and consistency of service, safety and wellbeing.

Customers want services that are easy to use, that simplify their lives and provide lifestyle satisfaction. However customer value is a compromise between their perceived benefit and their willingness to contribute financially towards these benefits. Asset and service attributes like healthy, timeliness, 'safe and reliable', convenience and quality are intrinsic with best practice Asset Management (AM), but they are not always tangible to the consumer. Public organisations need to communicate these attributes and/or the consequences resulting from their removal if the community cannot afford them.

2.1 Developing Levels of Service

Levels of service are key business drivers. They influence the range, quality and quantity of assets and services provided. LoS indicators are usually based on the following:

- Ø Customer expectations and willingness to pay,
- Ø Legislative and environmental compliance which impose standards of service, and
- Ø The business context including strategic objectives, available resources and financial constraints.

LoS statements describes local Council's intention to deliver customer services in terms of quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost. Statements should be written so customers can relate to them, Councils are accountable through a customer satisfaction measure and a technical performance measure.

The relationship between costs and LoS depends on the type of activity. Some infrastructures have a steep initial cost with minimal servicing costs while other services will have higher proportions of operational and maintenance type costs. Costing needs to be meaningful and understandable, the cost per user should represent a tangible benefit or a better LoS.

Community Levels of Service

Service levels are defined as either customer LoS or technical LoS. Community LoS measure how the community receives the service and whether the organisation is providing community value.

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

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

The organisation's current and expected community service levels are detailed in Table 2.1 which shows the agreed expected community LoS based on resource levels in the LTFP and community consultation/engagement.

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTTP
COMMUNITY OUTCOMES				
Key findings from a customer satisfaction survey find that largest performance gaps for resident satisfaction were maintaining local roads, economic development and financial management.				
COMMUNITY LEVELS OF SERVICE				
Quality	Don't get flooded No Overflow through private property Not inconvenienced No property damage No environmental damage to receiving waters Reuse stormwater	Customer surveys Customer requests	To be provided from the Resident Survey	Requests received should not increase annually
Function	Water drained by stormwater system	Customer surveys Customer requests	To be provided from the Resident Survey	Requests received should not increase annually
Safety	Free from hazards	Number of injury accidents (Accident History)	Should commence monitoring trend to determine if accidents are increasing	Accidents attributable to path condition should be reduced annually

Table 2.1: Community Level of Service

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 organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

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

Service and AMPs, implement and control technical service levels to influence the customer service levels.²

² IPWEA, 2011, IIMM, p 2.22

Stormwater Levels of Service

Technical LoS is a function of ongoing serviceability (Operations, Maintenance and Administration (OMA)) and renewing of depleted assets. Council allocates 50% of budget for OMA or serviceability costs (\$3.8 million), 45% for renewing depleted assets (\$3.5 million) and 4% for new assets (\$0.4 million) over the LTFP.

The LTFP stormwater program allocates \$3.4 million for budgeted renewals, \$0.4 million for new works with a total program depreciation of \$6.9 million and total asset disposals of \$5.6 million. This results in a Stormwater renewals ratio of 0.51 and a Bring to Satisfactory (BTS) Ratio of 0.06. Stormwater conduits have a BTS ratio of 0.08 over the LTFP. Stormwater structures have a BTS Ratio of 0.1 over the duration of the LTFP.

Table 2.2 shows the technical LoS expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and the trade-off of service levels performance, costs and risk management of resources available in the LTFP.

Drain \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
SW Conduit	\$2,973	\$302	\$28,241	\$5,247	\$5,909	0.08	0.50
SW Headwall	\$41	\$4	\$449	\$10	\$78		0.53
SW Pit	\$433	\$44	\$5,756	\$241	\$831		0.52
SW Structure	\$46	\$5	\$1,086	\$155	\$91	0.10	0.51
Program	\$3,493	\$355	\$35,532	\$5,653	\$6,908	0.06	0.51

Table 2.2: Stormwater Levels of Service \$(000)

2.2 Customer Research and Expectations

Council engaged Micromex to conduct the Richmond Valley Council Community Research 2013³. The poll from a sample of residents revealed their level of satisfaction with Council's services. Council sought to examine community attitudes and perceptions towards current and future services and facilities provided by Council. Key objectives of the research included:

- To assess and establish the community's priorities and satisfaction in relation to Council activities, services and facilities,
- To identify the community's overall level of satisfaction with Council's performance, and
- To identify the community's level of satisfaction with regards to contact they have had with Council staff.

Overall, the research has found a generally positive result for Council, with 29 of the 32 services/facilities/criteria rated as being of 'moderate satisfaction' to 'very high satisfaction'.

At an overall level, residents expressed a 'moderate' level of satisfaction with the performance of Council, with 82% of the respondents giving a rating of 'somewhat satisfied' to 'very satisfied'. Only 4% of residents indicated that they were 'not at all satisfied' with Council's performance.

³ Micromex Research, 2013, Richmond Valley Council Community Research

Compared to an *All of NSW measure and Regional Councils*, Richmond Valley has performed better than average. The most recent community satisfaction survey reported satisfaction levels for the following services in Table 2.3. The community is generally satisfied with services provided by council and is very satisfied with the regional water supply service.

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Economic development and Local Employment			√		
Community Consultation			√		
Financial Management			√		
Support for Community Organisations		√			
Council Provision of Information for Residents			√		
Council Policies and Plans			√		
Town Water Supply	√				
Maintaining Local Roads			√		

Table 2.3: Community Satisfaction Survey Levels

2.3 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this AMP 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.

Forecast Reliability and Confidence

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale⁴ in accordance with Table 2.4.

⁴ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

Table 2.4: Data Confidence Grading System

Key assumptions made in this AMP and risks that these may change are shown in Table 2.5.

Key Assumptions	Risks of Change to Assumptions
Use of existing inventory data	Data set is reliable; monetary movements have a confidence level of A.
Use of existing valuations and useful lives	Design lives confidence level A RUL confidence level B, some slight deviation observed when applying modified pattern asset movements over the LTFP.
Use of current expenditure information as best as this can be determined	Confidence level A. Council has integrated asset schedule.

Table 2.5: Key Assumptions made in AMP and Risks of Change

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 2.6.

Data	Confidence Assessment	Comment
Demand drivers	TBD	Need calibration
Growth projections	Highly Reliable	ABS and NSW DPI
Operations expenditures	Highly Reliable	Low variations over four years
Maintenance expenditures	Highly Reliable	Low variations over four years
Projected Renewal exps. - Asset values	Reliable	Dataset complete with some expected errors
- Asset residual values	Reliable	Dataset complete with some expected errors

Table 2.6: Data Confidence Assessment for Data used in AMP

3. Future Demand

Demand management is an action plan to improve usage and efficiency for the stormwater system. The capacity of an organisation is dependent on quantitative analysis and best judgements across the many factors impacting on service delivery. Issues include asset integrity, preventative maintenance, periodic renewal and network expansion to accommodate community development.

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

Population is expected to increase modestly over the next 25 years, therefore not influencing demand for new assets. A general issue with infrastructure delivery is the increasing costs of doing business. Rising costs are a factor of increased resourcing costs (labour and materials), WHS awareness and a more focused regulatory environment.

Infrastructure assets are subject to increasing environmental affects, resulting in new technologies and improved materials. New construction methods are designed to lessen susceptibility to damage from the environment, as well as to minimise induced impacts on the environment. In combination the cost to provide and care for assets is increasing faster than the community's ability to fund provision.

3.1 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability and the timely renewal of assets that have reached end of life. Council continues to invest in information systems and evidence based data including conditions ratings, remaining useful life, depreciation patterns which improve the infrastructure and long term financial planning functions.

The potential benefits of demand management programs include sustainable usage patterns, delaying investment in new infrastructure and to reduce the operational costs of reticulated water services. LWUs can balance demand management initiatives with supply side works and achieve triple bottom line benefits including: lower rates (Typical Residential Bill TRB) for their customers, a more secure water supply and increase residual water for environment uses.

Opportunities identified for demand management include monitoring community expectations to determine LoS and analysing the cost of provision to determine the long term affordability. There is a gap between community aspirations and their willingness to pay for these services. It is the responsibility of council board and management to articulate the evidence presented in asset and financial planning, therefore narrowing the expectations gap.

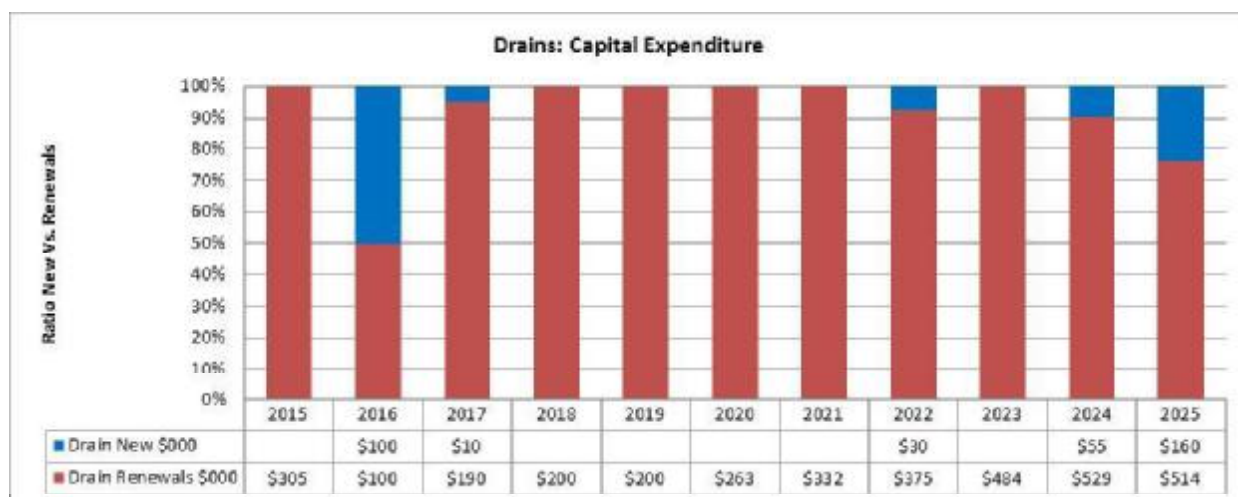


Fig 3.2 New Assets from Growth

Financial results from best practices applied to the Stormwater program identify that 91% of capital expenditure will be required to maintain the existing network of asset. A total of \$0.4 million has been allocated for new and improved serviceability of the stormwater drainage. It is important to note that acquiring additional assets from growth or by provision of additional infrastructure services, will ultimately commit Council to fund ongoing operations and maintenance costs. These future costs should be identified and considered in developing forecasts of future operating and maintenance costs.

4. Lifecycle Management Plan

A Lifecycle AMP details how Council plans to manage and operate storm water assets at the agreed levels of service while optimising lifecycle costs. The objective is to look at the lowest long term cost rather than seeking short term savings when making decisions. Sustainable financial management is about managing community outcomes by providing assets and services with the lowest long term cost.

4.1 Background Data

The Council Stormwater network includes four asset classes consisting of 6,411 unique assets with a Fair Value Current Replacement Cost (CRC) of \$47.4 million and a Depreciable Replacement Cost (DRC) \$47.4 million. The remaining useful life (RUL) for all stormwater assets as a percentage of total life is 52.4% (Table 4.1).

Type	No Of Assets	New Assets	Avg Age	AvgRUL	Dep Pattern	Distance m	Area sqm	Age %	Value %
SW Conduit	3,100	0	38	37	Moderate	78,596		49.6%	68.7%
SW Headwall	671	0	36	44	Moderate			54.7%	64.9%
SW Pit	2,588	0	36	44	Moderate			54.6%	79.4%
SW Structure	52	0	18	56	Moderate			75.8%	89.6%
Grand Total	6,411	0	37	41		78,596		52.4%	70.6%

Table 4.1: Stormwater Asset Statistics

Long life assets have modified depreciation schedules reflecting reduced consumption patterns in earlier years and increasing consumption as the asset integrity declines towards end of useful life (Figure 4.1). Standard lifecycle asset terms include:

- Ø Current replacement cost (CRC) -the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset with the same economic benefits or service potential,
- Ø Depreciable amount (DA) - CRC for depreciable assets less residual value (RV),
- Ø Depreciated replacement cost (DRC) - CRC less accumulated depreciation, and
- Ø Asset valuations by the valuer employ a modified depreciation pattern which results in asset valuations as a percentage (DRC/CRC) being higher than the age percentage (RUL/Useful Life).

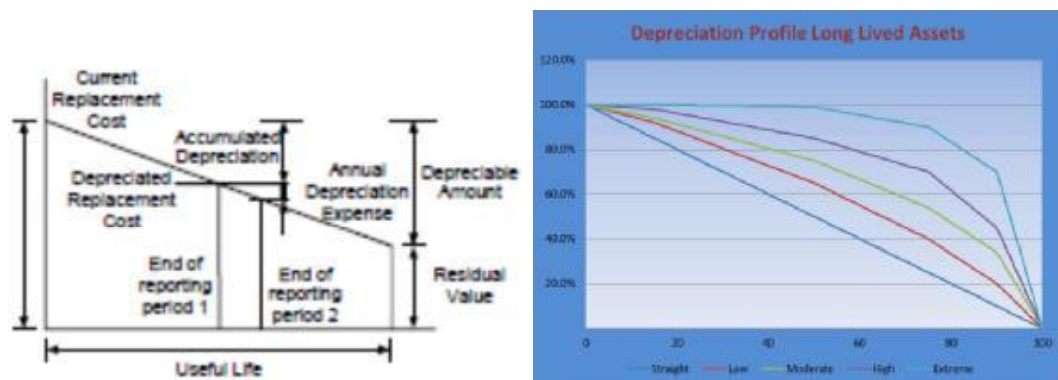


Figure 4.1: Depreciation Profile for Long Life Assets

Council Stormwater position (Table 4.2) shows the fair value of assets (CRC) is \$47.4 million and DRC or the Written Down Value (WDV) totalling \$33.5 million. Annual depreciation of \$0.55 million reflects an asset consumption rate of 1.15%. The asset renewal funding ratio⁵ is 0.51 this indicates Council plans to renew assets at half the rate they are being consumed, thereby decreasing asset stock by \$340,000 per year.

Type (\$000)	Opening CRC Reval		Additions	Annual Dep	Closing CRC	Depr Amoun	Accum Dep	WDV
SW Conduit	\$38,270	\$1,064		\$460	\$39,334	\$39,334	\$12,297	\$27,037
SW Headwall	\$562	\$47		\$7	\$609	\$609	\$214	\$396
SW Pit	\$5,623	\$737		\$69	\$6,361	\$6,361	\$1,310	\$5,051
SW Structure	\$829	\$298		\$10	\$1,128	\$1,128	\$118	\$1,010
Service Connection	\$45,285	\$2,147		\$546	\$47,432	\$47,432	\$13,938	\$33,494

Table 4.2: Stormwater Asset Values (\$000)

⁵ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

4.2 Physical Parameters

The age profile of infrastructure assets shows that significant construction took place in the post-World War 2 time period. It is likely that much of this infrastructure will be well through its useful life and will require renewal in the near future. The profile also indicates that the age data on infrastructure requires development.

Figure 4.2 examines the data by time periods. This graphic illustrates that the drainage network is reasonable modern, 29% of assets were constructed pre 1970 and 18% have been constructed this century.

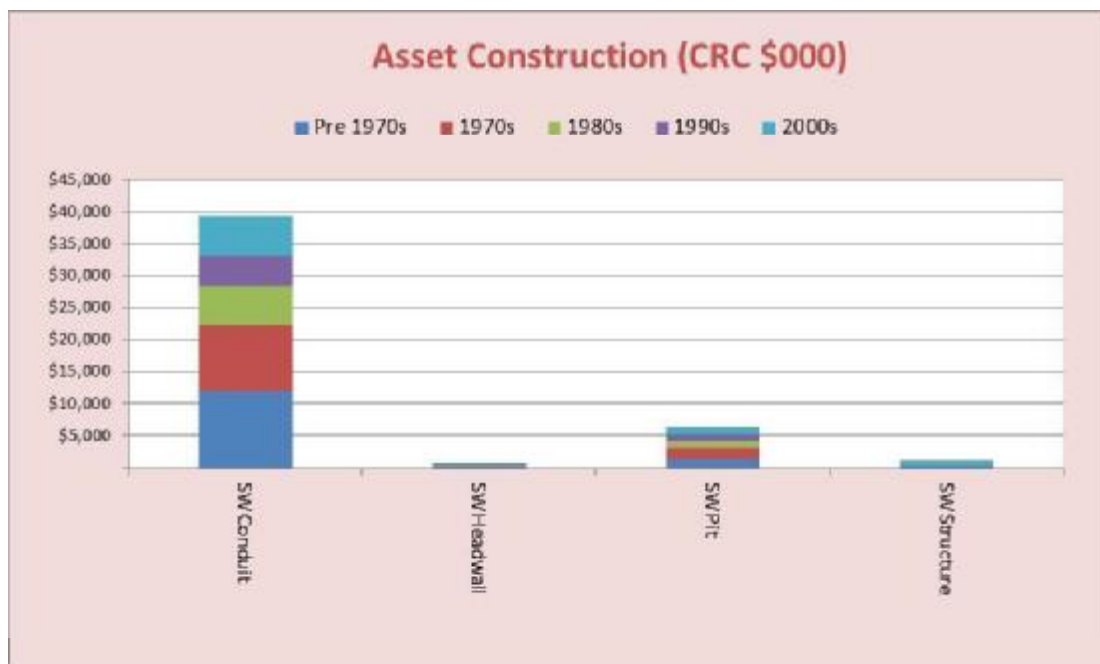


Figure 4.2: Asset Age Profile

Asset Renewals

Council's asset register provides RUL's for each asset which can be used to predict the capital renewals by decade (Table 4.3). Council's stormwater program has a current backlog of works (\$2.2 million) influenced by construction dates in the asset register. For this LTFP the backlog persists around this mark for a BTS measure of 0.06 which is greater than the benchmark measure of 0.02.

Asset Construction (CRC \$000)	Pre 1970	1970s	1980s	1990s	2000s	Total
SW Conduit	\$11,869	\$10,463	\$6,043	\$4,751	\$6,207	\$39,334
SW Headwall	\$185	\$92	\$159	\$96	\$77	\$610
SW Pit	\$1,501	\$1,672	\$1,040	\$957	\$1,191	\$6,361
SW Structure	\$172	\$2	\$85	\$33	\$835	\$1,128
Total	\$13,727	\$12,230	\$7,328	\$5,837	\$8,311	\$47,432

Table 4.3: Stormwater Construction data (\$000)

For the forward period asset renewals are reasonable consistent with 12% of renewals during the 2020s, 10% in the 2030s and 27% in the 2040s. This is consistent with other asset classes' in general business, indicating manageable asset care within the current resourcing model for 20 years. However the 2040s and onwards will challenge the current funding arrangements for drains, roads and building infrastructure.

Asset Renewal (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050s Total	
SW Conduit	\$145	\$5,369	\$4,114	\$12,102	\$17,604	\$39,334
SW Headwall	\$3	\$6	\$54	\$122	\$425	\$610
SW Pit	\$163	\$234	\$427	\$678	\$4,860	\$6,361
SW Structure	\$7	\$1	\$4	\$7	\$1,109	\$1,128
Total	\$318	\$5,609	\$4,598	\$12,909	\$23,998	\$47,432

Table 4.3.1: Capital Renewal Schedule (\$000)

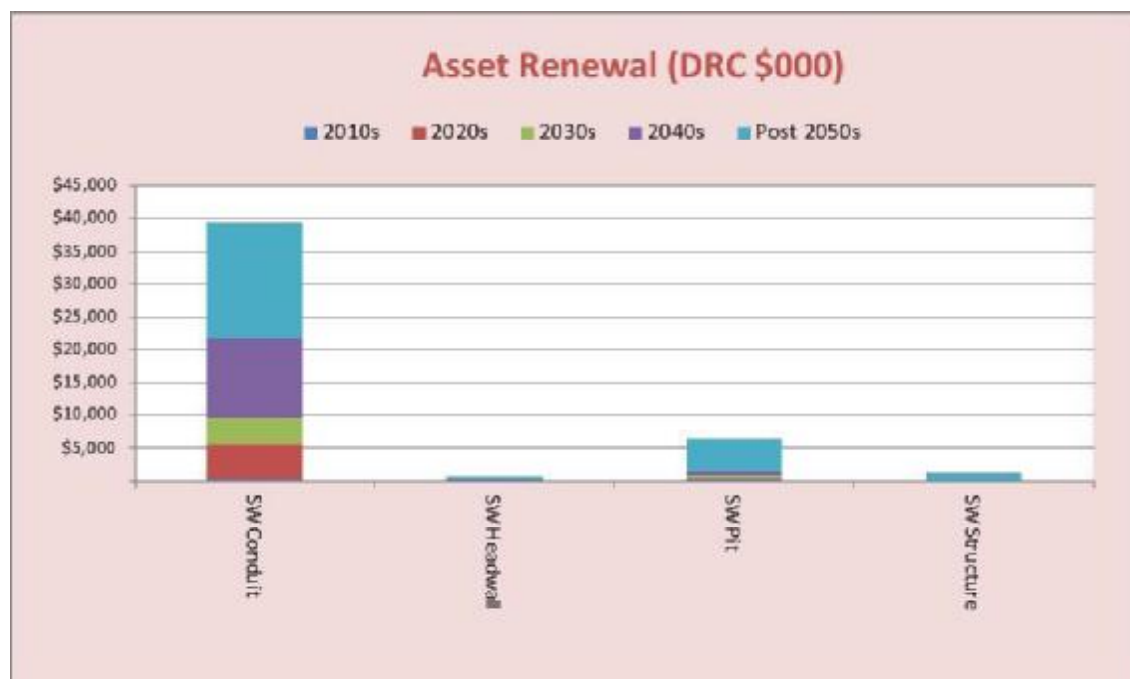


Figure 4.4: Asset Renewals Profile

Planning forward works is a function of renewals due and resourcing capacity. Over the LTFP period Council has \$5.6 million of drainage assets requiring renewal and has allocated 0.62 times this amount \$3.5 million, an amount insufficient to preserve the network. The following tables display asset financial movements for EOL Disposals, Renewals and Depreciation values (\$000s) for each road program this current LTFP. These tables produce the key BTS and Renewals Ratios discussed below.

Council demonstrates a mature and integrated approach towards budget development, LTFP and capital works planning. This approach is influenced by best practice management and the future sustainability of Council businesses. Asset and financial planning primary considerations include

replacement of end of life assets represented as a BTS Ratio and the preservation of assets represented as a Renewals Ratio.

The following tables provide a time series for EOL disposal values, proposed capital renewals, annual Depreciation Values (which measure the consumption of assets) and Written Down Values (which measure the remaining service potential of assets). The table with capital renewals presents Council's approach to achieving benchmark ratios of less than 0.02 for BTS and 1.0 for asset renewals.

Drain EOL \$000	2015 Disp	2016 Disp	2017 Disp	2018 Disp	2019 Disp	2020 Disp	2021 Disp	2022 Disp	2023 Disp	2024 Disp	2025 Disp	Total
SW Conduit	\$2,397	\$45				\$2		\$7	\$1,224	\$1,572		\$5,247
SW Headwall	\$7					\$3					\$1	\$10
SW Pit	\$241											\$241
SW Structure	\$149					\$5						\$155
Total	\$2,795	\$45				\$10		\$7	\$1,224	\$1,572	\$1	\$5,653

Table 4.4.1: Capital End of Life Disposal Values (\$000)

Drain Renewals \$000	2015 Add	2016 Add	2017 Add	2018 Add	2019 Add	2020 Add	2021 Add	2022 Add	2023 Add	2024 Add	2025 Add	Total
SW Conduit	\$265	\$87	\$164	\$172	\$172	\$226	\$290	\$323	\$402	\$438	\$435	\$2,973
SW Headwall	\$3	\$1	\$2	\$2	\$2	\$3	\$3	\$4	\$7	\$7	\$6	\$41
SW Pit	\$33	\$11	\$21	\$23	\$23	\$31	\$35	\$44	\$69	\$76	\$66	\$433
SW Structure	\$4	\$1	\$3	\$3	\$3	\$3	\$4	\$4	\$7	\$7	\$7	\$46
Total	\$305	\$100	\$190	\$200	\$200	\$263	\$332	\$375	\$484	\$529	\$514	\$3,493

Table 4.4.2: Proposed Capital Renewals Values (\$000)

BTS communicates the quantum of assets that are at risk or require immediate attention to restore their serviceability. With Council implementing best practice through professional revaluations on a five yearly cycle, Council's control systems have dependable data on the current state of assets. Therefore calculation of BTS is a simple calculation of the total value of EOL assets in year (x) less the value of renewals in that year compared to the total WDV of the asset class. For the LTFP period the stormwater network has a BTS measure of 0.06, which is lower than the benchmark of 0.02.

Renewables Ratio communicates the preservation of asset integrity. Asset consumption as measured by depreciation reflects the loss of future service potential in infrastructure assets. In accordance with AASB 116 p60, Council estimates asset consumption most closely reflecting their real world deterioration rates. This increases the complexity of financial calculations and will ultimately focus attention on best practice maintenance and renewals programs to preserve asset integrity.

An ideal Renewables Ratio is 1.0. This simply means that the value of renewals in year (x) matches the consumption of asset in that year. The LTFP process has focused on a sustainable asset position at the end of 10 years across all community assets. This is reflected in improving renewables ratios each year. For the LTFP period the stormwater network has a renewables ratio of 0.51 or half the ideal rate. Council aims to achieve a general fund renewables ratio of 1.0 across the combined buildings, roads and stormwater classes. The net result is that drainage suffers this LTFP with other classes having higher priorities.

Drain Depreciation \$000	2015 Dep	2016 Dep	2017 Dep	2018 Dep	2019 Dep	2020 Dep	2021 Dep	2022 Dep	2023 Dep	2024 Dep	2025 Dep	Total
SW Conduit	\$464	\$476	\$487	\$498	\$510	\$522	\$613	\$629	\$527	\$543	\$640	\$5,90
SW Headwall	\$5	\$6	\$6	\$6	\$6	\$6	\$7	\$8	\$9	\$9	\$9	\$7
SW Pit	\$58	\$61	\$63	\$66	\$69	\$72	\$75	\$85	\$90	\$94	\$98	\$83
SW Structure	\$7	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$9	\$9	\$10	\$9
Total	\$535	\$550	\$564	\$578	\$593	\$609	\$703	\$731	\$635	\$655	\$757	\$6,90

Table 4.4.3: Capital Depreciation Values (\$000)

Drain WDV \$000	2015 WDV	2016 WDV	2017 WDV	2018 WDV	2019 WDV	2020 WDV	2021 WDV	2022 WDV	2023 WDV	2024 WDV	2025 WDV	Total
SW Conduit	\$25,875	\$26,043	\$26,204	\$26,356	\$26,500	\$26,683	\$26,833	\$27,029	\$27,393	\$27,826	\$28,241	\$28,241
SW Headwall	\$398	\$403	\$407	\$411	\$415	\$420	\$425	\$430	\$435	\$442	\$449	\$449
SW Pit	\$4,973	\$5,037	\$5,099	\$5,160	\$5,219	\$5,286	\$5,364	\$5,444	\$5,534	\$5,638	\$5,756	\$5,756
SW Structure	\$884	\$899	\$913	\$928	\$943	\$961	\$980	\$1,003	\$1,027	\$1,055	\$1,086	\$1,086
Total	\$32,130	\$32,381	\$32,623	\$32,855	\$33,076	\$33,350	\$33,603	\$33,906	\$34,389	\$34,961	\$35,532	\$35,532

Table 4.4.4: Capital Written Down Values (\$000)

Stormwater Assets Funding Profile

The 10 year funding for drainage capital works totals \$3.8 million, \$0.4 million or 9% for scheme augmentation and \$3.5 million for renewals programs.

4.3 Asset Conditions

Asset conditions are monitored on a rotating asset class schedule. This is a recent development at Council and it ensures that all assets will receive an observational rating once every four years. The road network of assets were rated in 2012, stormwater in 2014 and land and building assets in 2015. The condition profile of our drainage assets is shown in Figure 4.5. 55.7% of Council assets have a current condition rating of 1 or 2 generally reflecting a network in average condition.

Figures 4.5 and 4.5.1 illustrate the current condition profile for each asset type as a percentage with the black diamond showing the average condition (right hand scale) for each asset. Using Stormwater Pits as an example in 2014, 10% of assets were condition 1 and only 4% rated condition 5; the black diamond indicating an average condition of 2.5. By 2025 only 1 asset remains at condition 1 while 11% now have a condition rating of 5, resulting in a weighted average condition of 2.9.

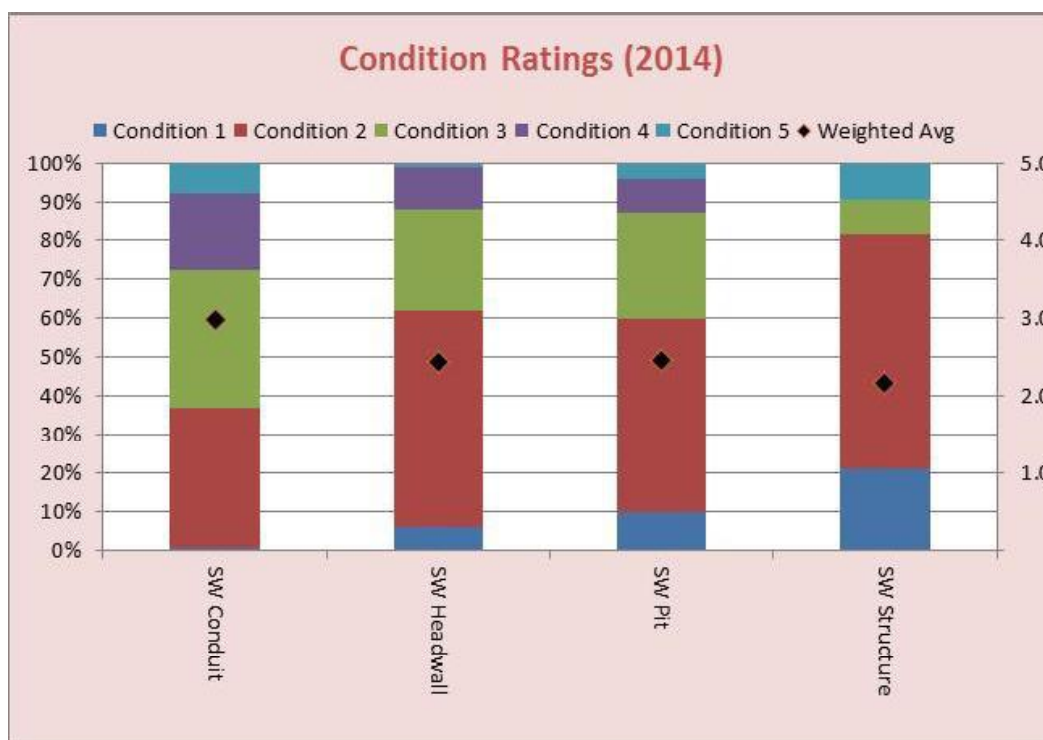


Figure 4.5: Asset Condition Rating Profile

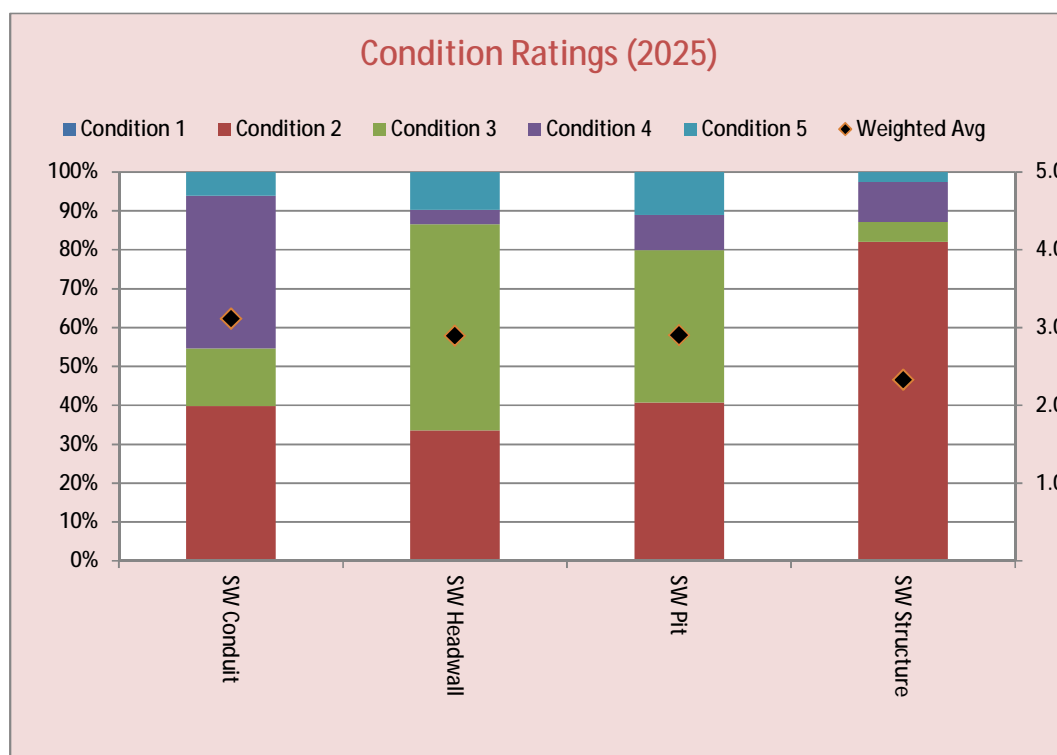


Figure 4.5.1: Asset Condition Rating Profile

4.4 Financial Summary

Council's operates the Stormwater network as a component of the general fund with a restricted reserves fund to meet Capex under and over expenditure requirements. Council revenue streams include access and usage charges, grants revenue, developer service charges and interest on restricted reserves. OpEx include Operations, Maintenance and Management Activities. Capex includes renewals program, improved LoS programs and augmentation programs. Table 4.6 provides a summary of cash flows for 20 years. Cash flow predictions are based on current business expectations with 3% indexation for revenue and expense streams beyond the LTFP.

Values (\$000)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	\$626	\$531	\$541	\$562	\$570	\$612	\$685	\$767	\$866	\$966
Operations										
Maintenance	\$155	\$154	\$158	\$162	\$166	\$170	\$174	\$179	\$183	\$188
Management	\$166	\$163	\$163	\$175	\$172	\$178	\$179	\$183	\$199	\$194
Depreciation	\$535	\$550	\$564	\$578	\$593	\$609	\$703	\$731	\$635	\$655
Renewals	\$305	\$100	\$190	\$200	\$200	\$263	\$332	\$375	\$484	\$529
Improved LOS		\$75	\$8					\$23		\$41
Augmentation		\$25	\$3					\$8		\$14
Program Position	0	15	36	62	94	94	94	94	94	94
Values (\$000)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	\$1,064	\$742	\$764	\$787	\$811	\$835	\$860	\$886	\$913	\$940
Operations										
Maintenance	\$192	\$199	\$205	\$211	\$217	\$224	\$231	\$238	\$245	\$252
Management	\$197	\$206	\$213	\$219	\$225	\$232	\$239	\$246	\$254	\$261
Depreciation	\$757	\$695	\$716	\$737	\$759	\$782	\$805	\$829	\$854	\$880
Renewals	\$514	\$316	\$325	\$335	\$345	\$356	\$366	\$377	\$389	\$400
Improved LOS	\$120	\$16	\$16	\$16	\$17	\$17	\$18	\$19	\$19	\$20
Augmentation	\$40	\$5	\$5	\$5	\$6	\$6	\$6	\$6	\$6	\$7
Program Position	94	94	94	94	94	94	94	94	94	94

Table 4.6: Projected Operating and Capital Expenditure (\$000)

Cash flow predictions are based on current business expectations with 5% as the indicator for revenue streams and 3% for expense streams. Developer service pricing also provide some uncertainty for revenue flows. The LWU business demonstrates a healthy state over the forward LTFP period.

Funding for the Drainage program includes operating budgets, capital grants and contributions and internal transfers from the restricted water fund. This means a shortfall is balanced by transfers from restricted assets and a surplus will result in a transfer to restricted assets. For the next 10 years the stormwater drainage program will require a transfer \$94,000 from restricted funding.

Asset Lifecycle profiles for the Stormwater Drains are shown in figure 4.7; this illustrates the flow of funds for operating and capital expenditures over the forward period. Annual consumption of assets (depreciation) is shown on the right axis. This clearly illustrates insufficient funding for the drainage network which is reinforced by a poor renewals ratio of 0.51.



Figure 4.7: Projected OpEx and Capex

4.5 Sustainability of Service Delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over five and 10 years of the planning period.

Asset Renewal Funding Ratio⁶ - 0.51

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 50% of the funds required for the optimal renewal and replacement of its assets.

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 asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is \$0.66 million per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years). The 10 year average LTCM indicator is \$0.67 million per year

⁶ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this AMP is + \$9,000 per year (negative = gap, positive = surplus).

10 Year AM Financial Indicator - Life cycle expenditure is 101% of life cycle costs.

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 AMPs and LTFP.

Medium term – 10 year financial planning period

This AMP 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 AMP, a gap is generally due to increasing asset renewals for ageing assets.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first five years of the planning period is \$0.54 million on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$0.56 million on average per year giving a five year average funding surplus of \$19,000. This indicates that Council expects to have 100% of projected expenditures required to provide the services shown in this AMP.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the AMP and ideally over the 10 year life of the LTFP.

Long Term Financial Plan Works Program

Council's LTCW program has an 11 year (current Budget plus LTFP) figure of \$3.8 million for the drainage program. The asset register indicates \$3.5 million of assets or 91% of the program will be renewals over the forward planning period. The balance of the program is divided 75% into improved LoS and 25% for scheme augmentation. Therefore 7% of the program or \$0.3 million is for LoS improvements and 2% or \$89,000 is for scheme augmentations over the planning period.

5. Risk Management

Asset management is about managing strategic and operational risks. The greatest strategic risk is whether a Council is sustainable. Efficient asset management contributes to risk minimisation by providing reliable and relevant information to decision makers. Risk management is the demonstrated commitment to understand problems, to classify sensitivities, to prioritise solutions and to contain the adverse consequences of threats to an acceptable level.

A primary consideration when selecting risk protection and practices is to ensure that the costs incurred are not greater than the benefits gained. Factors affecting risk include the consequences of service failure, identification of significant and critical assets, and options to mitigate impact or reduce harm.

Risks are generally identified and classified by the consensus approach through workshops or risk management tools (risk spectrum or risk matrix approach). These tools systematically quantify risk attributes into a risk factor, economic deprivation, social disruption or environmental impact. Risk is associated with consequences completely enumerated in terms of probability. The consensus approach seeks answers to the types and source of risk, severity levels, possible outcomes and the scale of impact. Advanced techniques include 'what if' scenario type answers that seek to describe varying effects of events affecting a few customers through to widespread and unacceptable community risks.

Flood Management

Flooding in Casino and the downstream river towns is a regular occurrence due to the confluence of three major river inflows being the Richmond River, Wilsons River and Bubgawalbyn Creek. Approximately 35% of the LGA is vulnerable to flooding, with events in the lower river towns having reoccurrence intervals of five to ten years.

Previous attempts to manage floodwaters have included the installation of floodgates at Rocky Mouth Creek, Swan Bay, Bora Ridge Canal and Boggy Creek and the construction of Tuckombil Canal. Constructed in the early 1900s the canal diverts floodwater down the Evans River which can result in saline intrusion and impacted biodiversity in the estuary. Mitigation measures have included the installation of an inflatable rubber dam (fabridam) and a now temporary weir. A committee has previously considered options to resolve this situation.

The Floodplain Risk Management Plans identify immediate and longer-term mitigation measures, including:

- Ø Flood warning and emergency planning,
- Ø Raising community awareness,
- Ø Development control planning,
- Ø Voluntary house raising/purchase, and
- Ø Infrastructure measures including levees, creek protection and drainage measures⁷.

⁷ RVC Casino Floodplain Risk Management Plan (2002a), RVC Mid-Richmond Floodplain Risk Management Risk (2002b)

Stormwater

A drainage network servicing urban areas consists of kerb and guttering, pipes, Gross Pollutant Traps (GPT), detention basins and natural drainage lines. Urban stormwater is discharged into local creeks, lagoons, the river and ultimately the ocean. Stormwater runoff is estimated assuming a 0.3 run-off coefficient would result in 5,922 ML p.a.

Council prepared a Stormwater Management Plan (SMP 2005) to minimise the ecological and economic effects of urban stormwater on the receiving environment. Community consultation identified litter, water-quality, weeds, funding and network maintenance as issues. The SMP identified erosion in the upper catchments of Rocky Mouth Creek and Evans River, pollutants from agriculture, landfill, sewerage, industrial and acid sulphate soils affecting water quality.

Measures to improve the situation included the construction of wetlands and sediment basins at Evans Head, maintenance of stormwater devices and GPT, litter control and alleviation measures like rain water tanks. *DC9: Water Sensitive Urban Design* outlines further principles for water quality control and catchment management.

6. Plan Improvement and Monitoring

Asset systems is an outward function which interacts across the organisation and attempts to consolidate operational plans, risk management plans, business continuity planning, emergency response planning with higher level strategic and governance objectives. Overall the function is still developing and seeking regular appropriate input from the various asset delivery areas of Council which remain focused on their primary objectives. This restricts some asset planning outcomes but will rise in importance when quality AMPs align with higher strategic goals and provide a clear line of sight between operational, maintenance and asset rehabilitation initiatives. It is the intention of Council to ensure that the practices documented within the Asset Plans are a prime focus of culture within the workplace, so that the links from service delivery to long term strategic plans remain strong.

6.1 Accounting Standards and Regulations

In accounting for Richmond Valley Council's assets, the following statutory requirements shall be adhered to:

- Ø NSW Local Government Act 1993;
- Ø NSW Code of Accounting Practice and Financial Reporting (updated annually);
- Ø Australian Accounting Standards, UIG Consensus Views and other prescribed requirements; and standards
- Ø AASB 13 Fair Value Measurement;
- Ø AASB 116 Property Plant and Equipment;
- Ø AASB 5 Assets Held for Sale; and
- Ø AASB 136 Impairment.

6.2 Asset management system

Council operates an integrated SQL based Asset Management System. The core programs include MapInfo a GIS asset information system and Asset Master, an Asset hierarchy and financial movements register. The programs are supported by MS office programs and information provided by Councils financial management systems. The financial systems are primarily managed by Council's

financial section. It is the responsibility of all persons with expenditure roles to ensure that costing is allocated to the correct account numbers so that financial reporting will be accurate and reliable.

The strength of the Asset Master process is the unique identifiers for each asset, accurate plans for work teams and detailed financial history of individual assets. Council has expanded its asset management and asset data team given the expansive task of data entry and data management. This is a continuing process that will produce more insight and accuracy into asset conditions, predictive strategies and financial observations.

Asset registers

Council utilises the Asset Master system from Open Office Australia. This system was deployed in 2012 and is continually being refined to produce quality asset information. Council systems are generally connected through an SQL server but often financial reporting is performed at a higher level. This is accomplished by excel reports exported by the various asset management and financial management systems.

All construction and maintenance costs are recorded in the Technology 1 Financial Management System. Capital costs are generally costed to a series of cost account numbers that can be related to a particular asset construction project. Personnel performing asset management system data functions require a high level of rounded numeracy and literacy skills. Although the functions have a high level of repetitive function primarily due to the scale of asset numbers accuracy is required with each process. Council systems are SQL driven requiring some scripting knowledge and also general abilities with financial data, accounting interpretations and knowledge of Australian Accounting Standards.

Required changes to asset management system arising from this AMP

Council manages a wide range of physical assets. These assets provide a range of services to the Richmond Valley community. In order to better manage its assets, Council has implemented an Integrated Asset Management System (AMS) namely Asset Master by Open Office. Asset Master enables Council to collect and store asset data and to manage its infrastructure maintenance and replacement programs.

Council's objectives in the implementation and consequent management of Asset Master are as follows:

- Ø To have a central repository for all asset data,
- Ø To undertake life cycle management of all Council asset categories,
- Ø To facilitate an asset management culture,
- Ø To reduce the overall costs and risks associated with Council assets, and
- Ø To provide the ability to add advanced asset management functionality as the Council matures with respect to asset management.

Monitoring and Review Procedures

This AMP will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide these services as a result of budget decisions.

The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's LTFP.

The AMP has a life of four years (Council election cycle) and is due for a complete revision and updating within one year of each Council election.

Performance Measures

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

- Ø The degree to which the required projected expenditures identified in this AMP is incorporated into Council's LTFP,
- Ø 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 AMP,
- Ø The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans, and
- Ø The Asset Renewal Funding Ratio achieving the target of 1.0.

7. References

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/AIFMG.

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

Richmond Valley Council, Community Strategic Plan 2013 – 2025',

Richmond Valley Council Strategic Business Plan for Water Supply and Sewerage Services,

RVC Strategic Planning FINMOD Analysis and Tariff Review – Water Supply Services

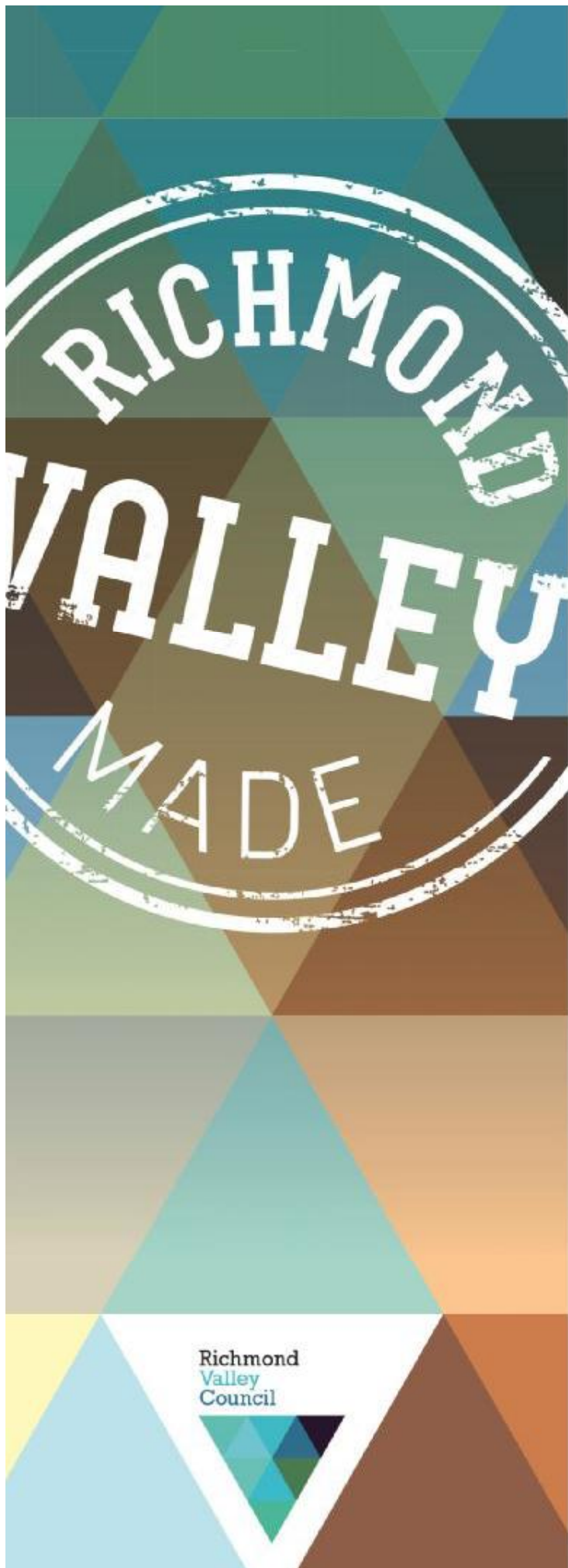
Richmond Valley Council - Annual Plan and Budget

Appendix D

Asset Management Plan 2015-2025

Roads and Traffic
Management

Customer Service. Initiative. Teamwork. Communication. Reliability. Accountability.





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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Executive Summary	4
1. Introduction	5
1.1 Asset Management Plan	5
1.2 Background.....	6
Objectives of Asset Management	6
1.3 Legislative Requirements	7
2. Service Levels.....	8
2.1 Developing Levels of Service	9
Community Levels of Service	9
Technical Levels of Service	10
Roads and Traffic Management LoS.....	11
2.2 Customer Research and Expectations.....	12
Customer Expectations Survey	12
2.3 Key Assumptions made in Financial Forecasts	13
Forecast Reliability and Confidence.....	14
3. Future Demand.....	15
3.1 Demand Management Plan	15
4. Lifecycle Management Plan.....	16
4.1 Background Data	16
4.2 Physical Parameters	18
4.3 Asset Conditions	24
4.4 Financial Summary.....	26
4.5 Sustainability of Service Delivery	28
Long term - Life Cycle Cost	28
Medium term – 10 year financial planning period	28
Medium Term – 5 year financial planning period	29
5. Risk Management.....	29
6. Plan Improvement and Monitoring.....	29
6.1 Accounting Standards and Regulations.....	30
6.2 Asset management system.....	30
7. References	32

Executive Summary

This Roads and Traffic Management Asset Management Plan addresses the responsible management of operational and capital works necessary to comply with legal and regulatory frameworks and to achieve agreed road program performance levels. The objective is to provide reliable networks that contribute towards the social, economic and environmental wellbeing of a regional hub. An Asset Management Plan (AMP) is a crucial element of the strategic planning process.

Council's Road and Traffic Management program is predicted to perform favourably over the 20 year outlook. Road network assets on average have a remaining useful life of 58% of their expected design lives. By asset type, unsealed roads have 20% (RUL) remaining of their design life, Aerodromes have 23% and Road Seals have 40% RUL of their design lives. Bridges as a class of asset have 64% remaining of their design life; however 41 bridges with a Current Replacement Cost of \$27 million were built before 1970 and are approaching the declining phase of their lifecycle.

The Roads program is primarily funded by consolidated revenues and grants (90%), with 10% from direct revenue sources. Total revenues for the Long Term Financial Plan (LTFP) period equal \$111.7 million, operating and management expenses equal \$53.7 million and capital works equal \$66.4 million. The 10 year Asset Management Financial Indicator is a healthy 1.02.

Executive Summary - What Does it Cost? (\$000)	10 Yr
10 Year total (Ops, Maint, Renewal Upgrades)	\$107,775
10 Year Average Cost	\$10,778
10 Year Total LTFP budget	\$109,927
10 Year Average LTFP Budget	\$10,993
10 Year AM Financial Indicator	102%
10 year average net improvement	\$215

The Asset Renewal Funding ratio is a critical indicator for the Road and Traffic Management programs long term stability; an ideal indicator is 1.0; therefore RVC's indicator of 1.21 is favourable. Another critical indicator is the Bring to Satisfactory measure which should be less than 2% of the asset network. RVC has a BTS measure of 0.00 for the Roads and Traffic Management network.

General observations for the Roads and Traffic Management program include:

- Ø Number of Assets - 22,637.
- Ø Current Replacement Cost of asset base - \$362 million.
- Ø Annual depreciation - \$4.6 million.
- Ø Depreciated Replacement Cost \$186 million, 52% of the fair values, reflecting high residual values and modified depreciation schedules for long lived assets.
- Ø 31% of all assets have a condition rating of 1 or 2; short life assets are 46%.
- Ø 42% of network assets due for renewal this LTFP (21% excluding signs).
- Ø A complete list of Roads and Traffic Management Assets is provided in Table 4.1.

1. Introduction

The Richmond Valley is located in the Northern Rivers region of North East NSW, 726 km north of Sydney and 228 km south of Brisbane. Located on the banks of the Richmond River the region supports a variety of agricultural industries, primarily beef, sugar cane and wheat. Richmond Valley Council was formed in February 2000 as the result of amalgamation between Casino Council and Richmond River Shire Council.

Council spreads across 3,050 square kilometres with six townships. Major urban areas are Casino and Evans Head and the villages are Woodburn, Coraki, Broadwater, Rileys Hill and Rappville. As at 2011, the resident population was 22,700 persons with a skew towards blue collar occupations. Richmond Valley is preparing to be one of the fastest growing areas in regional NSW with economic stimulus emerging from natural resource discoveries (uncertainty surrounds coal seam and natural gas developments).

The Region is expected to experience population growth (0.51% pa), decreasing occupancy rates and an ageing population. The number of dwellings in the Council LGA is expected to increase from 9,150 in 2011 to 10,750 in 2031, an increase of 1,600 dwellings at an average growth rate of 0.81% p.a.

Richmond Valley is in a sub-tropical area, characterised by hot humid summers and mild winters. Average rainfall ranges from 1,650 mm along the coast strip, to less than 1,025 mm over inland areas. The LGA is prone to natural disasters having had five Natural Disaster Declarations since 2009. Council is located on a flood plain and heavy rainfall can trigger flood events, while climate change and rising sea levels impact coastal areas and increase unpredictability.

The Richmond Valley is a region of balance where every individual, family and business has the opportunity to be successful.; It is an attractive place to live and play but as with most rural centres struggles to compete with the employment opportunities of the capital cities. This is reflected with a general decline of the working age cohort and professional occupations but does experience a large retiree and tree change population. This is consistent with the ALGA State of the Regions stylised fact number five that applies to the majority of LGA's.

The major issues facing Council generally include prosperity and economic development for individuals and the region. The community is engaged in the longer term prospects for the region with a focus on financial management and the provision of quality infrastructure networks. Council and the local business chamber are aligned in their purpose to provide employment, opportunities and lifestyle for the people of the Richmond Valley.

Timber and forestry and the associated production and manufacturing industries are creating strong demand for industrial development. A 58 hectare industrial development at North Casino (Intermodal Freight Handling Facility) has been approved by Council. Other major developments include coal seam methane gas fields and reticulation as a "green" energy source and an electrical power plant in the Casino area.

1.1 Asset Management Plan

An Asset Management Plan (AMP) provides understanding of the options, risks and consequences associated with the responsible management of large scale infrastructure. It provides the basis for community engagement, expectations, priorities, funding levels and the related trade-offs. Planning

enables a strong understanding of the capital, operating and maintenance expenditure to be incorporated into the long term strategic process.

Planning assists organisations to deliver services reliant on a network of infrastructure assets including transport, recreation, stormwater drainage, community buildings, water supply and sewerage. The *Local Government Act 1993* requires NSW Councils to prepare AMPs and annual reports.

1.2 Background

This plan demonstrates responsible management of roads, bridges, footpaths and supporting assets (including signage, parking, drainage, road safety and traffic management) necessary to comply with legal and regulatory frameworks. It communicates the funding needed to meet the accepted levels of service over a 10 year planning period.

This plan is to be read with the Council's Community Strategic Plan, Business Continuity Plan, Risk Management Strategy and Long Term Capital Plan.

Key stakeholders in the preparation and implementation of this AMP are:

- Ø Council Staff - Employees of Council have the role of managing the systems, controls and data associated with infrastructure assets, preparing, implementing, managing and reviewing this AMP,
- Ø Elected Members - Elected Members of Council have the role of adopting AMPs and liaising with the community on the priority of services, the service standards and the balance between services and cost, and
- Ø Community - Who provide the ultimate input into the services required and the cost the community is prepared to pay.

Objectives of Asset Management

Council exists to provide long-term quality services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our vision is:

The development of community and natural attributes of the area to enable a pleasant and sustainable lifestyle.

Our mission is:

Develop our area with our community by effective leadership and efficient service.

Our goals are:

1. *To maximise community wellbeing, public health and safety, by the provision and maintenance of transport infrastructure that contributes to the cultural and social needs of the community.*
2. *To provide a high standard of infrastructure to support economic, social and environmental needs. The primary objective is to develop a lifecycle approach to transport infrastructure safety in design and use while maximising services for the costs involved.*
3. *Implement proper governance through legal and regulatory frameworks with the appropriate controls, information systems, financial planning and organisational management. Raise organisational awareness of the policies, objectives and planning principles for asset care including, support*

community needs, appropriate planning for future needs and the right assessment and treatment of risks.

General asset management goals are:

- Ø Providing a defined level of service and monitoring performance,
- Ø Managing the impact of growth through demand management and infrastructure investment,
- Ø Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Ø Identifying, assessing and appropriately controlling risks, and
- Ø Having a LTFP which identifies required, affordable expenditure and how it will be financed.

Key elements of this plan are:

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

1.3 Legislative Requirements

Councils are subject to a number of legislative obligations and requirements. The Local Government Act establishes the conformance criteria which enables sustainable performance achievements. The framework for Roads and Traffic includes various Road Acts, public health and safety and environmental guidelines. Table 1.1 lists the pertinent Acts and requirements.

Legislation	Requirement
Local Government Act	<p>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.</p> <p>The purposes of this Act are as follows:</p> <p>(a) to provide the legal framework for an effective, efficient, environmentally responsible and open system of local government in New South Wales,</p> <p>(b) to regulate the relationships between the people and bodies comprising the system of local government in New South Wales,</p> <p>(c) to encourage and assist the effective participation of local communities in the affairs of local government,</p> <p>(d) to give councils:</p> <ul style="list-style-type: none">• the ability to provide goods, services and facilities, and to carry out activities, appropriate to the current and future needs of local communities and of the wider public• the responsibility for administering some regulatory systems under this Act• a role in the management, improvement and development of the resources of their areas, <p>(e) To require councils, councillors and council employees to have regard to the principles of ecologically sustainable development in carrying out their</p>

	responsibilities.
Public Works and Procurement Act 1912	Sets out the role of Council in the planning and construction of new assets.
Threatened Species Conservation Act 1995	An Act to conserve threatened species, populations and ecological communities of animals and plants.
Environmental Planning and Assessment Act 1979	An Act to institute a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Work Health and Safety Act 2011 and Workers Compensation Act 1987	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work and covering injury management, emphasising rehabilitation of workers particularly for return to work. Council is to provide a safe working environment and supply equipment to ensure safety.
Public Health Act 2010	An Act relating to the maintenance of proper standards of health for the public. Council operations need to be carried out in a manner that protects public health.
Roads Act 1993	Facilitates the adoption of nationally consistent road rules in NSW, the Australian Road Rules. It also makes provision for safety and traffic management on roads and road related areas including alcohol and other drug use, speeding and other dangerous driving, traffic control devices and vehicle safety accidents.
Roads Act 1993 (Continued)	Provides for the administration and enforcement of road transport legislation. It provides for the review of decisions made under road transport legislation. It makes provision for the use of vehicles on roads and road related areas and also with respect to written off and wrecked vehicles.
Roads Act 1993 (Continued)	Sets out rights of members of the public to pass along public roads, establishes procedures for opening and closing a public road, and provides for the classification of roads. It also provides for declaration of the RTA and other public authorities as roads authorities for both classified and unclassified roads, and confers certain functions (in particular, the function of carrying out roadwork) on the RTA and other roads authorities. Finally it provides for distribution of functions conferred by this Act between the RTA and other roads authorities, and regulates the carrying out of various activities on public roads.
Native Vegetation Act 2003	This Act regulates the clearing of native vegetation on all land in NSW, except for excluded land listed in Schedule 1 of the Act. The Act outlines what landowners can and cannot do in clearing native vegetation.
AS 1742	Australian Standard 1742 which refers to a variety of road and traffic issues.
Road Users Handbook 2014	A provision of road rules that are based on the Australian Road Rules so as to ensure that the road rules applicable in this State are substantially uniform with road rules applicable elsewhere in Australia.

Table 1.1: Legislative Requirements

2. Service Levels

For Council, serving customers and the community is our principal objective. Our first priority is to understand their needs, wants, values, concerns and what aspects of services are important to them.

Understanding customer concepts of value is achieved by understanding their expectations and preferences. Typically customers perceive the value provided by a service as the benefits they receive less their contributions in the form of rates and service charges. That is, a customer's utility or satisfaction level increases when their benefits exceed the costs they pay. Customers want to maximise their utility through saving time, reliability and consistency of service, safety and wellbeing.

Customers want services that are easy to use, that simplify their lives and provide lifestyle satisfaction. However, customer value is a compromise between their perceived benefit and their willingness to

contribute financially towards these benefits. Asset and service attributes like healthy, timeliness, 'safe and reliable', convenience and quality are intrinsic with best practice Asset Management (AM), but they are not always tangible to the consumer. Public organisations need to communicate these attributes and/or the consequences resulting from their removal if the community cannot afford them.

2.1 Developing Levels of Service

Levels of Service (LoS) are key business drivers. They influence the range, quality and quantity of assets and services provided. LoS indicators are usually based on the following:

- Ø Customer expectations and willingness to pay,
- Ø Legislative and environmental compliance which impose standards of service, and
- Ø The business context including strategic objectives, available resources and financial constraints.

LoS statements describe Council's intention to deliver services in terms of quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost. Statements should be written so customers can relate to them. Councils are ultimately accountable through a customer satisfaction measure and a technical performance measure.

The relationship between costs and LoS depends on the type of activity. Some infrastructure has a steep initial cost with minimal servicing costs while other services will have higher proportions of operational and maintenance type costs. Costing needs to be meaningful and understandable, the cost per user should represent a tangible benefit or a better level of service.

Community Levels of Service

Service levels are defined as either customer LoS or technical LoS. Community LoS measure how the community receives the service and whether the organisation is providing community value.

Community LoS measures used in the AMP are:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

Council's current and expected community service levels are detailed in Tables 2.1 and 2.2. Table 2.1 shows the agreed expected community LoS based on resource levels in the current LTFP and community consultation/engagement.

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY OUTCOMES				
Key findings from a customer satisfaction survey find that the largest performance gaps for resident satisfaction were maintaining local roads, economic development and financial management.				
COMMUNITY LEVELS OF SERVICE				
Quality	Roads with minimal undulation and Footpaths with minimal heaving. Do not pond water Look well maintained	Customer surveys Customer requests – Councils Enterprise Resource Planning System (TechnologyOne)	To be provided from the RVC annual Resident Survey	Requests received should not increase annually relative to a %age of network length
Function	Provide access to facilities and transport. Accessible to all abilities. Water drained by kerb and gutter	Customer surveys Customer requests – Councils Enterprise Resource Planning System (TechnologyOne)	To be provided from the RVC annual Resident Survey	Maintenance requests received should not increase annually
Safety	Footpaths should be free from hazards such as raised edges or severe cracking	Number of injury accidents (Accident History)	Should commence monitoring trend to determine if accidents are increasing	Accidents attributable to footpath condition should be reduced annually

Table 2.1: Community Level of Service: Roads and Traffic Management

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 organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

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

Service and AMP, implement and control technical service levels to influence the customer service levels.¹

Roads and Traffic Management LoS

Council delivers road and traffic capital projects that include a number of asset classes. An urban road project could contain assets such as Car Pparks, Guardrails, Culverts, Pavement, Sealed Roads, Signs and Drainage. Each of these assets has its own register.

Technical LoS is a function of ongoing serviceability (Operations, Maintenance and Administration (OMA)) and renewing depleted assets. Council factors 50% of its total budget for OMA or serviceability costs (\$53.7 million), 46% for renewing depleted assets (\$50 million) and 4% for new road assets (\$4 million) over the LTFP.

The LTFP road program allocates \$55.9 million for budgeted renewals, \$4.0 million for new works with a total program depreciation of \$50.6 million and total asset disposals of \$32.6 million. This results in a roads renewals ratio of 111% and a Bring to Satisfactory (BTS) Ratio of 0.0.

Table 2.2 shows the technical LoS expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by Council following community consultation and the balance of service levels performance, costs and risk management of resources available in the LTFP.

The unsealed road network is slightly underfunded with a BTS Ratio of 0.04 indicating an additional \$1.4 million is required to achieve technical LoS. Aerodromes have a BTS Ratio of 0.03 representing a renewals underfunding of \$49,000. All other road programs have sufficient funding over the LTFP. The Renewals Ratio compares program renewals to asset consumption (depreciation) reflecting the long term preservation of assets. The only programs with renewal ratios less than 1 are footpaths 0.24 and aerodromes 0.86. Council is investing \$1.8 million in new footpaths over the course of the LTFP period.

Roads \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
Roads-Aerodromes	\$397	\$20	\$2,103	\$446	\$460	0.02	0.86
Roads-Earthworks			\$87,506				
Roads-Footpaths	\$566	\$1,797	\$14,222	\$161	\$2,358		0.24
Roads-Regional Sealed	\$6,292		\$24,107	\$3,308	\$5,191		1.21
Roads-Regional Sealed Bri			\$6,644		\$483		
Roads-Rural Sealed	\$25,797		\$91,696	\$8,825	\$16,645		1.55
Roads-Rural Sealed Bridge	\$4,261		\$43,434		\$2,455		1.74
Roads-Rural Unsealed	\$12,013		\$27,453	\$13,065	\$10,521	0.04	1.14
Roads-Rural Unsealed Bri			\$11,256		\$674		
Roads-Urban Roads	\$12,956	\$2,260	\$69,516	\$6,320	\$11,861		1.09
Roads-Urban Roads Bridg			\$12,931	\$81	\$917	0.01	
Program	\$62,282	\$4,077	\$390,868	\$32,206	\$51,565		1.21

Table 2.2: Roads and Traffic Management Levels of Service

¹ IPWEA, 2011, IIMM, p 2.22

2.2 Customer Research and Expectations

Council engaged Micromex to conduct the Richmond Valley Council Community Research 2013². The poll from a sample of residents revealed their level of satisfaction with Council's services. Council sought to examine community attitudes and perceptions towards current and future services and facilities provided by Council. Key objectives of the research included:

- Ø To assess and establish the community's priorities and satisfaction in relation to Council activities, services and facilities,
- Ø To identify the community's overall level of satisfaction with Council's performance, and
- Ø To identify the community's level of satisfaction with regards to contact they have had with Council staff.

Overall, the research found a generally positive result for Council, with 29 of the 32 services/facilities/criteria rated as being of 'moderate satisfaction' to 'very high satisfaction'.

At an overall level, residents expressed a 'moderate' level of satisfaction with the performance of Council, with 82% of the respondents giving a rating of 'somewhat satisfied' to 'very satisfied'. Only 4% of residents indicated that they were 'not at all satisfied' with Council's performance.

Compared to an *All of NSW measure and adjoining Regional Councils*, Richmond Valley has performed better than average. The 2013 Micromex survey results are presented in Table 2.3. The community is generally satisfied with services provided by Council and is very satisfied with the regional water supply service.

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Economic development and Local Employment			√		
Community Consultation			√		
Financial Management			√		
Support for Community Organisations		√			
Council Provision of Information for Residents			√		
Council Policies and Plans			√		
Town Water Supply	√				
Maintaining Local Roads			√		

Table 2.3: Community Satisfaction Survey Levels

Customer Expectations Survey

Council has undertaken two customer satisfaction surveys, one in 2009 (resident satisfaction survey) and the Micromex survey in 2013. The earlier survey used a different Likert scale than the Micromex survey which measured satisfaction from 1= not at all satisfied, to 5 = very satisfied. Both surveys identified a performance score below the level of importance indicated by residents. This identified gap suggests that

² Micromex Research, 2013, Richmond Valley Council Community Research

real concerns and frustration remain within the community for all areas of Road and Traffic Management services.

Table 2.4 represents satisfaction trend over time. The first step was to convert the 2009 Gap to an equivalent 1 to 5 representation (multiplying 2009 gap by 5/7^{ths}). The trend represented by change in Gap from 2009 to 2013 shows improved performance, however still below the communities stated importance levels. The condition of local roads improved by about 20%, but is still 40% below stated importance. Roadside management and footpaths improved about 60%, but is still 19% below stated importance. Traffic management improved 29%, but is still 21% below stated importance. Availability of CBD parking weakened 7% and is 31% below stated importance.

Service Facility	2009 Survey			Equivalent	2013 Survey			Change
	Importance	Performance	Gap		Benchmark	2013 Score	Gap	
Condition of urban roads	6.05	3.05	3	2.14	4.53	2.77	1.76	18%
Condition of sealed rural roads	6.08	2.97	3.11	2.22	4.53	2.77	1.76	21%
Condition of unsealed rural roads	5.83	2.64	3.19	2.28	4.53	2.77	1.76	23%
Roadside management (eg trees, slashing, litter)	5.87	3.07	2.8	2.00	3.99	3.22	0.77	62%
Condition of footpaths	5.9	3.36	2.54	1.81	3.99	3.22	0.77	58%
Pedestrian safety	6.1	3.77	2.33	1.66				
Management of traffic flow (eg lights, roundabouts, street signs)	6.02	4.25	1.77	1.26	4.36	3.46	0.9	29%
Availability of parking in the CBD areas	5.88	4.06	1.81	1.29	4.44	3.06	1.38	-7%

Table 2.4 Customer Research and Expectations

Comparing expectations (Table 2.4) with LoS (Table 2.2) indicates that expectations are beyond the community's affordability for road and traffic assets. The funding profile for roads and traffic is 85% from consolidated revenue (the dominant factor in affordability) and 15% from grants and contributions for the forward period.

Local resident's desire for improved roads as measured by connectivity, reliability and timeliness. This leads to higher demand of OMA effectiveness and efficiency by Council; however higher LoS also relies on economy which is limited by the community's capacity to support their aspirations.

As a result of the 2014/15 Special Rates Variation (SRV), future customer satisfaction surveys should reflect continuing LoS improvements, evidenced by a narrowing gap between community expectations and Council performance.

2.3 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this AMP 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 AMP and risks that these may change are shown in Table 2.5.

Key Assumptions	Risks of Change to Assumptions
Use of existing inventory data	Data set is reliable; monetary movements have a confidence level of A.
Use of existing valuations and useful lives	Design lives confidence level A RUL confidence level B, some slight deviation observed when applying modified pattern asset movements over the LTFP.
Use of current expenditure information as best as this can be determined	Confidence level A. RVC has integrated asset schedule movements into the current budget and forward LTFP process.

Table 2.5: Key Assumptions made in AM Plan and Risks of Change

Forecast Reliability and Confidence

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale³ in accordance with Table 2.6.

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

Table 2.6: Data Confidence Grading System

The estimated confidence level for and reliability of data used in this AMP is shown in Table 2.7.

³ IPWEA, 2011, IIMM, Table 2.4.6, p 2 | 59.

Data	Confidence Assessment	Comment
Demand drivers	TBD	Need calibration
Growth projections	Highly Reliable	ABS and NSW DPI
Operations expenditures	Highly Reliable	Low variations over four years
Maintenance expenditures	Highly Reliable	Low variations over four years
Projected Renewal exps. - Asset values	Reliable	Dataset complete with some expected errors
- Asset residual values	Reliable	Dataset complete with some expected errors

Table 2.7: Data Confidence Assessment for Data used in AM Plan

3. Future Demand

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

Population is expected to increase modestly over the next 25 years, therefore it is not a significant influence on the demand for new assets. The demographic profile is moving towards an ageing population placing increased risk awareness on infrastructure like footpaths. Future transportation needs will require an integrated approach, balancing environmental awareness with improved public transport and alternative options such as improved cycle ways.

A general issue with infrastructure delivery is the increasing costs of doing business. Rising costs are a factor of increased resourcing costs (labour and materials), WHS awareness and a more focused regulatory environment. Infrastructure assets are subject to environmental affects, resulting in new maintenance technologies and improved materials. New construction methods are designed to lessen susceptibility to damage from the environment, as well as to minimise induced impacts on the environment. In combination the cost to provide and care for assets is increasing faster than the community's ability to fund provision.

3.1 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability and the timely renewal of assets that have reached end of life (Figure 3.1). Council continues to invest in information systems and evidence based data including conditions ratings, remaining useful life and depreciation patterns which improve the infrastructure and long term financial planning functions.



Fig 3.1 New Assets from Growth

Opportunities identified for demand management include monitoring community expectations and analysing the cost of provision to determine the long term affordability. In the past, there has been a gap between community aspirations and their willingness to pay for services. This has recently been identified and addressed with the introduction and acceptance of the SRV Scheme.

Financial results from best practice applied to roads and traffic management identify that 94% of roads capital expenditure will be required to maintain the existing network of assets. A further 6% or \$4.08 million has been allocated for new and improved serviceability of the road network. New works will include \$1.8 million (44% of new works) for improved footpaths and \$2.26 million (55%) for urban roads.

It is important to note that acquiring additional assets from growth or by provision of additional infrastructure services, will commit Council to fund ongoing operations and maintenance costs. These future costs should be identified and considered in developing forecasts of future operating and maintenance costs.

4. Lifecycle Management Plan

A lifecycle AMP details how Council plans to manage and operate Road and Traffic Management assets at the agreed LoS while optimising lifecycle costs. The objective is to look at the lowest long term cost rather than seeking short term savings when making decisions. Sustainable financial management is about managing community outcomes by providing assets and services with the lowest long term cost.

4.1 Background Data

Council's Road and Traffic Management network includes 18 asset classes consisting of 22,637 unique assets with a Fair Value Current Replacement Cost (CRC) of \$362.13 million and a Depreciable Replacement Cost (DRC) of \$186.37 million. Aerodromes, drains, bridges, culverts and bus shelters represent the oldest network assets, while car parking represents the newest asset in the network. The remaining useful life (RUL) for all road assets as a percentage of total life is 57.5%.

Type	No. of Assets	New Assets	Av Age	Av RUL	Dep Pattern	Distance m	Area sqm	Age %	Value %
Aerodrome	4	0	40	12	Moderate	4,720	101,319	23%	71.3%
Earthworks	2,046	0	22	100	Non Dep	1,067,621	5,606,532	82%	100.0%
Bridge	125	1	30	55	Low	3,272	21,330	64%	83.2%
Bus Shelter	107	0	25	14	Straight		626	36%	53.8%
Car Park	4	0	4	23	Moderate			87%	88.4%
Footpath	512	9	22	29	Straight	53,252	112,916	57%	74.3%
Guard Rail	320	1	18	21	Moderate	11,803		53%	75.8%
Guard Terminal	364	10	14	15	Moderate	3,259		52%	68.7%
Major Culvert	23	0	27	29	Moderate	159		52%	80.4%
Minor Culvert	2,151	5	26	33	Low	19,231		56%	83.1%
Sealed Roads	2,290	3	13	9	Mod & Low	521,585	2,892,233	40%	75.1%
Sealed Road Structure	2,369	11	20	27	Moderate	521,618	2,810,418	58%	84.8%
Unsealed Road	769	0	12	3	Straight	545,768	2,327,481	20%	66.7%
Roadside Furniture	459	42	14	6	Low			32%	66.4%
Sign Panel	5,237	71	10	2	Straight			20%	28.3%
Signpost	3,720	19	14	7	Low			33%	54.1%
Surface Drain	1,765	11	31	36	Moderate	133,693		53%	82.7%
Traffic Management	372	0	12	45	Moderate		9,201	79%	84.6%
Grand Total	22,637	183	17	23		2,885,982	13,882,056	57.5%	84.5%

Table 4.1: Traffic Asset Statistics

Long life assets have modified depreciation schedules reflecting reduced consumption patterns in earlier years and increasing rates of consumption as the asset integrity declines towards the end of their useful life (Figure 4.1). Standard lifecycle asset terms include:

- Ø Current Replacement Cost (CRC) - the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset with the same economic benefits or service potential,
- Ø Depreciable Amount (DA) - CRC for depreciable assets less residual value (RV),
- Ø Depreciated Replacement Cost (DRC) - CRC less accumulated depreciation,
- Ø Asset valuations by the valuer employ a modified depreciation pattern which results in asset valuations as a percentage (DRC/CRC) being higher than the age percentage (RUL/Useful Life).

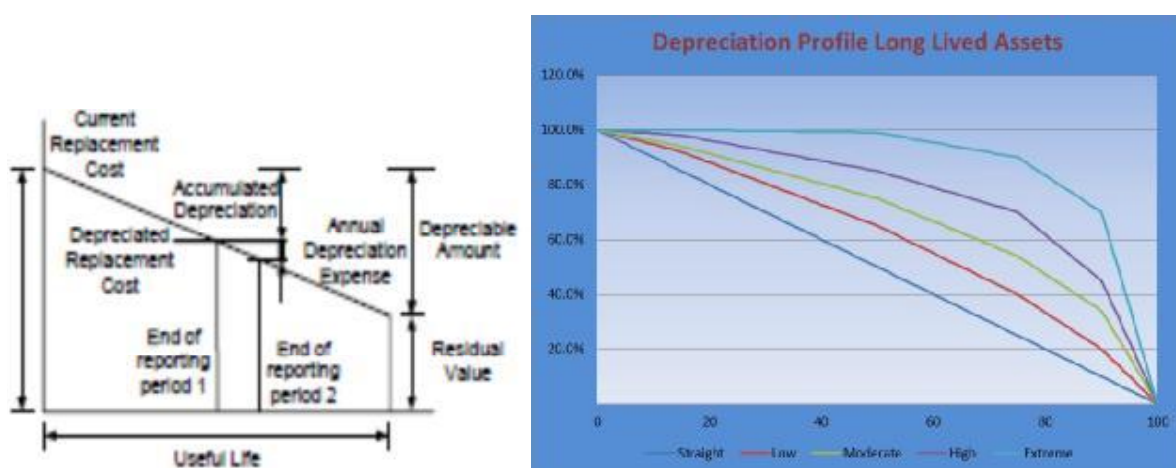


Figure 4.1: Depreciation Profile for Long Life Assets

Council's Road and Traffic Asset Values (Table 4.2) show the fair value of asset movements for the year 2014/15. Asset indexation of \$10.7 million increased the fair value of road assets from \$349 to \$362 million. Annual depreciation for the road network is \$4.6 million reflecting an asset consumption rate of 1.26%. The Asset Renewal Funding Ratio⁴ is 1.11 and this indicates Council is renewing assets at a faster rate than they are being consumed, thereby increasing asset stock by \$5.3 million over the LTFP period.

Type	Opening CR	Reval	Additions	Annual Dep	Closing CF	Residuals	Depr Amou	Accum Dep	WDV
Aerodrome	\$2,315	\$78		\$41	\$2,392	\$957	\$1,435	\$686	\$1,706
Earthworks	\$69,049	\$2,323			\$71,372	\$71,372			\$71,372
Bridge	\$70,480	\$2,361	\$343	\$338	\$73,184	\$29,274	\$43,911	\$12,313	\$60,872
Bus Shelter	\$746	\$25		\$24	\$771		\$771	\$356	\$415
Car Park	\$126	\$4		\$1	\$130	\$39	\$92	\$15	\$115
Footpath	\$14,044	\$399	\$1,101	\$200	\$15,544	\$43	\$15,501	\$3,991	\$11,553
Guard Rail	\$2,494	\$110	\$14	\$42	\$2,618	\$513	\$2,105	\$634	\$1,984
Guard Terminal	\$1,642	\$66	\$41	\$48	\$1,748		\$1,748	\$547	\$1,202
Major Culvert	\$2,650	\$89		\$22	\$2,739	\$1,096	\$1,643	\$538	\$2,201
Minor Culvert	\$17,180	\$576	\$39	\$130	\$17,794	\$7,118	\$10,676	\$3,007	\$14,787
Sealed Roads	\$26,304		\$37	\$1,089	\$26,341	\$8,289	\$18,052	\$6,550	\$19,791
Sealed Road Structure	\$96,215	\$3,053	\$572	\$909	\$99,840	\$39,936	\$59,904	\$15,178	\$84,662
Unsealed Road	\$22,177	\$874		\$1,419	\$23,051	\$8,068	\$14,983	\$7,685	\$15,366
Roadside Furniture	\$957	\$32	\$196	\$84	\$1,185		\$1,185	\$398	\$787
Sign Panel	\$399	\$13	\$7	\$52	\$419		\$419	\$301	\$119
Signpost	\$343	\$12	\$3	\$19	\$357		\$357	\$164	\$193
Surface Drain	\$18,750	\$628	\$135	\$131	\$19,513	\$7,805	\$11,708	\$3,374	\$16,140
Traffic Management	\$3,034	\$102		\$19	\$3,136	\$1,254	\$1,882	\$482	\$2,654
Grand Total	\$348,907	\$10,744	\$2,487	\$4,569	\$362,138	\$175,763	\$186,374	\$56,220	\$305,918

Table 4.2: Road and Traffic Asset Values (\$000)

4.2 Physical Parameters

The age profile of infrastructure assets shows that significant construction took place in the post-World War 2 time period. It is likely that much of this infrastructure will be well through its useful life, and will require renewal in the near future. The profile also indicates that the age data on infrastructure requires further investigation. Table 4.3 examines the data by time periods.

⁴ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Asset Build (CRC \$000)	Pre 1970s	1970s	1980s	1990s	2000s	Total
Aerodromes	\$691		\$1,701			\$2,392
Earthworks	\$989	\$6,601	\$4,750	\$44,310	\$14,722	\$71,372
Bridge	\$27,306	\$6,930	\$12,401	\$11,489	\$15,059	\$73,184
Bus Shelter		\$287	\$57	\$212	\$214	\$771
Car Park					\$130	\$130
Footpath		\$1,526	\$3,327	\$3,060	\$7,631	\$15,544
Guard Rail	\$522	\$178	\$331	\$977	\$609	\$2,618
Guard Terminal		\$9		\$870	\$869	\$1,748
Major Culvert	\$981			\$1,150	\$608	\$2,739
Minor Culvert	\$1,072	\$208	\$751	\$14,659	\$1,105	\$17,794
Sealed Roads	\$538	\$847	\$1,725	\$5,334	\$17,899	\$26,341
Pavement	\$2,061	\$4,832	\$9,198	\$45,708	\$38,041	\$99,840
Unsealed Road	\$33	\$95	\$217	\$1,243	\$21,463	\$23,051
Roadside Furniture	\$76	\$5	\$445	\$8	\$651	\$1,185
Sign Panel				\$9	\$411	\$419
Signpost			\$3	\$116	\$238	\$357
Surface Drain	\$3,273	\$1,583	\$8,622	\$3,167	\$2,868	\$19,513
Traffic Management		\$39	\$329	\$1,039	\$1,730	\$3,136
Total	\$37,542	\$23,141	\$43,856	\$133,350	\$124,249	\$362,138

Table 4.3: Road Asset Construction Data (\$000)

The majority (71%) of Road and Traffic Management assets have been constructed in the last 25 years. This assumes that these younger assets are reasonably sound. The main concern is the number and value of bridges (41 at a CRC of \$27 million) built before 1970 that are approaching the declining phase of their lifecycle. The age profile of each asset class is shown in figure 4.2.

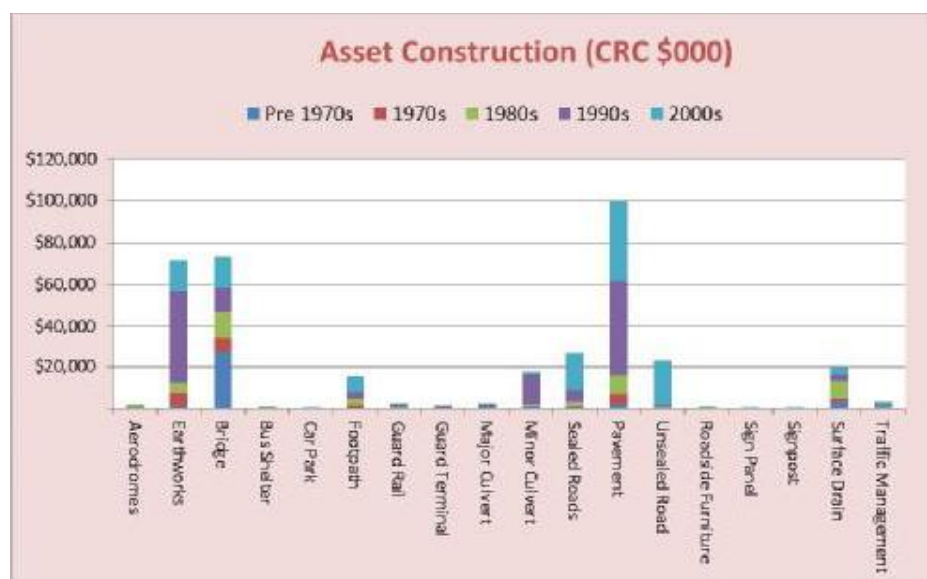


Figure 4.2: Road Asset Age Profile

Asset Renewals

Council's asset register provides RUL's for each asset which can be used to predict the capital renewals in each decade. The road network includes assets with a wide range of useful lives from 10 years to 120 years, therefore some asset classes will be replenished many times over (roadside furniture, signs, bitumen seals and unsealed roads) compared to bridges, guard rails, culverts and concrete works. In the next 100 years the unsealed network will be renewed 5.7 times over, signs will be replaced 7.7 times and bitumen seals will be renewed 6.6 times, three times the rate of pavement renewals (Table 4.4).

Type	Design Life	Dep Pattern	Renewal Rate
Aerodrome	36	Moderate	2.9 Times
Earthworks	100	Non Dep	
Bridge	118	Low	1.0 Times
Bus Shelter	56	Straight	2.2 Times
Car Park	41	Moderate	2.2 Times
Footpath	95	Straight	1.1 Times
Guard Rail	51	Moderate	2.0 Times
Guard Terminal	30	Moderate	3.3 Times
Major Culvert	70	Moderate	1.4 Times
Minor Culvert	100	Low	1.0 Times
Sealed Roads	16	Mod & Low	6.6 Times
Sealed Road Structure	51	Moderate	2.0 Times
Unsealed Road	22	Straight	5.7 Times
Roadside Furniture	11	Low	7.7 Times
Sign Panel	15	Straight	6.9 Times
Signpost	30	Low	3.3 Times
Surface Drain	80	Moderate	1.1 Times
Traffic Management	70	Moderate	1.5 Times

Table 4.4: Capital Renewal Times (by class) Next 100 Years

Asset Planning

Planning forward works is a function of renewals due and resourcing capacity. Over the LTFP period, Council has \$32.2 million of road assets requiring renewal and has allocated 1.74 times this amount to allow for contingencies, unexpected works and cost increases. The following tables display asset financial movements for EOL Disposals, Renewals and Depreciation values (\$000's) for each road program for this current LTFP period. These tables produce the key BTS and renewals ratios discussed in this Section and Section 2.

Council demonstrates a mature and integrated approach towards budget development, long term financial planning and capital works planning. This approach is influenced by best practice management and the future sustainability of Council business functions. Asset and financial planning primary considerations include replacement of end of life assets represented as a BTS Ratio and the preservation of assets represented as a renewals ratio.

The following tables provide a time series for EOL disposal values, proposed capital renewals, ADV (which measure the consumption of assets) and WDV (which measure the remaining service potential of

assets). The table with capital renewals presents Council's approach to achieving benchmark Ratios of less than 0.02 for BTS and 1.0 for asset renewals.

Roads EOL \$000	2015 Disp	2016 Disp	2017 Disp	2018 Disp	2019 Disp	2020 Disp	2021 Disp	2022 Disp	2023 Disp	2024 Disp	2025 Disp	Total
Roads-Aerodromes				\$446								\$446
Roads-Earthworks												
Roads-Footpaths	\$13	\$4			\$36				\$4	\$104		\$161
Roads-Regional Sealed		\$20	\$160		\$318	\$249	\$1,021	\$28	\$810	\$126	\$575	\$3,308
Roads-Regional Sealed Bridges												
Roads-Rural Sealed	\$144	\$91	\$440	\$49	\$437	\$257	\$1,760	\$217	\$3,803	\$523	\$1,103	\$8,825
Roads-Rural Sealed Bridges												
Roads-Rural Unsealed	\$289	\$1,171	\$639	\$123	\$276	\$768	\$2,572	\$2,518	\$2,505	\$830	\$1,375	\$13,065
Roads-Rural Unsealed Bridges												
Roads-Urban Roads	\$82	\$93	\$558		\$583	\$96	\$1,041	\$535	\$2,577	\$203	\$551	\$6,320
Roads-Urban Roads Bridges	\$81											\$81
Total	\$609	\$1,380	\$1,797	\$617	\$1,651	\$1,371	\$6,394	\$3,298	\$9,699	\$1,786	\$3,604	\$32,206

Table 4.5.1: Capital End of Life Disposal Values (\$000)

Roads Renewals \$000	2015 Add	2016 Add	2017 Add	2018 Add	2019 Add	2020 Add	2021 Add	2022 Add	2023 Add	2024 Add	2025 Add	Total
Roads-Aerodromes		\$107	\$9			\$35	\$140	\$100			\$5	\$397
Roads-Earthworks												
Roads-Footpaths	\$270	\$27	\$32	\$28	\$28	\$29	\$29	\$30	\$31	\$31	\$32	\$566
Roads-Regional Sealed	\$488	\$616	\$632	\$643	\$663	\$510	\$523	\$537	\$545	\$564	\$572	\$6,292
Roads-Regional Sealed Bridges												
Roads-Rural Sealed	\$2,238	\$2,448	\$2,104	\$2,290	\$2,013	\$2,389	\$2,231	\$2,356	\$2,595	\$2,539	\$2,593	\$25,797
Roads-Rural Sealed Bridges			\$550	\$550	\$750	\$511	\$589	\$600	\$111	\$400	\$200	\$4,261
Roads-Rural Unsealed	\$381	\$166	\$194	\$595	\$1,111	\$1,178	\$1,148	\$1,603	\$1,649	\$1,819	\$2,170	\$12,013
Roads-Rural Unsealed Bridges												
Roads-Urban Roads	\$3,046	\$1,129	\$1,011	\$857	\$964	\$860	\$972	\$870	\$1,154	\$956	\$1,137	\$12,956
Roads-Urban Roads Bridges												
Total	\$6,422	\$4,492	\$4,533	\$4,962	\$5,530	\$5,512	\$5,633	\$6,096	\$6,084	\$6,309	\$6,710	\$62,282

Table 4.5.2: Proposed Capital Renewals Values (\$000)

BTS communicates the quantum of assets that are at risk or require immediate attention to restore their serviceability. With Council implementing best practice through professional revaluations on a five yearly cycle, councils control systems have dependable data on the current state of assets. Therefore calculation of BTS is a simple calculation of the total value of EOL assets in year (x) less the value of renewals in that year compared to the total WDV of the asset class.

For the LTFP period, the Roads and Traffic Management network has a BTS measure of 0.0, however unsealed roads have a BTS measure of 0.04 which is less than the benchmark of 0.02. Council has target the unsealed network increasing capital works by a factor of six for this LTFP. This reduces reliance on emergency funding to maintain the unsealed network of roads.

The renewables ratio communicates the preservation of asset integrity. Asset consumption as measured by depreciation reflects the loss of future service potential in infrastructure assets. In accordance with AASB 116 p60 Council estimates asset consumption most closely reflecting their real world deterioration rates. This increases the complexity of financial calculations and will ultimately focus attention on best practice maintenance and renewals programs to preserve asset integrity.

An ideal renewables ratio is 1.0. This simply means that the value of renewables in year (x) matches the consumption of the asset in that year. The LTFP process has focused on a sustainable asset position at the end of 10 years across all community assets and this is reflected in improving renewables ratios each year. For the LTFP period the Roads and Traffic Management network has a renewables ratio of 1.21.

Roads Depreciation \$000	2015 Dep	2016 Dep	2017 Dep	2018 Dep	2019 Dep	2020 Dep	2021 Dep	2022 Dep	2023 Dep	2024 Dep	2025 Dep	Total
Roads-Aerodromes	\$42	\$46	\$44	\$27	\$27	\$29	\$33	\$37	\$58	\$59	\$60	\$460
Roads-Earthworks												
Roads-Footpaths	\$254	\$260	\$185	\$190	\$194	\$200	\$206	\$212	\$214	\$219	\$224	\$2,358
Roads-Regional Sealed	\$391	\$408	\$454	\$509	\$518	\$462	\$487	\$466	\$509	\$499	\$488	\$5,191
Roads-Regional Sealed Bridges	\$39	\$40	\$42	\$42	\$43	\$44	\$45	\$46	\$46	\$47	\$48	\$483
Roads-Rural Sealed	\$1,231	\$1,290	\$1,374	\$1,513	\$1,585	\$1,603	\$1,727	\$1,542	\$1,505	\$1,606	\$1,671	\$16,645
Roads-Rural Sealed Bridges	\$178	\$182	\$198	\$206	\$217	\$225	\$234	\$244	\$249	\$257	\$264	\$2,455
Roads-Rural Unsealed	\$1,481	\$1,283	\$851	\$886	\$923	\$898	\$848	\$822	\$793	\$843	\$892	\$10,521
Roads-Rural Unsealed Bridges	\$56	\$57	\$58	\$59	\$60	\$61	\$62	\$64	\$65	\$66	\$67	\$674
Roads-Urban Roads	\$983	\$1,023	\$994	\$1,066	\$1,093	\$1,138	\$1,178	\$1,015	\$1,073	\$1,146	\$1,151	\$11,861
Roads-Urban Roads Bridges	\$75	\$77	\$79	\$80	\$82	\$83	\$85	\$87	\$88	\$90	\$91	\$917
Total	\$4,731	\$4,666	\$4,278	\$4,578	\$4,742	\$4,743	\$4,905	\$4,534	\$4,601	\$4,831	\$4,957	\$51,565

Table 4.5.3: Capital Depreciation Values (\$000)

Roads WDV \$000	2015 WDV	2016 WDV	2017 WDV	2018 WDV	2019 WDV	2020 WDV	2021 WDV	2022 WDV	2023 WDV	2024 WDV	2025 WDV	Total
Roads-Aerodromes	\$1,695	\$1,787	\$1,801	\$1,813	\$1,819	\$1,860	\$2,002	\$2,103	\$2,084	\$2,065	\$2,049	\$2,103
Roads-Earthworks	\$72,707	\$74,066	\$75,451	\$76,862	\$78,300	\$79,764	\$81,255	\$82,775	\$84,323	\$85,900	\$87,506	\$87,506
Roads-Footpaths	\$12,230	\$12,290	\$12,508	\$12,770	\$13,009	\$13,271	\$13,533	\$13,794	\$13,938	\$14,081	\$14,222	\$14,222
Roads-Regional Sealed	\$19,117	\$19,664	\$20,210	\$20,723	\$21,255	\$21,701	\$22,143	\$22,627	\$23,086	\$23,582	\$24,107	\$24,107
Roads-Regional Sealed Bridges	\$5,921	\$5,991	\$6,061	\$6,132	\$6,204	\$6,276	\$6,348	\$6,421	\$6,495	\$6,569	\$6,644	\$6,644
Roads-Rural Sealed	\$68,854	\$71,280	\$73,344	\$75,492	\$77,333	\$79,566	\$81,558	\$83,897	\$86,555	\$89,107	\$91,696	\$91,696
Roads-Rural Sealed Bridges	\$34,271	\$34,727	\$35,728	\$36,740	\$37,960	\$38,956	\$40,039	\$41,144	\$41,775	\$42,699	\$43,434	\$43,434
Roads-Rural Unsealed	\$20,829	\$20,077	\$19,795	\$19,874	\$20,433	\$21,095	\$21,789	\$22,978	\$24,263	\$25,694	\$27,453	\$27,453
Roads-Rural Unsealed Bridges	\$9,911	\$10,039	\$10,169	\$10,300	\$10,433	\$10,566	\$10,702	\$10,838	\$10,976	\$11,116	\$11,256	\$11,256
Roads-Urban Roads	\$56,553	\$58,033	\$59,380	\$60,555	\$62,274	\$63,275	\$64,368	\$65,542	\$66,964	\$68,141	\$69,516	\$69,516
Roads-Urban Roads Bridges	\$11,505	\$11,642	\$11,781	\$11,921	\$12,062	\$12,204	\$12,347	\$12,491	\$12,637	\$12,783	\$12,931	\$12,931
Total	\$313,593	\$319,596	\$326,228	\$333,182	\$341,082	\$348,534	\$356,084	\$364,610	\$373,097	\$381,737	\$390,813	\$390,868

Table 4.5.4: Capital Written Down Values (\$000)

The sealed road network is adequately funded for this plan. Council is making a determined effort to improve the unsealed network, which requires considerable works in the years 2016, 2021-2023 and 2025. For this LTFP period the unsealed network has renewals ratio of 1.14 with \$12 million budgeted for renewals, an average of \$1.2 million per year against depreciation of \$1.5 million.

With a wide range of assets and design lives it is prudent to observe beyond the present planning period for roads and traffic assets. Council resources could be stretched in 25 years' time when the cycle of replacements across the different classes start to coincide, creating renewals requirements at twice the rate of this LTFP.

An asset renewals profile provides a snapshot of long term planning considerations. The register provides a good indication of works due for long life assets with design lives greater than 50 to 70 years. However it does not provide a good indication with shorter design lives especially road seals and unsealed roads. Table 4.6.1 predicted capital renewals and Figure 4.4 illustrate the renewals profile for existing road and traffic management assets.



Figure 4.4: Asset Renewals Profile

Because the road network contains a wide variance in design lives, a logical assumption is an attempt to predict ongoing renewals. The method used is to calculate the 100 year consumption for each asset type (current values multiplied by renewal frequency) with the balance distributed evenly to the periods 2020s (5%), 2030s (10%), 2040s (10%) and Post 2050s (75%). The primary benefit is to observe the total works commitment across the main road programs sealed roads, unsealed roads and pavements.

For sealed roads the projected works commitment for sealed roads vs. Pavements is 100% for the times renewals scenario against a base scenario of only 30%. For unsealed roads the projected works commitment for sealed roads vs. pavements is 72% for the times renewals scenario against a base scenario of only 25%. Another benefit of the predictive assumption approach is to visualise the increased works resulting from assets with short design lives.

N.B. The impact of long life renewals coinciding with the frequent renewing of shorter design live assets could increase capital works by 47% in 2020s, 185% in the 2030s and 41% in the 2040s as shown in the following two tables.

Asset Renewal (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050s	Total
Aerodromes	\$92	\$736		\$607		\$1,435
Earthworks						
Bridge		\$225		\$5,302	\$38,384	\$43,911
Bus Shelter	\$110	\$193	\$227	\$90	\$150	\$771
Car Park		\$3	\$41	\$48		\$92
Footpath	\$13	\$198	\$296	\$2,174	\$12,821	\$15,501
Guard Rail	\$8	\$469	\$286	\$715	\$627	\$2,105
Guard Terminal	\$9	\$866	\$411	\$463		\$1,748
Major Culvert	\$21	\$192	\$77	\$407	\$946	\$1,643
Minor Culvert		\$195	\$479	\$456	\$9,546	\$10,676
Sealed Roads	\$704	\$13,663	\$3,227	\$458		\$18,052
Pavement	\$27	\$3,924	\$7,003	\$45,757	\$3,193	\$59,904
Unsealed Road	\$10,161	\$4,823				\$14,983
Roadside Furniture	\$373	\$581	\$105	\$73	\$53	\$1,185
Sign Panel	\$344	\$34	\$41			\$419
Signpost	\$13	\$322	\$0	\$23		\$357
Surface Drain	\$27	\$263	\$1,377	\$4,446	\$5,575	\$11,708
Traffic Management	\$4	\$13	\$106	\$774	\$986	\$1,882
Total	\$11,905	\$26,720	\$13,676	\$61,793	\$72,280	\$186,374

Table 4.6.1: Predicted Capital Renewals (Base Case) (\$000)

Asset Renewal Est. (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050s	Total	Renewals
Aerodromes	\$92	\$872	\$272	\$879	\$2,042	\$4,158	2.9 Times
Earthworks							
Bridge		\$211		\$5,273	\$38,170	\$43,625	1.0 Times
Bus Shelter	\$110	\$240	\$320	\$184	\$849	\$1,703	2.2 Times
Car Park		\$8	\$52	\$59	\$81	\$200	2.2 Times
Footpath	\$13	\$243	\$388	\$2,285	\$13,507	\$16,416	1.1 Times
Guard Rail	\$8	\$574	\$495	\$924	\$2,196	\$4,197	2.0 Times
Guard Terminal	\$9	\$1,066	\$812	\$864	\$3,007	\$5,758	3.3 Times
Major Culvert	\$21	\$227	\$147	\$477	\$1,489	\$2,341	1.4 Times
Minor Culvert		\$195	\$479	\$456	\$9,546	\$10,676	1.0 Times
Sealed Roads	\$704	\$18,685	\$13,271	\$10,502	\$75,328	\$118,490	6.6 Times
Pavement	\$27	\$6,825	\$12,805	\$51,560	\$46,713	\$117,930	2.0 Times
Unsealed Road	\$10,161	\$8,331	\$7,015	\$7,015	\$52,615	\$85,137	5.7 Times
Roadside Furniture	\$373	\$979	\$901	\$868	\$8,019	\$9,140	7.7 Times
Sign Panel	\$344	\$158	\$289	\$248	\$1,856	\$2,895	6.9 Times
Signpost	\$13	\$363	\$84	\$106	\$627	\$1,193	3.3 Times
Surface Drain	\$27	\$368	\$1,546	\$4,614	\$6,840	\$13,395	1.1 Times
Traffic Management	\$4	\$58	\$195	\$863	\$1,658	\$2,778	1.5 Times
Total	\$11,905	\$39,403	\$39,042	\$87,159	\$262,523	\$440,032	

Table 4.6.1: Predicted Capital Renewals Each decade

4.3 Asset Conditions

Council has moved to independent fair value valuations of asset networks across a five yearly cycle. Road and Traffic Management were valued in 2013 and coincided with modified consumption profiles for long life assets. Stormwater assets were revalued in 2014 and Land and Building assets in 2015.

The condition profile of Road and Traffic Management assets is shown in Figure 4.5. 30.7% of Council assets have a current condition rating of 1 or 2, while 34.4% have condition ratings of 4 or 5 indicating an

aging network. A better appreciation of road assets excludes sign panels and roadside furniture which contain 9,000 low value short design life assets which skews performance. The result is 45.8% of Council assets have a current condition rating of 1 or 2 and only 15.8% having a condition rating of 4 or 5, thereby representing a network in good condition.

Figures 4.5 and 4.5.1 illustrate the current condition profile for each asset type as a percentage with the black diamond showing the average condition (right hand scale) for each asset. Using pavements as an example in 2014, 87% of pavement assets were condition 2 or 3, with the black diamond indicating an average condition of 2.7. By 2025 most of the condition 2 assets have moved to a condition 3 level, while 8% of assets now have a condition rating of 5, resulting in a weighted average condition of 3.3.

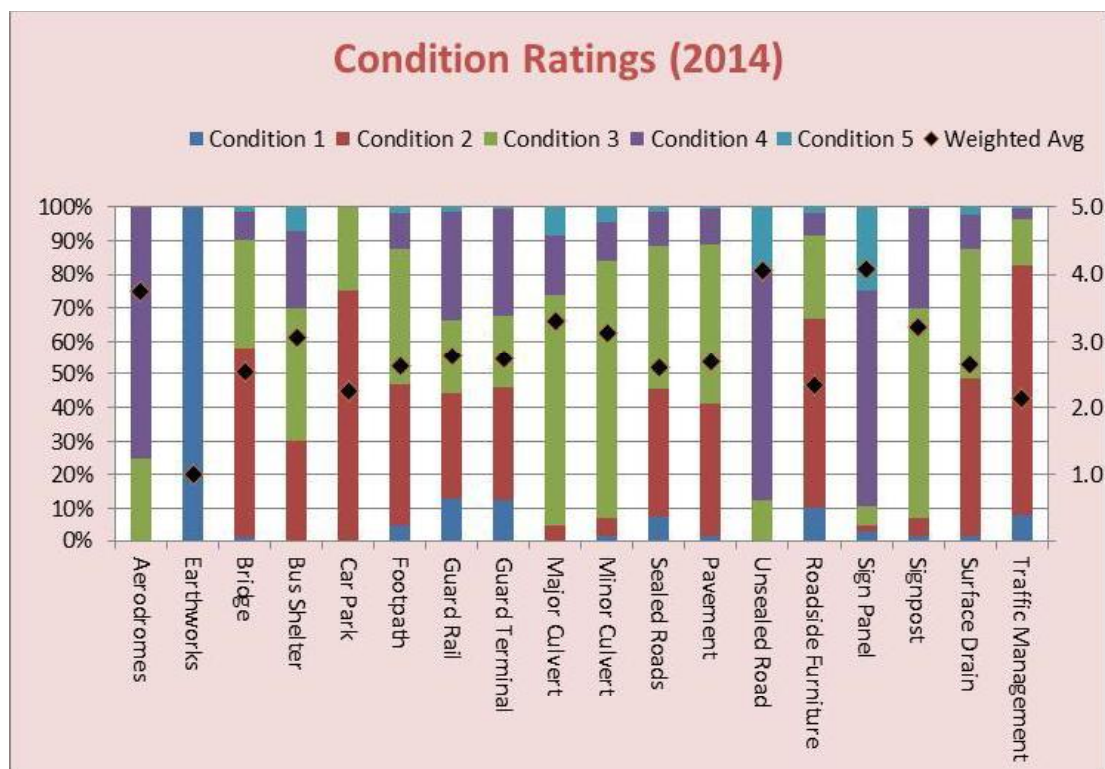


Figure 4.5: Asset Condition Rating Profile

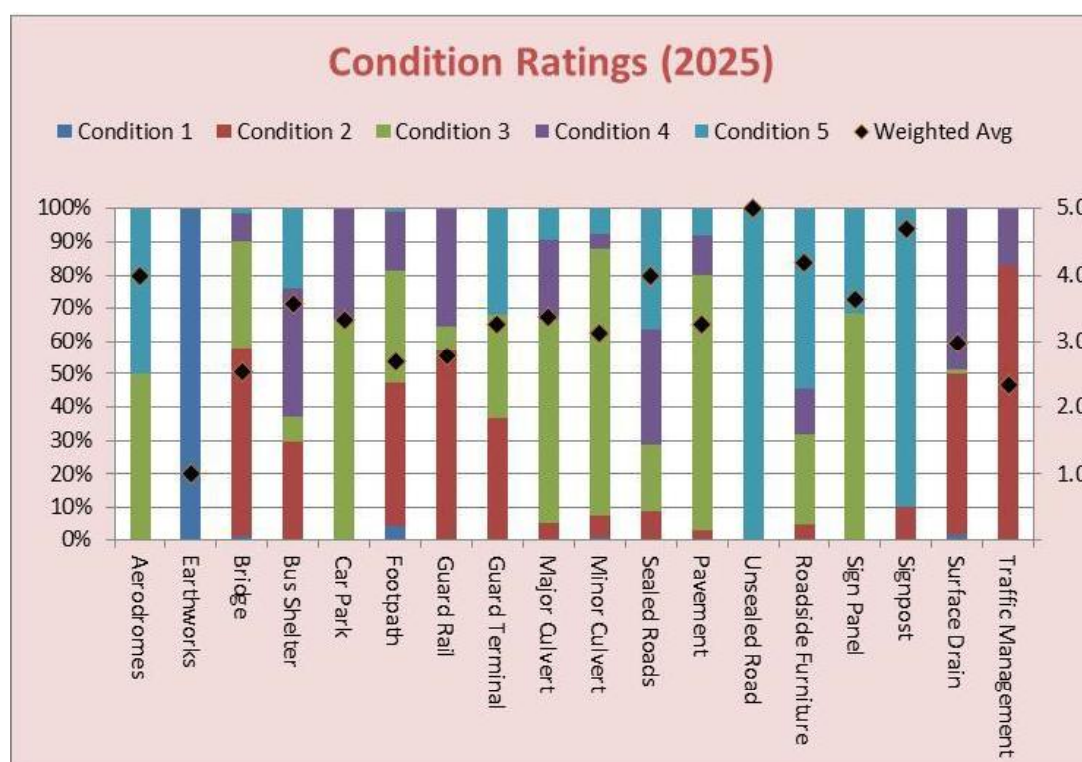


Figure 4.5.1: Asset Condition Rating Profile

4.4 Financial Summary

Council's road program is funded by a mix of special grants and contributions and funding from the consolidated general fund. Operating expenditure (OpEx) includes Operations, Maintenance and Management Activities (OMA). Capital expenditure (Capex) includes renewals program, improved LoS programs and augmentation programs.

The previous methodology used for calculating BTS for the roads program is \$6.0 million, which is based on renewing all assets below condition 3 to a satisfactory level of 2. This is not practicable and does not respect the mature asset management approach adopted at Council. Council has now introduced five yearly periodic fair value valuations providing robust evidence for the state of assets. Therefore a better measure of BTS is due works for EOL assets compared to budgeted renewals in the LTFP.

Measured for roads the percentage is 0.00, however at the program level unsealed roads have a BTS of 0.04 and aerodromes 0.02, with the benchmark level being 0.02. Over the 10 year period the program is well funded. Funding issues are not anticipated until 2033 onwards, beyond the scope of this planning document.

Table 4.7 provides a summary of cash flows for 20 years. Cash flow predictions are based on current business expectations with 3% indexation for revenue and expense streams beyond the LTFP.

Values (\$000)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	\$11,473	\$6,459	\$7,719	\$8,525	\$9,787	\$10,485	\$10,694	\$11,271	\$11,345	\$11,626
Operations	\$775	\$804	\$852	\$872	\$891	\$911	\$931	\$952	\$973	\$995
Maintenance	\$2,458	\$2,089	\$2,145	\$2,199	\$2,255	\$2,312	\$2,373	\$2,432	\$2,489	\$2,554
Management	\$1,368	\$1,393	\$1,495	\$1,631	\$1,646	\$1,678	\$1,663	\$1,675	\$1,779	\$1,723
Depreciation	\$4,731	\$4,666	\$4,278	\$4,578	\$4,742	\$4,743	\$4,905	\$4,534	\$4,601	\$4,831
Renewals	\$6,422	\$4,492	\$4,533	\$4,962	\$5,530	\$5,512	\$5,633	\$6,096	\$6,084	\$6,309
Improved LOS	\$338	\$304	\$300	\$353	\$662	\$229	\$229	\$229	\$139	\$139
Augmentation	\$113	\$101	\$100	\$118	\$221	\$76	\$76	\$76	\$46	\$46
Program Position	0	2,723	4,429	6,038	7,454	7,686	7,897	8,086	8,250	8,391
Values (\$000)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	\$12,325	\$11,902	\$12,259	\$12,627	\$13,005	\$13,395	\$13,797	\$14,211	\$14,638	\$15,077
Operations	\$1,025	\$1,056	\$1,080	\$1,120	\$1,154	\$1,180	\$1,224	\$1,261	\$1,299	\$1,330
Maintenance	\$2,630	\$2,709	\$2,790	\$2,874	\$2,960	\$3,049	\$3,141	\$3,235	\$3,332	\$3,432
Management	\$1,775	\$1,828	\$1,883	\$1,939	\$1,998	\$2,058	\$2,119	\$2,183	\$2,248	\$2,316
Depreciation	\$4,957	\$5,125	\$5,279	\$5,437	\$5,600	\$5,768	\$5,941	\$6,119	\$6,303	\$6,492
Renewals	\$6,710	\$5,896	\$6,073	\$6,255	\$6,442	\$6,636	\$6,835	\$7,040	\$7,251	\$7,469
Improved LOS	\$139	\$310	\$319	\$329	\$338	\$349	\$359	\$370	\$381	\$392
Augmentation	\$46	\$103	\$106	\$110	\$113	\$116	\$120	\$123	\$127	\$131
Program Position	8,391	8,391	8,391	8,391	8,391	8,391	8,391	8,391	8,391	8,391

Table 4.7: Projected Operating and Capital Expenditure (\$000)

Funding for the roads program includes operating budgets, capital grants and contributions and internal transfers from the general fund. This means a shortfall is balanced transfer from restricted assets and a surplus will result in a transfer to restricted assets. For the next 10 years the roads program will require \$8.4 Million from restricted funding to achieve desired LoS.

Asset Lifecycle profiles for Roads and Traffic Management are shown in figure 4.6, this illustrates the flow of funds for operating and capital expenditures over the forward period. The balance of funding for Roads and Traffic Management represents transfers from the general reserve fund. Annual consumption of assets (depreciation) is shown on the right axis.

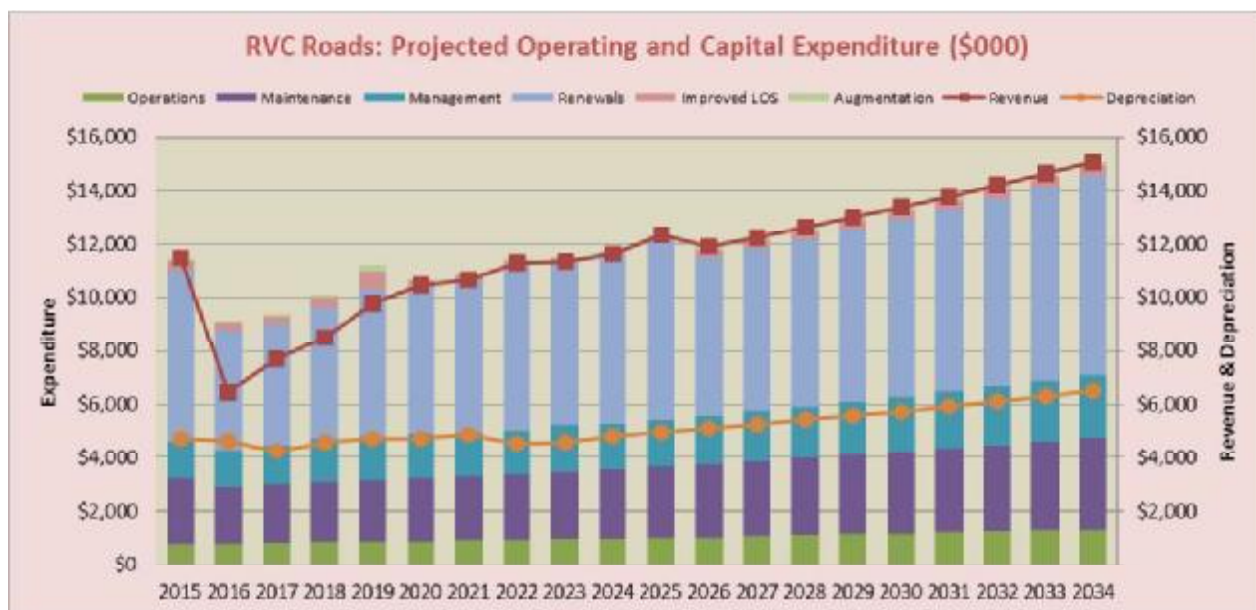


Figure 4.6: Projected OpEx and Capex

4.5 Sustainability of Service Delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the Asset Renewal Funding Ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over five and 10 years of the planning period.

Asset Renewal Funding Ratio⁵ - 1.11%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 111% of the funds required for the optimal renewal and replacement of its assets.

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 asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle cost over the 10 year planning period is \$10.78 million per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years). The average LTFP capital lifecycle expenditure is \$10.99 million.

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this AMP is + \$215,000 per year (negative= gap, positive = surplus).

10 Year AM Financial Indicator - Life cycle expenditure is 102% of life cycle costs.

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 AMP and LTFP.

Medium term – 10 year financial planning period

This AMP identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed LoS 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.

⁵ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

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

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first five years of the planning period is \$10.28 million on average per year. Estimated (budget) operations, maintenance and capital renewal funding is \$10.71 million on average per year giving a five year average funding surplus of \$430,000. This indicates that Council expects to have 104% of projected expenditures required to provide the services shown for the first five years of this AMP.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.04 for the first five years of the AMP and ideally over the 10 year life of the LTFP.

5. Risk Management

Asset management is about managing strategic and operational risks. The greatest strategic risk is whether a Council is sustainable. Efficient asset management contributes to risk minimisation by providing reliable and relevant information to decision makers. Risk management is the demonstrated commitment to understand problems, to classify sensitivities, to prioritise solutions and to contain the adverse consequences of threats to an acceptable level.

A primary consideration when selecting risk protection and practices is to ensure that the costs incurred are not greater than the benefits gained. Factors affecting risk include the consequences of service failure, identification of significant and critical assets, and options to mitigate impact or reduce harm.

Risks are generally identified and classified by the consensus approach through workshops or risk management tools (risk spectrum or risk matrix approach). These tools systematically quantify risk attributes into a risk factor, economic deprivation, social disruption or environmental impact. Risk is associated with consequences completely enumerated in terms of probability. The consensus approach seeks answers to the types and source of risk, severity levels, possible outcomes and the scale of impact. Advanced techniques include 'what if' scenario type answers that seek to describe varying effects of events affecting a few customers through to widespread and unacceptable community risks.

For the roads program, Council leverages its mature approach to identifying risk through independent professional valuation of assets and an integrated approach to budget, long term planning and asset management principles. Future tasks of Council are to further develop this approach across all asset classes, and the identification of risks as an element of asset planning.

6. Plan Improvement and Monitoring

Asset systems is an outward function which interacts across the organisation and attempts to consolidate operational plans, risk management plans, business continuity planning, emergency response planning with higher level strategic and governance objectives. Overall the function is still developing and seeking regular appropriate input from the various asset delivery areas of Council which remain focused on their primary objectives. This restricts some asset planning outcomes but will rise in importance when quality

asset management plans align with higher strategic goals and provide a clear line of sight between operational, maintenance and asset rehabilitation initiatives. It is the intention of Council to ensure that the practices documented within the AMPs are a prime focus of culture within the workplace, so that the links from service delivery to long term strategic plans remain strong.

6.1 Accounting Standards and Regulations

In accounting for Richmond Valley Council's assets, the following statutory requirements shall be adhered to:

- Ø NSW Local Government Act 1993,
- Ø NSW Code of Accounting Practice and Financial Reporting (updated annually),
- Ø Australian Accounting Standards, UIG Consensus Views and other prescribed requirements and standards,
- Ø AASB 13 Fair Value Measurement,
- Ø AASB 116 Property Plant and Equipment,
- Ø AASB 5 Assets Held for Sale, and
- Ø AASB 136 Impairment.

6.2 Asset management system

Council operates an integrated SQL based Asset Management System. The core programs include MapInfo a GIS asset information system and Asset Master, an Asset hierarchy and financial movements register. The programs are supported by MS Office programs and information provided by Councils financial management systems. The financial systems are primarily managed by Council's financial section. It is the responsibility of all persons with expenditure roles to ensure that costing is allocated to the correct account numbers so that financial reporting will be accurate and reliable.

The strength of the Asset Master process is the unique identifiers for each asset, accurate plans for work teams and detailed financial history of individual assets. Council has expanded its asset management and asset data team given the expansive task of data entry and data management. This is a continuing process that will produce more insight and accuracy into asset conditions, predictive strategies and financial observations.

Asset registers

Council utilises the Asset Master system from Open Office Australia. This system was deployed in 2012 and is continually being refined to produce quality asset information. Council systems are generally connected through an SQL server but often financial reporting is performed at a higher level. This is accomplished by excel reports exported by the various asset management and financial management systems.

All construction and maintenance costs are recorded in the Technology 1 Financial Management System. Capital costs are generally costed to a series of cost account numbers that can be related to a particular asset construction project. Personnel performing asset management system data functions require a high level of rounded numeracy and literacy skills. Although the functions have a high level of repetitive function primarily due to the scale of asset numbers accuracy is required with each process. Council systems are SQL driven requiring some scripting knowledge and also general abilities with financial data, accounting interpretations and knowledge of Australian Accounting Standards.

Required changes to asset management system arising from this AMP

Council manages a wide range of physical assets. These assets provide a range of services to the Richmond Valley community. In order to better manage its assets, Council has implemented an Integrated Asset Management System (AMS) namely Asset Master by Open Office. Asset Master enables Council to collect and store asset data and to manage its infrastructure maintenance and replacement programs.

Council's objectives in the implementation and consequent management of Asset Master are as follows:

- Ø To have a central repository for all asset data,
- Ø To undertake life cycle management of all Council asset categories,
- Ø To facilitate an asset management culture,
- Ø To reduce the overall costs and risks associated with Council assets, and
- Ø To provide the ability to add advanced asset management functionality as the Council matures with respect to asset management.

Monitoring and Review Procedures

This AMP will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide these services as a result of budget decisions.

The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AMP has a life of four years (Council election cycle) and is due for a complete revision and updating within one year of each Council election.

Performance Measures

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

- Ø The degree to which the required projected expenditures identified in this AMP are incorporated into Council's LTFP,
- Ø 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 AMP,
- Ø The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- Ø The Asset Renewal Funding Ratio achieving the target of 1.0.

7. References

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/AIFMG.

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

Richmond Valley Council, Community Strategic Plan 2013 – 2025',

Richmond Valley Council Strategic Business Plan for Water Supply and Sewerage Services,

RVC Strategic Planning FINMOD Analysis and Tariff Review – Water Supply Services

Richmond Valley Council - Annual Plan and Budget

Appendix E Asset Management Plan 2015-2025

Sewerage Network





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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Executive Summary.....	5
1. Introduction	6
1.1 Asset Management Plan.....	6
1.2 Background.....	7
Objectives of Asset Management	7
1.3 Integrated Water Cycle Management.....	8
1.4 Legislative Requirements.....	9
2. Service Levels	11
2.1 Developing Levels of Service.....	11
Community Levels of Service	11
Technical Levels of Service	12
2.2 Customer Research and Expectations.....	14
2.3 Key Assumptions made in Financial Forecasts.....	15
Forecast Reliability and Confidence	16
3. Future Demand	17
3.1 Demand Management Plan.....	17
Sewer Load Management	18
3.2 Casino STP Flow Analysis.....	18
Casino STP Modelling.....	18
GHD Conclusions - Casino STP.....	20
3.3 Evans Head STP.....	21
3.4 Coraki STP	21
3.5 Demand Management Plan.....	22
4. Lifecycle Management Plan	23
4.1 Background Data.....	24
4.2 Physical Parameters.....	25
Sewer Assets Funding Profile.....	30
4.3 Asset Conditions	30
4.4 Financial Summary	33
4.5 Sustainability of Service Delivery	34
Long term - Life Cycle Cost.....	35
Medium term – 10 year financial planning period.....	35
Medium Term – 5 year financial planning period.....	35

Long Term Financial Plan Works Program.....	36
High Operating and Management Costs.....	36
5. Risk Management	36
Environmental Planning.....	37
Sewerage Risk Strategy	37
Risk Management Process	38
6. Plan Improvement and Monitoring	39
6.1 Accounting Standards and Regulations	39
6.2 Asset management system	39
7. References.....	42

Executive Summary

This Total Asset Management Plan addresses the responsible management of medium term operational and capital works necessary to comply with legal and regulatory frameworks and to achieve water and sewer program performance levels. The objective is to provide reliable networks that contribute towards the social, economic and environmental indicators of a regional hub. An asset plan is a crucial element of the strategic planning process providing cascading outcomes that align with the IWCM and Strategic water plans. It is a key element of Best Practice Management for Local Water Units under the NSW Governments Country Towns Water Supply and Sewerage program.

Council's sewer business is predicted to perform favourable over the 20 year horizon. Sewer network assets on average have a remaining useful life 50% of their expected lifecycles. Larger issues include the uncertain condition below ground assets, achieving full compliance for waste treatments and environmental initiatives. Council has invested resources into capturing better data for underground assets which will improve the budget, Long Term Financial Plan (LTFP) and Asset Management Plan (AMP) processes.

The sewer program is well funded through sewer access and usage charges supplemented by grants, interest and developer service charges. Total revenues equal \$109 million, operating and management expenses equal \$63.2 million and capital works equal \$25.8 million. Sewer program has a favourable position providing some certainty for future required large scale augmentation works. The Asset Renewal Funding Ratio is a critical indicator of the sewer programs long term stability, an ideal indicator is 1.0, therefore Council's indicator of 0.91 is satisfactory.

Executive Summary - What Does it Cost? (\$000)	10 Yr
10 Year total (Ops, Maint, Renewal Upgrades)	\$81,498
10 Year Average Cost	\$8,150
10 Year Total LTFP budget	\$88,400
10 Year Average LTFP Budget	\$8,840
10 Year AM Financial Indicator	108%
10 year average net improvement	\$690

General observations for the local water unit include:

- Ø Number of Assets - 13,630.
- Ø Current Replacement Cost of asset base - \$121.6 million.
- Ø Annual depreciation - \$1.1 million.
- Ø Depreciated Replacement Cost \$100 million, 82% of the fair values, reflecting modified depreciation schedules of long lived assets.
- Ø Percentage of assets with condition rating of 1 or 2 is a satisfactory at 55%.
- Ø Percentage of network assets due for renewal in next 10 years - 16%.

The Council sewer business is currently performing favourably. Integrated Water Cycle Management (IWCM) and NSW Office of Water best practices have focused attention on environmental compliance for treatment processes and the investment in capital works and operational practices to achieve performance benchmarks.

1. Introduction

The Richmond Valley is located in the Northern Rivers region of North East NSW, 726 km north of Sydney and 228 km south of Brisbane. Located on the banks of the Richmond River the region supports a variety of agricultural industries, primarily beef, sugar cane and wheat. Richmond Valley Council was formed in February 2000 as the result of amalgamation between Casino Council and Richmond River Shire Council.

Council spreads across 3,050 square kilometres with six townships. Major urban areas are Casino and Evans Head and the villages are Woodburn, Coraki, Broadwater, Rileys Hill and Rappville. As at 2011, the resident population was 22,700 persons with a skew towards blue collar occupations. Richmond Valley is preparing to be one of the fastest growing areas in regional NSW with economic stimulus emerging from natural resource discoveries (uncertainty surrounds coal seam and natural gas developments).

The Region is expected to experience population growth (0.51% pa), decreasing occupancy rates and an ageing population. The number of dwellings in the Council LGA is expected to increase from 9,150 in 2011 to 10,750 in 2031, an increase of 1,600 dwellings at an average growth rate of 0.81% p.a.

Richmond Valley is in a sub-tropical area, characterised by hot humid summers and mild winters. Average rainfall ranges from 1,650 mm along the coast strip, to less than 1,025 mm over inland areas. The LGA is prone to natural disasters having had five Natural Disaster Declarations since 2009. Council is located on a flood plain and heavy rainfall can trigger flood events, while climate change and rising sea levels impact coastal areas and increase unpredictability.

The Richmond Valley is a region of balance where every individual, family and business has the opportunity to be successful.; It is an attractive place to live and play but as with most rural centres struggles to compete with the employment opportunities of the capital cities. This is reflected with a general decline of the working age cohort and professional occupations but does experience a large retiree and tree change population. This is consistent with the ALGA State of the Regions stylised fact number five that applies to the majority of LGA's.

The major issues facing Council generally include prosperity and economic development for individuals and the region. The community is engaged in the longer term prospects for the region with a focus on financial management and the provision of quality infrastructure networks. Council and the local business chamber are aligned in their purpose to provide employment, opportunities and lifestyle for the people of the Richmond Valley.

Timber and forestry and the associated production and manufacturing industries are creating strong demand for industrial development. A 58 hectare industrial development at North Casino (Intermodal Freight Handling Facility) has been approved by Council. Other major developments include coal seam methane gas fields and reticulation as a "green" energy source and an electrical power plant in the Casino area.

1.1 Asset Management Plan

An AMP provides understanding of the options, risks and consequences associated with managing large scale infrastructure, having an articulated basis for community engagement, expectations, priorities, funding levels and the related trade-offs, and a rigorous understanding of the capital,

operating and maintenance expenditures to be incorporated into the long term strategic planning process.

Planning assists Council to deliver services derived from a network of infrastructure assets including transport, recreation, stormwater drainage, community buildings, water supply and sewerage. The *Local Government Act 1993* requires NSW Councils to prepare AMPs and annual reports.

Many of Council's sewer planning initiatives are driven by the IWCM strategy. IWCM is a 30 year strategic planning tool for local water utilities. IWCM enables utilities to manage their water services in a holistic manner. It deals with the complex linkages between the different elements of the water cycle. This is consistent with the NSW Best Practice Management of Water Supply and Sewerage Framework.

1.2 Background

This plan demonstrates responsive management of sewerage treatment and reticulation assets, associated services, compliance with regulatory requirements and to communicate the funding needed to provide the required levels of service over a 10 year planning period.

This plan is to be read with Council's Strategic Business Plan for Water and Sewer, IWCM Strategy Plan, Business Continuity Plan, Risk Management Strategy Sewerage Supply, Council's Long Term Capital Plan and Community Strategic Plan. The document [Water & Sewer Review](#) synthesises 30 plus planning and investigative reports for the Local Water Utilities (LWUs), capturing the major issues and opportunities for Council's water and sewer business.

Objectives of Asset Management

Council exists to provide long-term quality services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our vision is:

We will ensure the Richmond Valley is well positioned for the future – socially, environmentally and economically, with all the right ingredients to be a primary regional hub in NSW.

Our mission is:

To develop and operate infrastructure networks that supports the fabric of a modern vibrant society. Our aim is to provide reliable networks that build trust and dependency not only within their network, but also between one network and another network.

Our goal is:

In managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Ø Providing a defined level of service and monitoring performance,

- Ø *Managing the impact of growth through demand management and infrastructure investment,*
- Ø *Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,*
- Ø *Identifying, assessing and appropriately controlling risks, and*
- Ø *Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.*

Key elements of this plan are:

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

1.3 Integrated Water Cycle Management

IWCM is a 30 year strategic planning tool for LWUs enabling them to manage their urban sewer and water services in a holistic manner within a catchment context. LWUs have the goal of providing an appropriate, affordable, cost-effective and sustainable urban sewer services that meet community needs, protect public health and the environment, and make best use of regional resources.

IWCM involves looking at the three components of the urban water services (water supply, sewerage and stormwater) in an integrated way when identifying all the IWCM issues and developing scenarios to address these issues. The scenarios are evaluated and compared on the basis of their social, environmental and economic impacts. Council completed its IWCM Strategy Plan in 2008.

The objectives of the Strategy are:

- Ø Improve land use management through education and demonstration,
- Ø Maximise high value (priority to substitution of potable water) reuse,
- Ø Increase the number of alternative water sources,
- Ø Improved security of urban water supply, and
- Ø Provide the highest level of service relative to users’ willingness to pay.

The issues addressed by the Strategy are:

- Ø Council must implement sustainable effluent reuse with end user requirements considered,
- Ø Existing land use practices and urban impacts are affecting surface water quality,
- Ø High operating and management costs for water and sewerage systems lead to relatively high typical residential bills,
- Ø There is a need for sustainable stormwater / rainwater reuse,
- Ø Climate change may adversely alter the rainfall and temperature patterns of the study area, and
- Ø Poor demand management in terms of consumption and unaccounted for water.

The key components to be implemented by the sewer business are:

- Ø High level demand management;
- Ø Agricultural and open space irrigation reuse of recycled effluent;
- Ø Dual reticulation for new developments, where feasible;
- Ø Investigation and participation in regional water management strategies;
- Ø Contribution to macro water sharing planning process;
- Ø Condition based asset renewal and inflow/infiltration reduction program; and
- Ø Management of risks associated with climate change.

The IWCM Strategy has set the future direction for Council by addressing a number of priority issues identified by Council staff, government agencies and the local community. The implementation of the strategy is reliant on Council's commitment to the capital works program developed as well as its ability to maintain financial stability in the future. The capital works program associated with the adopted strategy has set the direction for Council's Strategic Business Planning. Council will need to continuously develop, implement and review the components of the IWCM Strategy to ensure it is successful.

Performance monitoring is an essential part of the IWCM process to ensure that the implementation of strategies which have been identified have been successful at addressing the water cycle issues. Annual reporting to the Office of Water should provide an indication of the success of Council's IWCM Strategy and the other Best-Practice planning documents in achieving sustainability and progress in meeting Council's business goals and social and environmental responsibilities.

1.4 Legislative Requirements

As a local government owned business, LWUs are subject to a number of legislative obligations and requirements. The Local Government Act establishes the conformance criteria which enables sustainable performance achievements.

Through the NSW Government's *Country Towns Water Supply and Sewerage Program*, sections 283 to 322 of the *Water Management Act 2000*, and sections 56 to 66 of the *Local Government Act 1993*, the Minister for Water is responsible for overseeing the performance of LWUs. The NSW Best-Practice Management (BPM) guidelines encourage continuing improvement and identify criteria for monitoring performance. Council has achieved full compliance for the sewerage business.

Goal 22 under the NSW Governments 10 year plan is to protect our natural environment and improve the health of wetlands and catchments through actively managing water. Water reforms in NSW included the implementation of the Water Management Act 2000, the development of 63 water sharing plans (improving the management of water resources) and a National Water Initiative (NWI) that commits NSW to achieving sustainability in the use of its water resources¹.

The BPM of Water Supply and Sewerage Framework implements 19 requirements towards the effective and efficient delivery of LWUs services. This framework promotes continuing improvement in sustainable water conservation practices, water demand management and appropriate, affordable and cost-effective water supply.

¹ EPA, 2012, NSW State of the Environment.

National requirements include Australian Drinking Water Guidelines, 2011, National Water Initiative (reforms and pricing principles), National Urban Water Planning Principles and The COAG Strategic Framework for Water Reform. Table 1.1 provides an overview of relevant legislations and their guidance towards sustainable LWUs outcomes.

Legislation	Requirement
Local Government Act	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.
Public Works and Procurement Act 1912	Sets out the role of the Department of Water and Energy (DWE) and Department of Commerce in the planning and construction of new assets.
Soil Conservation Act 1938	An Act to make provision for the conservation of soil resources and farm water resources and for the mitigation of erosion. It addresses preservation of watercourse environments.
Environmental Planning and Assessment Act 1979	An Act to institute a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Work Health and Safety Act 2011 and Workers Compensation Act 1987	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work and covering injury management, emphasising rehabilitation of workers particularly for return to work. Council is to provide a safe working environment and supply equipment to ensure safety.
Public Health Act 2010	An Act relating to the maintenance of proper standards of health for the public. Council operations need to be carried out in a manner that protects public health.
Independent Pricing and Regulatory Tribunal Act 1992	The Act empowers the Independent Pricing and Regulatory Tribunal (IPART) which sets principles and guidelines related to charging for water supply.
Competition Policy including Competition Policy Reform Act 1995	Council is subject to prohibition on anti-competitive behaviour, according to the Trade Practices Act.
Threatened Species Conservation Act 1995	An Act to conserve threatened species, populations and ecological communities of animals and plants.
Protection of the Environment Operations Act 1997	Council is required to exercise due diligence to avoid environmental impact and among others are required to develop operations emergency plans and due diligence plans to ensure that procedures are in place to prevent or minimise pollution.
Water Management Act 2000	An Act to provide for the protection, conservation and ecologically sustainable development of the water sources of the State, and for other purposes. Allows Council to levy developer charges and addresses water sharing and environmental flows.

Table 1.1: Legislative Requirements

2. Service Levels

For Council, serving customers and the community is our principal objective. Our first priority is to understand their needs, wants, values, concerns and what aspects of services are important to them.

Understanding customer concepts of value is achieved by understanding their expectations and preferences. Typically customers perceive the value provided by a service as the benefits they receive less their contributions in the form of rates and service charges. That is, a customer's utility or satisfaction level increases when their benefits exceed the costs they pay. Customers want to maximise their utility through saving time, reliability and consistency of service, safety and wellbeing.

Customers want services that are easy to use, that simplify their lives and provide lifestyle satisfaction. However customer value is a compromise between their perceived benefit and their willingness to contribute financially towards these benefits. Asset and service attributes like healthy, timeliness, 'safe and reliable', convenience and quality are intrinsic with best practice Asset Management (AM), but they are not always tangible to the consumer. Public organisations need to communicate these attributes and/or the consequences resulting from their removal if the community cannot afford them.

2.1 Developing Levels of Service

Levels of Service (LoS) are key business drivers. They influence the range, quality and quantity of assets and services provided. LoS indicators are usually based on the following:

- Ø Customer expectations and willingness to pay,
- Ø Legislative and environmental compliance which impose standards of service, and
- Ø The business context including strategic objectives, available resources and financial constraints.

LoS statements describes local Council's intention to deliver customer services in terms of quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost. Statements should be written so customers can relate to them. Councils are accountable through a customer satisfaction measure and a technical performance measure.

The relationship between costs and LoS depends on the type of activity. Some infrastructures have a steep initial cost with minimal servicing costs while other services will have higher proportions of operational and maintenance type costs. Costing needs to be meaningful and understandable, the cost per user should represent a tangible benefit or a better LoS.

Community Levels of Service

Service levels are defined as either customer LoS or technical LoS. Community LoS measure how the community receives the service and whether the organisation is providing community value.

Community LoS measures used in the AMP are:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

Council's current and expected community service levels are detailed in Tables 2.1 and 2.2. Table 2.1 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY OUTCOMES				
Key findings from a customer satisfaction survey find that largest performance gaps for resident satisfaction were maintaining local roads, economic development and financial management.				
COMMUNITY LEVELS OF SERVICE				
Quality	Disposal has no impact on natural Watercourses	<ul style="list-style-type: none"> • Customer surveys • Customer requests 	To be provided from the Resident Survey	Requests received should not increase annually
Function	Connection available	<ul style="list-style-type: none"> • Customer surveys • Customer requests • Ongoing monitoring 	To be provided from the Resident Survey	Requests received should not increase annually
Safety	Meets health standards	Monitoring and reporting program	Meets all health requirements	Meets all health requirements

Table 2.1: Community Level of Service

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 organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

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

Service and AMP, implement and control technical service levels to influence the customer service levels.²

Table 2.2 shows the technical level of service expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and trade-off of service levels performance, costs and risk within resources available in the LTFP.

² IPWEA, 2011, IIMM, p 2.22

Description	Units	Target Level of Service
Availability of Service		
Residential Areas	All urban residential and industrial areas where practical.	
Frequency of System Failures		
Dry weather sewer overflows	per 100km	30
Customer Complaints		
Service Complaint	per 1,000 properties p.a.	9
Odour Complaint (complaints shall be considered resolved when 90% of residents in the originally affected area are satisfied).	per 1,000 properties p.a.	5
Treatment Plant	events per year per plant	3
Other	events per year per scheme	10
Effluent Discharge Compliance		
Compliance with Licence Conditions	%	100
<i>Priority, Issues and Effects</i>	<i>Customer given feedback</i>	<i>Repairs to commence</i>
<i>Priority 1: A complete failure to contain sewerage within the Sewer System or any problem affecting many users resulting in one or more of the following occurring.</i>		
Possible Issue: Blockage overflowing Sewer System, manhole overflowing, Broken Gravity/Rising Main, Pump Station failure, Missing Manhole Lid		
Typical Effects: Personal injury or significant risk to health, Surcharge inside/outside a building, Property damage eg subsidence of critical asset eg roadway, buildings, railway etc, Environmental impact eg Tradewaste spill, Subsidence causing danger	Within 1 hour	Within 1 hour
<i>Priority 2: Minor failure within the Sewer System or any problem affecting users resulting in one or more of the following effects occurring.</i>		
Possible Issue: Cracked sewer pipe, Odour Complaint, Partial sewer blockage, Noisy manhole, Noisy Pump Station.	Within 1 working day	Within 3 days
Typical Effects: Slow moving toilet flush		
<i>Priority 3: Non urgent fault but significant in the belief of the customer.</i>		
Possible Issue: Minor subsidence, Restoration, Locations	Within 3 working days	Programmed Maintenance
Typical Effects: No impact on the environment, Seepage investigation		

Table 2.2: Sewerage Supply Levels of Service

Sewer Business Levels of Service

Technical LoS is a function of ongoing serviceability (Operations, Maintenance and Administration (OMA)) and renewing of depleted assets. Council allocates 71% of budget for OMA or serviceability costs (\$63.2 million), 27% for renewing depleted assets (\$24.2 million) and 2% for new assets (\$1.5 million) over the LTFP period.

The LTFP sewer program allocates \$24.2 million for budgeted renewals, \$1.5 million for new works with a total program depreciation of \$26.6 million and total asset disposals of \$5.3 million. This results in a sewer business Renewals Ratio of 0.96 and a Bring to Satisfactory (BTS) Ratio of 0.0. Sewerage Pump Stations have a BTS ratio of 0.06 over the LTFP, resultant from \$4.8 million EOL assets in the final two years of the LTFP. Manhole and Service connections both have a BTS ratio of 0.03 resulting from an opening backlog of works (this is being reduced over the duration of the LTFP).

Table 2.3 shows the technical LoS expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by Council following community consultation and the trade-off of service levels performance, costs and risk management of resources available in the LTFP.

Sewer \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
Manhole	\$1,132	\$71	\$20,649	\$1,830	\$1,160	0.03	0.98
Other	\$255	\$15	\$1,616	\$1	\$257		0.99
Pipeline	\$4,455	\$283	\$55,759	\$4,845	\$4,523	0.01	0.98
Pressure Control Panel	\$165	\$10	\$437		\$170		0.97
Pressure Grinder Pump	\$131	\$8	\$347		\$135		0.97
Pressure Main	\$119	\$7	\$2,107		\$119		1.00
Pressure Pod Tank	\$134	\$8	\$2,380		\$134		1.00
Pressure Service Connect	\$45	\$3	\$800		\$45		1.00
Pressure Valve	\$16	\$1	\$287		\$16		1.00
Service Connection	\$324	\$19	\$6,510	\$517	\$315	0.03	1.03
Sewerage Pump Station	\$3,902	\$233	\$10,954	\$4,807	\$4,504	0.08	0.87
Sewerage Treatment Plan	\$13,561	\$926	\$35,370	\$5,851	\$15,214		0.89
Program	\$24,238	\$1,583	\$137,216	\$17,851	\$26,592	0.00	0.91

Table 2.3: Sewer Business Levels of Service (\$000)

2.2 Customer Research and Expectations

Council engaged Micromex to conduct the Richmond Valley Council Community Research 2013³. The poll from a sample of residents revealed their level of satisfaction with Council's services. Council sought to examine community attitudes and perceptions towards current and future services and facilities provided by Council. Key objectives of the research included:

- Ø To assess and establish the community's priorities and satisfaction in relation to Council activities, services and facilities,
- Ø To identify the community's overall level of satisfaction with Council's performance, and

³ Micromex Research, 2013, Richmond Valley Council Community Research

- o To identify the community's level of satisfaction with regards to contact they have had with Council staff.

Overall, the research has found a generally positive result for Council, with 29 of the 32 services/facilities/criteria rated as being of 'moderate satisfaction' to 'very high satisfaction'.

At an overall level, residents expressed a 'moderate' level of satisfaction with the performance of Council, with 82% of the respondents giving a rating of 'somewhat satisfied' to 'very satisfied'. Only 4% of residents indicated that they were 'not at all satisfied' with Council's performance.

Compared to an *All of NSW measure and Regional Councils*, Richmond Valley has performed better than average. The most recent community satisfaction survey reported satisfaction levels for the following services in table 2.4. The community is generally satisfied with services provided by Council and is very satisfied with the regional water supply service.

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Economic development and Local Employment			√		
Community Consultation			√		
Financial Management			√		
Support for Community Organisations		√			
Council Provision of Information for Residents			√		
Council Policies and Plans			√		
Town Water Supply	√				
Maintaining Local Roads			√		

Table 2.4: Community Satisfaction Survey Levels

2.3 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this AMP 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 AMP and risks that these may change are shown in Table 2.5.

Key Assumptions	Risks of Change to Assumptions
Use of existing inventory data	<ul style="list-style-type: none"> Data set is reliable; monetary movements have a confidence level of A.
Use of existing valuations and useful lives	<ul style="list-style-type: none"> Design lives confidence level A. RUL confidence level D, uncertainty surrounds current condition of underground assets. Some slight deviation observed when applying modified pattern asset movements over the LTFP.
Use of current expenditure information as best as this can be determined	<ul style="list-style-type: none"> Confidence level A. Council has integrated asset schedule.

Table 2.5: Key Assumptions made in AM Plan and Risks of Change

Forecast Reliability and Confidence

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale⁴ in accordance with Table 2.6.

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

Table 2.6: Data Confidence Grading System

The estimated confidence level for and reliability of data used in this AMP is shown in Table 2.7.

⁴ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Data	Confidence Assessment	Comment
Demand drivers	TBD	Need calibration
Growth projections	Highly Reliable	ABS and NSW DPI
Operations expenditures	Highly Reliable	Low variations over four years
Maintenance expenditures	Highly Reliable	Low variations over four years
Projected Renewal exps. - Asset values	Uncertain	Dataset complete with some expected errors for observable assets. Underground assets less reliable due to old age, will be verified by a CCTV inspection program.
- Asset residual values	Reliable	Dataset complete with some expected errors

Table 2.7: Data Confidence Assessment for data used in AMP

3. Future Demand

Demand management is an action plan to improve usage and efficiency for the sewer supply system. The capacity of an organisation is dependent on quantitative analysis and best judgements across the many factors impacting on service delivery. Issues include asset integrity, preventative maintenance, periodic renewal and network expansion to accommodate community development.

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

Population is expected to increase modestly over the next 25 years, therefore not influencing demand for new assets. A general issue with infrastructure delivery is the increasing costs of doing business. Rising costs are a factor of increased resourcing costs (labour and materials), WHS awareness and a more focused regulatory environment.

Infrastructure assets are subject to increasing environmental affects, resulting in new technologies and improved materials. New construction methods are designed to lessen susceptibility to damage from the environment, as well as to minimise induced impacts on the environment. In combination, the cost to provide and care for assets is increasing faster than the community's ability to fund provision.

3.1 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability, and the timely renewal of assets that have reached end of life. Council continues to invest in information systems and

evidence based data including conditions ratings, remaining useful life, depreciation patterns which improve the infrastructure and long term financial planning functions.

The potential benefits of demand management programs include sustainable usage patterns, delaying investment in new infrastructure and to reduce the operational costs of reticulated water services. LWU's can balance demand management initiatives with supply side works and achieve triple bottom line benefits including lower rates (Typical Residential Bill (TRB)) for their customers, a more secure water supply and increase residual water for environment uses.

Sewer Load Management

Wet weather and dry weather groundwater infiltration is known to be significant in the Evans Head and Coraki sewerage catchments. Dry weather groundwater infiltration in the Evans Head catchment was estimated to be 37% of the average wet weather flow (GeoLINK, 2009). Instantaneous peak wet weather flow to the Evans Head Sewer Treatment Plant (STP) is likely to be in the order of 10 to 12 x ADWF (GHD, 2008). Wet weather flows in Coraki are limited by the pumping capacity and as such, recorded wet weather flows are limited to 7 x ADWF, although significant infiltration is known to occur.

As part of its renewal program, Council has implemented a sewer main relining program with proposed \$1m budget expenditure every two years to 2030/31, then \$600,000 budget expenditure every two years. This program was developed from CCTV inspections and the prioritisation of works.

3.2 Casino STP Flow Analysis

The Casino Sewage Treatment Plant (STP) has two treatment streams. The first includes a trickling filter process, followed by an intermittently decanted extended aeration (IDEA) system, alternatively flow can be sent directly to the IDEA tank without treatment in the trickling filter process. The facility was originally constructed in 1933, with modifications made in the 1950s and again in the 1990s.

The primary sedimentation and trickling filter system has remained essentially unchanged with the exception that one additional PST, trickling filter and humus tank were added as a part of an intermediate facility expansion in the 1950s. The IDEA treatment stream was added as a part of the 1990s expansion along with storm ponds, sludge lagoons and additional sludge drying beds. The facility treats residential and commercial flow with some contributions from industrial food processing facilities.

Casino STP Modelling

STP flow enters the facility via two sewage pump stations (SPS), numbers SPS601 and SPS607. Flow is directed into a balance tank prior to flow measurement and then split between treatment trains. The following has been observed regarding the daily flow data:

- ❑ Base flows at the facility have stayed pretty constant over the five year historic period evaluated, indicating there has been little growth in the area over the past few years.
- ❑ Minor seasonal variations seem to occur every year in the autumn typically around March through May. This is consistent with increased precipitation during these times.
- ❑ Casino STPs average dry weather flow rate of 2.7 ML/d (211 L/d/EP) is less than the typical flow rates per EP values of 260 L/d/EP as estimated by Hunter Water Australia (HWA).

- Ø STP process capacity modelling⁵ by GHD developed summarises flow projections for both evaluations (Figure 3.1) as a basis for future augmentation strategies.

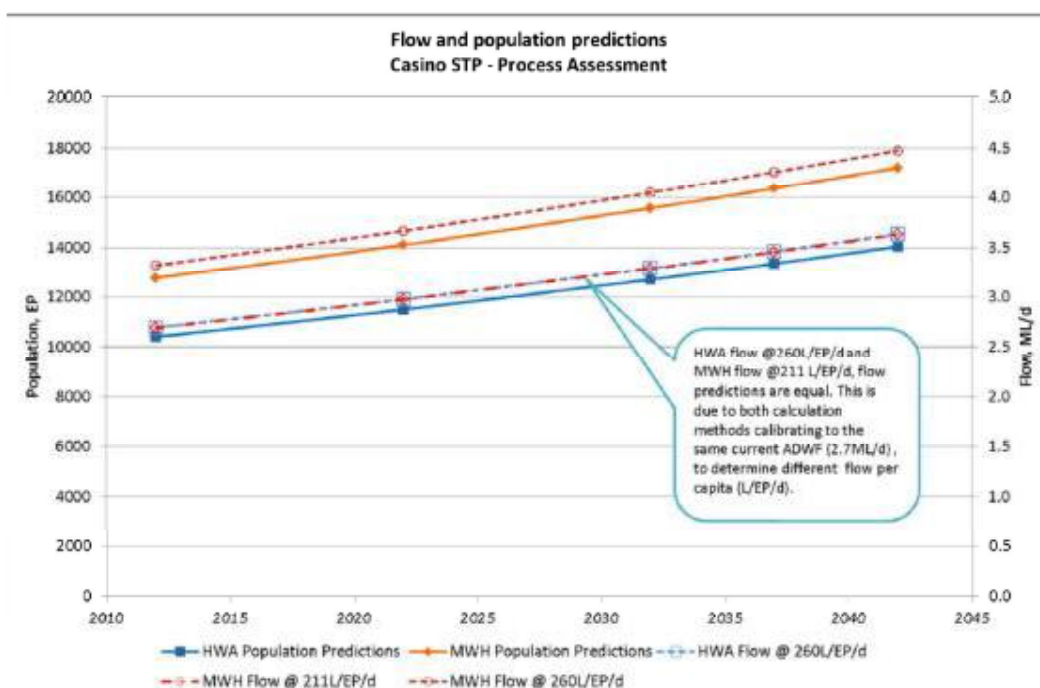


Figure 3.1: Casino STP Population and Flow Projections

Future flows and populations have been determined based on projected population growth and historical flow data. Table 3.1 summarises future flows expected at Casino STP for current conditions through to 2042 future flow conditions. A wet weather peaking factor of 11.6 and peak dry weather peaking factor of 2.7 were determined from historical data and used for these evaluations.

Year	Adopted (HWA, 2013), growth rate 1.0%/yr	ADWF (Flow per capita = 260 L/EP/d)	PDWF (2.7 x ADWF) ⁵	PWWF (11.6 x ADWF) ⁴	
		kL/d	kL/d	kL/d	L/s
2014	10411	2,700	7,400	31,400	363
2022	11500	3,000	8,200	34,900	404
2032	12703	3,300	9,000	38,400	444
2037	13351	3,500	9,600	40,700	471
2042	14032	3,600	9,900	41,900	485

Table 3.1: Future estimated flows, based on 1.0% growth rate and 260 L/EP/d

⁵ GHD, 2014, Report for Richmond Valley Council – Casino STP Investigations Process Capacity Assessment.

GHD Conclusions - Casino STP

With regard to current average dry weather flow (31 L/s), the humus tanks and the anaerobic digesters, sludge lagoons, and drying beds are all slightly overloaded.

- Ø The humus tanks do not receive equal flow, resulting in the eastern humus tank being significantly overloaded. Humus tank effluent samples confirm this condition as it appears as though solids are being washed out of the tank. At peak flows, both humus tanks are over capacity.
- Ø Existing digesters appear to be overloaded at current conditions, the condition could be mitigated by decanting supernatant from the digesters, however further investigation of the active volumes is needed.
- Ø The sludge lagoons may not be currently meeting the current design criteria of 6 months of retention time.
- Ø The provision of wet weather flow buffering (via storm ponds) is necessary for plant performance at peak flows. The existing storm ponds only provide a maximum of 19 hours flow attenuation (flows greater than 165 L/s) at current peak flows.
- Ø The IDEA tank can currently lose nitrification and is likely not performing optimally due to low influent average loads and high influent peak flows.
- Ø Stable final effluent performance (at the licence measuring point) is primarily due to polishing treatment (lagoon and wetland) and both these processes perform to expectations.
- Ø Additional sludge drying bed area is required to properly dry current sludge produced at the STP. It is possible that the existing drying arrangements are not providing sufficient dewatering, resulting in higher disposal costs.
- Ø A septage receiving facility will improve performance of the sludge lagoons by providing treatment (such as screening or even treatment through the main processes) to septage arriving at the facility. This will also reduce odours from the sludge lagoons due to untreated septage.

The following recommendations are made in regards to the Casino STP process capacity

- Ø Undertake detailed investigation of all solids processes to ascertain existing performance and determine required expansion. Investigation should include a more detailed look at actual supernatant return rates (if any) and sludge pumping rates and schedules from PSTs, humus tank and IDEA tank.
- Ø Storm ponds should have capacity to significantly mitigate peak wet weather flow events, operation options should be evaluated to better use these facilities and determine if targeted peak flow mitigation to the treatment streams is being achieved. Additional storm pond volume should be provided in the future to allow for at least one full days diversion at future flows.
- Ø Additional investigation is required to determine if tertiary lagoon can be taken offline (as a potential option for increasing storage volumes), assuming improvements to upstream processes, to potentially increase the capacity of either the storm water bypass system or the sludge lagoon stabilisation process. It is suggested that this review be undertaken in conjunction with any planning regarding wet weather storage bypass arrangement.
- Ø All trickling filters should be taken offline for maintenance and mechanical components and bed details investigated to determine if performance can be improved. Depending on the results of the inspection, bed media may benefit from replacement for improved performance.
- Ø An additional humus tank is recommended to reduce loading contributed from the east and middle trickling filters.
- Ø Alternative operating configurations for IDEA tank should be investigated and evaluated. If treatment in the trickling filters and humus tank system can be improved (possibly by treating

higher raw sewage flows through the IDEA up to 2 ML/d) then effluent can be directed straight to the tertiary lagoon, allowing for only raw sewage to be treated by the IDEA tank.

- Ø Augmentation of the process to include a dedicated phosphorus removal process (through chemical precipitation with alum or equivalent) to allow the process to meet the future EPA licence load limits.
- Ø Additional sludge storage and/or stabilisation capacity (lagoons and digesters) is required. A complete review of consolidated sludge storage and stabilisation practices (including septage management) is required, and options for increasing capacity should be investigated.
- Ø Additional sludge drying or dewatering capacity is required to meet current and future loads. Augmentation of the drying/dewatering facilities should be incorporated into future strategic planning.

3.3 Evans Head STP

Council constructed a new STP facility in 2006 to service Evans Head and Woodburn. Stage 1 provided capacity for 5,500 e.p. (equivalent persons). Previous modelling scenarios expected this threshold to be reached in 2015 necessitating Stage 2 development with expanded capacity for 11,000 e.p. However actual populations have been lower than expectations, delaying augmentation works in previous planning documents.

Reclaimed water from the STP is presently released via a circuitous route into the Salty Lagoon coastal lake within the Broadwater National Park. This long term irrigation strategy minimises discharge of treated effluent into Salty Lagoon and minimises environmental impacts on adjacent lands.

Upgrading the Evans Head STP has achieved a scale improvement in the quality of water released, with significant reductions in gross nutrients of nitrogen and phosphorous. This combined with the trial closure of the artificial canal is restoring ecosystem vitality.

An investigation into the usage of Evans River as an option for STP effluent discharges reflects the communities agreed position for catchment and estuarine waters. Evans River is highly valued by the community as a site for recreational pursuits, aesthetic qualities and family water based activities. The health of the river is also a critical success factor for Evans Head as a tourist destination.

The current policy position is to monitor hydrodynamic and water quality health (Hydrosphere ERMP program) of the wetland system, the expectation is that achievements over the past 15 years will prove beneficial. Council continues to consult with regulatory agencies and local citizens to develop long-term preferred strategies if the current status quo option fails to achieve expected objectives. This strategy is most likely to manage short-term environmental risk, provide for continual improvement in ecosystem conditions and provides a logical path to restoring the natural regime of the system.

3.4 Coraki STP

The Coraki system was upgraded to satisfy current and future licensing agreements. Upgrades included works to SPS1, SPS2 and a rising mains extension in 2010. A duckweed system was installed in 2009 to control algal growth, which has resulted in previous breaches. Duckweed growth has been slow due to the presence of carp affecting water quality in the pond (their removal is being investigated). Alum dosing is being considered to reduce phosphorous nutrients.

GHD⁶ prepared the following major conclusions regarding plant performance:

- Ø The PST is performing within the expected ranges.
- Ø The trickling filter is performing only slightly below the expected levels for BOD removal, and the filter is achieving good nitrification rates.
- Ø The humus tank solids capture rate is less than expected, however the effluent quality is within the expected ranges for a secondary sedimentation tank.
- Ø The two tertiary ponds (in series) are achieving the required disinfection standards, as well as providing good nutrient reduction.
- Ø The plant meets the EPA licence limits for BOD and faecal coliforms. TSS limits are frequently exceeded in the warmer months, most likely due to algae blooms in the ponds. Nutrient discharge concentrations and loads are not currently licenced.
- Ø It is anticipated that the pump station upgrade (to include variable speed drive) will improve the PST, trickling filter and humus tank performance, by minimising the peak flows to the plant during dry weather.

The following recommendations are made in regards to the Coraki STP process capacity and performance:

- Ø The implementation of the new pump station with variable speed drives will significantly improve the performance of the trickling filter and humus tanks, by limiting the dry weather flow to 11 L/s. It is important to ensure that the variable speed drives are correctly operated, to minimise pumping at rates greater than 11 L/s.
- Ø Address all condition assessment items within either the long-term upgrade strategy, or within scheduled maintenance activities. As a guide, any items given a remaining life of less than five years should be incorporated into maintenance schedules.
- Ø Undertake detailed investigation of the existing lagoons, tertiary treatment (disinfection), algae mitigation and effluent storage, compared to existing pond arrangement.
- Ø Modification of the storage will need to be addressed due to the algae issues resulting in licence breeches. It is suggested that this review be undertaken in conjunction with any planning regarding wet weather storage bypass arrangements (if required).
- Ø A review of the digested sludge handling should be undertaken, to determine what improvements could be made to the digestion process. In particular a review of sludge operating levels within the digester may indicate that the full digester volume is not in use, which would impact on volatile destruction by effectively decreasing solids retention time in the system. Furthermore, a review of primary sludge transfer volumes (measured) would also be beneficial in improving the digester performance.

3.5 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability and the timely renewal of assets that have reached end of life. Council continues to invest in information systems and

⁶ GHD, 2014, Report for Richmond Valley Council – Coraki STP Investigations Process Capacity Assessment.

evidence based data including conditions ratings, remaining useful life, depreciation patterns which improve the infrastructure and long term financial planning functions.

Opportunities identified for demand management include monitoring community expectations to determine LoS and analysing the cost of provision to determine the long term affordability. There is a gap between community aspirations and their willingness to pay for these services. It is the responsibility of Council board and management to articulate the evidence presented in asset and financial planning, therefore narrowing the expectations gap.

Financial results from best practices applied to the Sewer business identify that 94% of capital expenditure will be required to maintain the existing network of asset. A total of \$1.6 million has been allocated for new and improved serviceability of the Sewer business (Figure 3.2). It is important to note that acquiring additional assets from growth or by provision of additional infrastructure services, will ultimately commit Council to fund ongoing operations and maintenance costs. These future costs should be identified and considered in developing forecasts of future operating and maintenance costs.



Fig 3.2 New Assets from Growth

4. Lifecycle Management Plan

A lifecycle asset management plan details how Council plans to manage and operate water business assets at the agreed LoS while optimising lifecycle costs. The objective is to look at the lowest long term cost rather than seeking short term savings when making decisions. Sustainable financial management is about managing community outcomes by providing assets and services with the lowest long term cost.

4.1 Background Data

The Council sewer network includes 12 asset classes (includes six new pressure sewer classes) consisting of 13,630 unique assets with a Fair Value Current Replacement Cost (CRC) of \$121.64 million and a Depreciable Replacement Cost (DRC) \$98.95 million. Service connections, manholes and pipelines represent the oldest network assets, while the new Broadwater pressure sewer system are the newest assets in the network. The remaining useful life (RUL) for all sewer assets as a percentage of total life is 49.7% (table 4.1).

Type	No Of Assets	New Asset	Avg Age	Avg RUL	Dep Pattern	Distance m	Area sqm	Age %	Value %
Service Connection	4,966	31	47	43	Moderate	19,337		47.9%	82.5%
Pressure Valve	75	75	1	69	Moderate			98.6%	98.6%
Pressure Main	77	77	1	69	Moderate	8,051		98.6%	98.6%
Pressure Control Panel	202	202	1	24	Low			96.0%	96.0%
Pressure Grinder Pump	212	212	1	24	Low			96.0%	96.0%
Pressure Pod Tank	198	198	1	69	Moderate			98.6%	98.6%
Pressure Service Connecti	214	214	1	69	Moderate	7,800		98.6%	98.6%
Other	298	37	29	45	Moderate	986		61.3%	83.7%
Manhole	2,455	6	44	32	Moderate			42.0%	75.4%
Pipeline	3,626	15	39	37	Low/Mod	186,555		48.8%	79.6%
Sewerage Pump Station	581	52	22	25	Moderate	1,031,322		52.8%	81.6%
Sewerage Treatment Plan	726	7	28	22	Moderate	23,297	8,495	43.6%	84.0%
Grand Total	13,630	1,126	39	38		1,277,349	8,495	49.7%	81.3%

Table 4.1: Sewer Asset Statistics

Long lived assets have modified depreciation schedules reflecting reduced consumption patterns in earlier years and increasing consumption as the asset integrity declines towards end of useful life (Figure 4.1). Standard lifecycle asset terms include:

- Ø Current Replacement Cost (CRC) - the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset with the same economic benefits or service potential,
- Ø Depreciable Amount (DA) - CRC for depreciable assets less residual value (RV),
- Ø Depreciated Replacement Cost (DRC) - CRC less accumulated depreciation, and
- Ø Asset valuations by the valuer employ a modified depreciation pattern which results in asset valuations as a percentage (DRC/CRC) being higher than the age percentage (RUL/Useful Life).

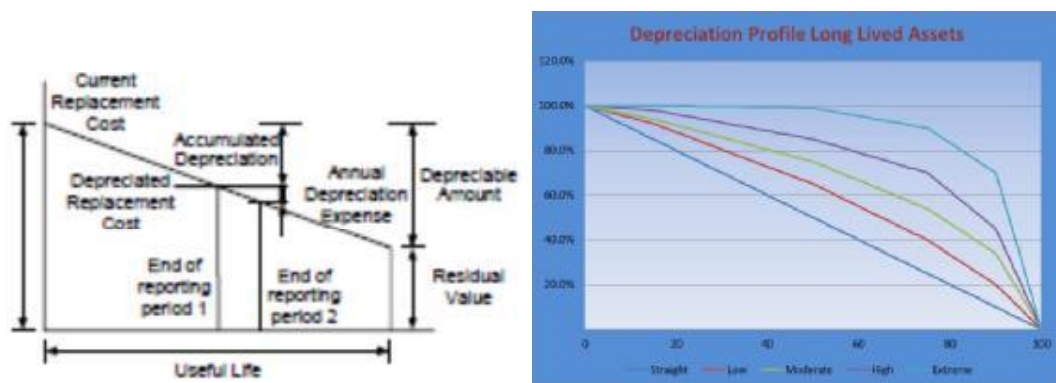


Figure 4.1: Depreciation Profile for Long Lived Assets

Councils sewer position (Table 4.2) shows the fair value of assets (CRC) is \$121.64 million, with the DA totalling \$100.3 million and a residual component of \$21.32 million; and DRC or the written down value (WDV) totalling \$98.95 million. Council's sewer assets DRC is currently 81.3% of CRC (vs. a remaining age based indicator of 49.7%) illustrating the effect of modified depreciation schedules. Annual depreciation of \$1.05 million reflects an asset consumption rate of 0.87%. The asset renewal funding ratio⁷ is 0.96 this indicates Council plans to renew assets at a slightly slower the rate they are being consumed, thereby slightly decreasing asset stock by \$91,000 per year.

Type (\$000)	Opening CRC	Reval	Additions	Annual Dep	Closing CRC	Depr Amount	Accum Dep	WDV
Reservoir	4,727	183	26	23	4,935	2,907	862	4,073
Water Meter	0	0	183	3	183	183	3	181
Water Pump Station	0	0	1,344	19	1,344	1,344	19	1,325
Water Treatment Plant	0	0	399	16	399	399	16	383
Service Connection	0	0	316	13	316	316	13	304
Encasement	0	0	1,518	22	1,518	1,518	22	1,497
Fire Hydrant	0	0	510	7	510	510	7	503
Water Meter	1,122	31	215	18	1,368	1,368	223	1,145
Pipe Main	15,989	450	24	73	16,462	8,231	4,050	12,413
WSP	43,335	1,212	1,548	299	46,095	35,033	9,414	36,681
Main Encasement	8,891	377	2,298	159	11,567	11,567	2,130	9,437
Water Valve	35,632	1,227	84	403	36,943	36,943	5,928	31,015
Grand Total	109,697	3,480	8,465	1,056	121,641	100,321	22,686	98,955

Table 4.2: Sewer Asset Values (\$000)

4.2 Physical Parameters

The age profile of infrastructure assets shows that significant construction took place in the post-World War 2 time period. It is likely that much of this infrastructure will be well through its useful life, and will require renewal in the near future. The profile also indicates that the age data on infrastructure requires development.

Figure 4.2 examines the data by time periods. This graphic illustrates that the main sewer is aged, with 35% of the network constructed pre 1970. Service Connections represent the oldest asset with 69% pre 1970, Manholes 55% pre 1970 and STP 36% of assets constructed pre 1970's. The new Broadwater pressure system was constructed in 2013 and 2014, and improves the percentage of relatively new sewer assets built post 2000 to 36% of all assets.

⁷ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

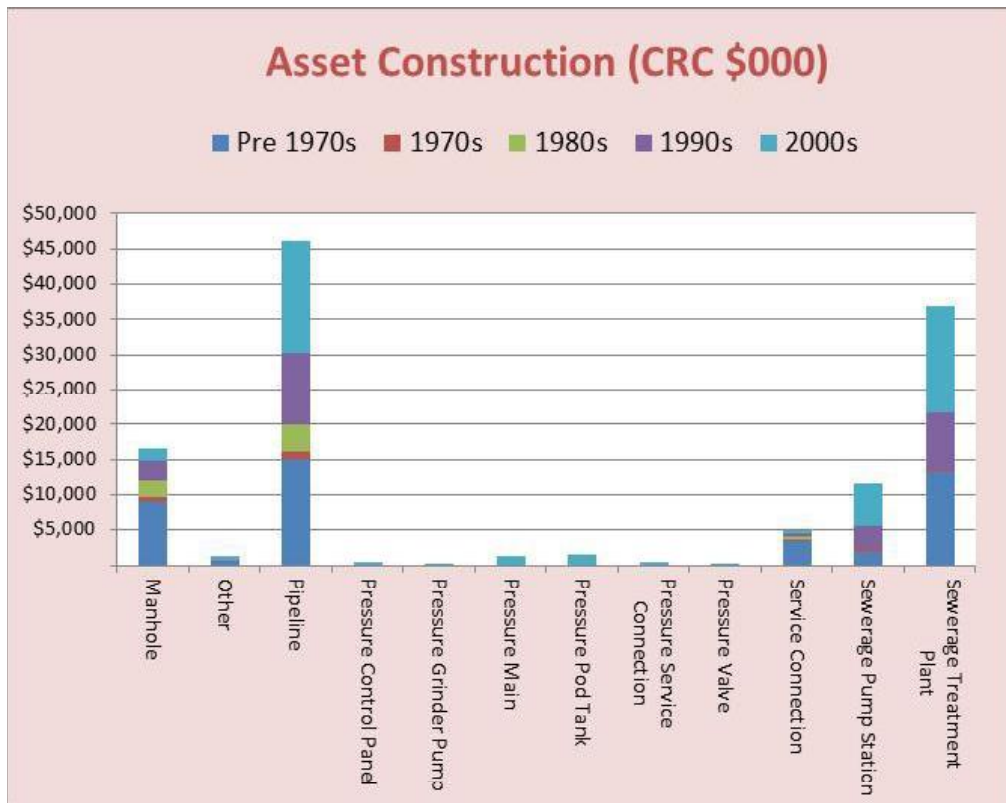


Figure 4.2: Asset Age Profile

Asset Renewals

Council's asset register provides RUL's for each asset which can be used to predict the capital renewals by decade (Table 4.3). Council's Sewer business has a current backlog of works (\$7 million) influenced by construction dates in the asset register. \$6.1 million of these works are for underground pipes and manholes which is inconsistent with failure rates for these assets. Outside the current backlog, the sewer network will not require large renewals until 2023 when the Sewerage Pump Stations (SPSs) and Sewerage Treatment Plants (STPs) will require asset renewals. It is proposed that an improved inspection and data capture process will refine this information in future.

Asset Construction (CRC \$000)	Pre 1970s	1970s	1980s	1990s	2000s	Total
Manhole	\$9,020	\$721	\$2,207	\$2,908	\$1,607	\$16,462
Other	\$403	\$6	\$6	\$174	\$780	\$1,368
Pipeline	\$14,954	\$1,204	\$3,789	\$10,312	\$15,836	\$46,095
Pressure Control Panel					\$399	\$399
Pressure Grinder Pump					\$316	\$316
Pressure Main					\$1,344	\$1,344
Pressure Pod Tank					\$1,518	\$1,518
Pressure Service Connection					\$510	\$510
Pressure Valve					\$183	\$183
Service Connection	\$3,417	\$176	\$384	\$457	\$501	\$4,935
Sewerage Pump Station	\$1,964	\$389	\$26	\$3,276	\$5,911	\$11,567
Sewerage Treatment Plant	\$13,393	\$149		\$8,076	\$15,324	\$36,943
Total	\$43,151	\$2,645	\$6,411	\$25,203	\$44,230	\$121,641

Table 4.3: Sewer Asset Construction data (\$000)

For the forward period asset renewals are reasonable consistent with 17% of renewals during the 2020s, 13% in the 2030s and 20% in the 2040s.

Asset Renewal (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050	Total
Manhole	\$1,752	\$507	\$658	\$1,593	\$3,721	\$8,231
Other		\$37	\$533		\$799	\$1,368
Pipeline	\$3,429	\$1,841	\$1,547	\$2,559	\$25,656	\$35,033
Pressure Control Panel			\$399			\$399
Pressure Grinder Pump			\$316			\$316
Pressure Main					\$1,344	\$1,344
Pressure Pod Tank					\$1,518	\$1,518
Pressure Service Connection					\$510	\$510
Pressure Valve					\$183	\$183
Service Connection	\$494	\$0	\$46	\$259	\$2,107	\$2,907
Sewerage Pump Station		\$3,630	\$783	\$4,872	\$2,282	\$11,567
Sewerage Treatment Plant	\$10	\$11,249	\$8,792	\$11,176	\$5,716	\$36,943
Total	\$5,686	\$17,264	\$13,075	\$20,459	\$43,838	\$100,321

Table 4.3.1: Capital Renewal Schedule (\$000)

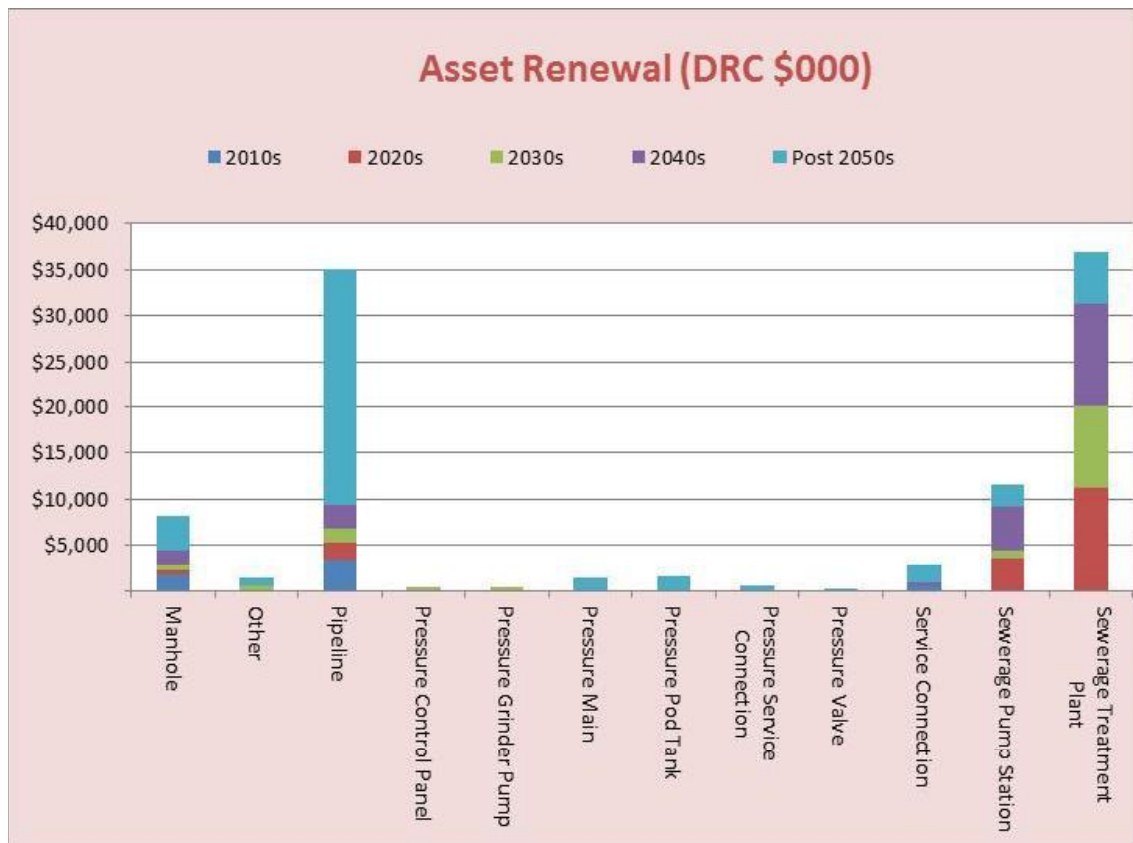


Figure 4.4: Asset Renewals Profile

Planning forward works is a function of renewals due and resourcing capacity. Over the LTFP period Council has \$17.8 million of sewer assets requiring renewal and has allocated 1.44 times this amount to allow for contingencies, and the preservation of the network. The following tables display asset financial movements for EOL Disposals, Renewals and Depreciation values (000s) for each road program this current LTFP. These tables produce the key BTS and renewals ratios discussed below.

Council demonstrates a mature and integrated approach towards budget development, long term financial planning and capital works planning. This approach is influenced by best practice management and the future sustainable of Council businesses. Asset and financial planning primary considerations include replacement of end of life assets represented as a Bring to Satisfactory ratio (BTS), and the preservation of assets represented as a renewals ratio.

The following tables (4.4.1 and 4.4.2) provide a time series for EOL disposal values, proposed capital renewals, annual depreciation values (which measure the consumption of assets) and Written Down values (which measure the remaining service potential of assets). The table with capital renewals presents councils approach to achieving benchmark ratios of less than 0.02 for BTS and 1.0 for asset renewals.

Sewer EOL \$000	2015 Disp	2016 Disp	2017 Disp	2018 Disp	2019 Disp	2020 Disp	2021 Disp	2022 Disp	2023 Disp	2024 Disp	2025 Disp	Total
Manhole	\$1,830											\$1,830
Other		\$1										\$1
Pipeline	\$4,803	\$1	\$37			\$5						\$4,845
Pressure Control Panel												
Pressure Grinder Pump												
Pressure Main												
Pressure Pod Tank												
Pressure Service Connection												
Pressure Valve												
Service Connection	\$436	\$9	\$72			\$0						\$517
Sewerage Pump Station	\$15									\$3,412	\$1,380	\$4,807
Sewerage Treatment Plant		\$132		\$12		\$47	\$16		\$4,330	\$241	\$1,075	\$5,851
Total	\$7,083	\$142	\$109	\$12		\$52	\$16		\$4,330	\$3,653	\$2,455	\$17,851

Table 4.4.1: Capital End of Life Disposal Values (\$000)

Manhole	\$106	\$214	\$100	\$117	\$56	\$141	\$49	\$67	\$48	\$156	\$78	\$1,132
Other	\$26	\$52	\$24	\$28	\$13	\$28	\$10	\$15	\$11	\$31	\$17	\$255
Pipeline	\$434	\$864	\$405	\$472	\$225	\$557	\$193	\$266	\$182	\$564	\$292	\$4,455
Pressure Control Panel	\$14	\$29	\$18	\$21	\$10	\$20	\$7	\$10	\$7	\$19	\$11	\$165
Pressure Grinder Pump	\$11	\$23	\$14	\$16	\$8	\$16	\$6	\$8	\$5	\$15	\$9	\$131
Pressure Main	\$12	\$24	\$11	\$13	\$6	\$13	\$4	\$6	\$5	\$16	\$8	\$119
Pressure Pod Tank	\$14	\$27	\$12	\$15	\$7	\$14	\$5	\$7	\$5	\$18	\$10	\$134
Pressure Service Connection	\$5	\$9	\$4	\$5	\$2	\$5	\$2	\$2	\$2	\$6	\$3	\$45
Pressure Valve	\$2	\$3	\$2	\$2	\$1	\$2	\$1	\$1	\$1	\$2	\$1	\$16
Service Connection	\$38	\$69	\$31	\$36	\$17	\$35	\$12	\$17	\$12	\$37	\$20	\$324
Sewerage Pump Station	\$295	\$571	\$298	\$470	\$229	\$476	\$262	\$496	\$281	\$410	\$115	\$3,902
Sewerage Treatment Plant	\$1,048	\$2,025	\$952	\$1,317	\$928	\$1,928	\$939	\$1,128	\$627	\$1,783	\$886	\$13,561
Total	\$2,005	\$3,910	\$1,871	\$2,511	\$1,501	\$3,235	\$1,489	\$2,023	\$1,185	\$3,057	\$1,451	\$24,238

Table 4.4.2: Capital Renewals Values (\$000)

BTS communicates the quantum of assets that are at risk or require immediate attention to restore their serviceability. With Council implementing best practice through professional revaluations on a five yearly cycle, Councils control systems have dependable data on the current state of assets. Therefore calculation of BTS is a simple calculation of the total value of EOL assets in year (x) less the value of renewals in that year compared to the total WDV of the asset class. For the LTFP period the sewer network has a BTS measure of 0.0, however by asset types, Sewerage Pump Stations, Service Connections and Manholes have a BTS measure less than the benchmark of 0.02.

The Renewables Ratio communicates the preservation of asset integrity. Asset consumption as measured by depreciation reflects the loss of future service potential in infrastructure assets. In accordance with AASB 116 p60 Council estimates asset consumption most closely reflecting their real world deterioration rates. This increases the complexity of financial calculations and will ultimately focus attention on best practice maintenance and renewals programs to preserve asset integrity.

An ideal Renewables Ratio is 1.0. This simply means that the value of renewals in year (x) matches the consumption of asset in that year. The LTFP process has focused on a sustainable asset position at the end of 10 years across all community assets. This is reflected in improving renewables ratios each year. For the LTFP period the sewer network has a renewables ratio of 0.96, close to ideal.

Sewer Depreciation \$000	2015 Dep	2016 Dep	2017 Dep	2018 Dep	2019 Dep	2020 Dep	2021 Dep	2022 Dep	2023 Dep	2024 Dep	2025 Dep	Total
Manhole	\$68	\$77	\$81	\$84	\$86	\$109	\$111	\$115	\$128	\$151	\$151	\$1,160
Other	\$17	\$18	\$19	\$20	\$20	\$22	\$23	\$25	\$29	\$30	\$33	\$257
Pipeline	\$279	\$309	\$326	\$339	\$346	\$433	\$438	\$455	\$487	\$547	\$564	\$4,523
Pressure Control Panel	\$9	\$10	\$14	\$15	\$15	\$16	\$16	\$17	\$17	\$18	\$22	\$170
Pressure Grinder Pump	\$7	\$8	\$11	\$12	\$12	\$13	\$13	\$13	\$14	\$15	\$17	\$135
Pressure Main	\$8	\$9	\$9	\$9	\$9	\$10	\$10	\$10	\$13	\$16	\$16	\$119
Pressure Pod Tank	\$9	\$10	\$10	\$10	\$11	\$11	\$11	\$12	\$14	\$18	\$18	\$134
Pressure Service Connection	\$3	\$3	\$3	\$4	\$4	\$4	\$4	\$4	\$5	\$6	\$6	\$45
Pressure Valve	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$2	\$2	\$2	\$16
Service Connection	\$25	\$25	\$25	\$26	\$26	\$28	\$28	\$29	\$31	\$35	\$38	\$315
Sewerage Pump Station	\$190	\$204	\$240	\$337	\$352	\$370	\$594	\$847	\$750	\$397	\$223	\$4,504
Sewerage Treatment Plant	\$675	\$723	\$767	\$944	\$1,430	\$1,499	\$2,134	\$1,927	\$1,676	\$1,728	\$1,710	\$15,214
Total	\$1,292	\$1,397	\$1,507	\$1,801	\$2,313	\$2,515	\$3,384	\$3,455	\$3,165	\$2,962	\$2,801	\$26,592

Table 4.5: Capital Depreciation Values (\$000)

Sewer WDV \$000	2015 WDV	2016 WDV	2017 WDV	2018 WDV	2019 WDV	2020 WDV	2021 WDV	2022 WDV	2023 WDV	2024 WDV	2025 WDV	Total
Manhole	\$13,538	\$14,388	\$14,961	\$15,637	\$16,204	\$17,197	\$17,811	\$18,525	\$19,123	\$19,994	\$20,649	\$20,649
Other	\$1,183	\$1,245	\$1,282	\$1,327	\$1,361	\$1,431	\$1,467	\$1,500	\$1,537	\$1,587	\$1,616	\$1,616
Pipeline	\$37,591	\$39,855	\$41,339	\$43,098	\$44,545	\$47,135	\$48,669	\$50,463	\$51,941	\$54,155	\$55,759	\$55,759
Pressure Control Panel	\$393	\$409	\$413	\$419	\$421	\$433	\$434	\$436	\$434	\$437	\$431	\$437
Pressure Grinder Pump	\$311	\$324	\$328	\$332	\$334	\$343	\$344	\$345	\$344	\$347	\$342	\$347
Pressure Main	\$1,381	\$1,467	\$1,525	\$1,593	\$1,650	\$1,753	\$1,816	\$1,891	\$1,952	\$2,041	\$2,107	\$2,107
Pressure Pod Tank	\$1,560	\$1,657	\$1,722	\$1,799	\$1,864	\$1,979	\$2,052	\$2,136	\$2,205	\$2,305	\$2,380	\$2,380
Pressure Service Connection	\$524	\$557	\$579	\$605	\$626	\$665	\$690	\$718	\$741	\$775	\$800	\$800
Pressure Valve	\$188	\$200	\$208	\$217	\$225	\$239	\$248	\$258	\$266	\$278	\$287	\$287
Service Connection	\$4,236	\$4,493	\$4,672	\$4,884	\$5,061	\$5,379	\$5,578	\$5,809	\$6,006	\$6,293	\$6,510	\$6,510
Sewerage Pump Station	\$9,687	\$10,144	\$10,363	\$10,546	\$10,620	\$10,954	\$10,771	\$10,343	\$9,930	\$10,031	\$10,199	\$10,954
Sewerage Treatment Plant	\$31,834	\$33,145	\$33,877	\$34,636	\$34,594	\$35,370	\$34,545	\$34,044	\$33,558	\$33,474	\$32,975	\$35,370
Total	\$102,426	\$107,884	\$111,268	\$115,094	\$117,504	\$122,879	\$124,425	\$126,477	\$128,038	\$131,718	\$134,056	\$137,216

Table 4.5.1: Capital Written Down Values (\$000)

Sewer Assets Funding Profile

The 10 year funding for sewerage capital works totals \$25.8 million, \$1.5 million or 5% for scheme augmentation and \$24.2 million for renewals programs. Funding for sewerage asset renewals is complicated by asset register data indicating 1,528 assets with a DRC of \$5.57 million due for replacement. These assets have estimated construction dates in the 1930's suggesting no remaining useful life, however this is not reflected in the performance of these assets. Out of life assets include 656 service connections replacement value of \$423,789, 438 manholes replacement value \$1.75 million and 434 sewer pipelines replacement value \$3.39 million. As explained in section 4.3 there is good evidence that the majority of these 1,528 assets are serviceable from preliminary WinCan inspection data.

4.3 Asset Conditions

Asset conditions are monitored on a rotating asset class schedule. This is a recent development at Council and it ensures that all assets will receive an observational rating once every four years. The road network of assets were rated in 2012, stormwater in 2014 and land and building assets in 2015. The condition profile of our sewer supply assets is shown in Figure 4.5. 55.7% of Council assets have a current condition rating of 1 or 2 generally reflecting a network in average condition.

Figures 4.5 and 4.5.1 illustrate the current condition profile for each asset type as a percentage with the black diamond showing the average condition (right hand scale) for each asset. Using Service Connections as an example in 2014, 40% of pipe assets were condition 1 and only 2% rated condition 4; the black diamond indicating an average condition of 2.1. By 2025 only 10% remain at condition 1 while 14% now have a condition rating of 4, resulting in a weighted average condition of 2.6.



Figure 4.5: Asset Condition Rating Profile



Figure 4.5.1: Asset Condition Rating Profile

WinCan Inspection Data

Asset register data indicates that 17% (634) of sewer pipes have no remaining useful life, however this is not reflected in reported failures or inspection data from WinCan CCTV inspections. Over the past decade Council has performed visual inspections using the WinCan CCTV system. A general conclusion is that the results prove the sewer pipe network is performing better than asset register information indicates. Council plans to revisit pipeline inspections based upon valid samples which indicate that 70% of the sewer pipes have a condition rating of 1 and more importantly, less than 1% are rated condition 4 or 5.

Council has invested significant resources into the process which has not translated into improved predictive data for asset management. This reflects the complexity of processes and limited alignment with other asset management systems. Council officers have examined all WinCan records to find that only 38.6% of records have a recorded condition rating in the system. Of the remaining records, 27.6% do not have a recorded condition rating and 33.6% have no record. This indicates an issue with the recording process.

Further analysis indicates reliable records from the period 2004 to 2006, with incorrect recording methods thereon (see fig 4.6 WinCan results). It is apparent that limited alignment between WinCan and other asset systems has contributed to these results. WinCan records with recorded condition data (615 records) indicate that 67% of assets have a condition rating of 1, 32% have ratings of 2 or 3 and less than 1% have poor ratings of 4 or 5.

Presently Council cannot confidently calculate condition ratings from the observed conditions using regression methods because of a high standard error (0.75) and relatively low R Square of 0.299. Council can confidently predict that a further 465 records without a calculated condition rating would be rated at condition 1 because all their recorded observations are zero (reflects best condition). This would result in 875 of 1080 records (81%) having a condition rating of 1.

Consequently continuation of the WinCan program is recommended provided the system can be aligned with other information systems to provide useful asset information and the field operators receive the training to accurately record data with an emphasis on the key fields used for asset management purposes. This will benefit asset planning and financial planning as current asset register information indicates a possible backlog of \$5.1 million of works for pipelines and manholes. Council can confidently predict a more satisfactory condition of the sewer network based on CCTV records, therefor potentially erasing this backlog.

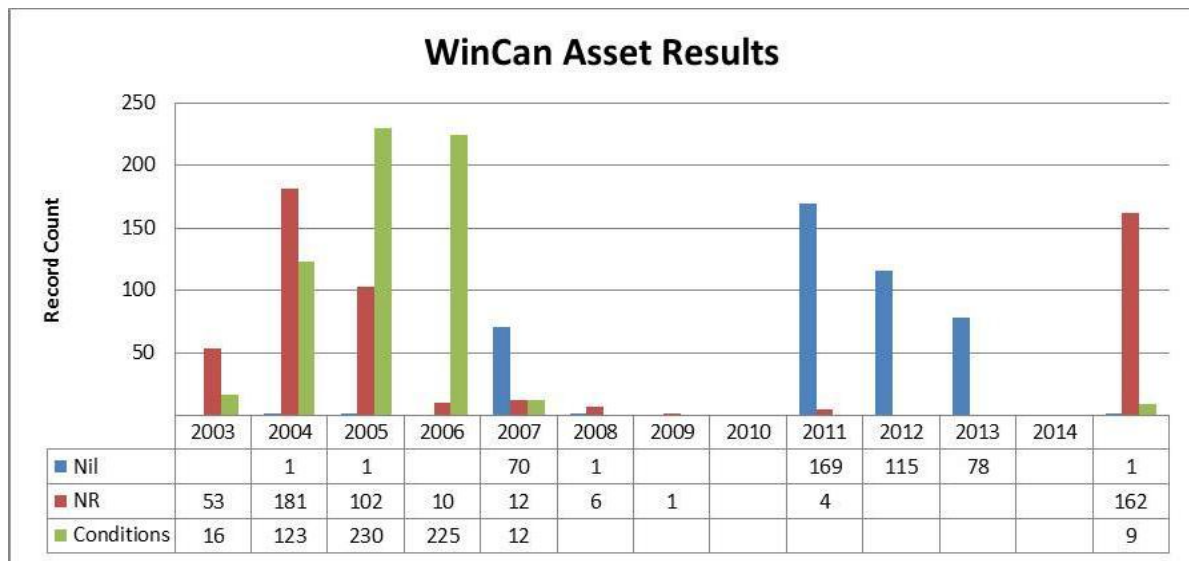


Figure 4.6: WinCan Asset Condition Rating Results

4.4 Financial Summary

Council's Local Water Utility (LWU) operates the sewer business as single program with a restricted reserves fund to meet Capex under and over expenditure requirements. Council revenue streams include access and usage charges, grants revenue, developer service charges and interest on restricted reserves. OpEx include operations, maintenance and management activities. Capex includes renewals program, improved LOS programs and augmentation programs. Table 4.6 provides a summary of cash flows for 20 years.

Values (\$000)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	\$7,759	\$10,381	\$8,977	\$9,216	\$9,690	\$11,422	\$9,878	\$10,147	\$10,425	\$10,711
Operations	\$1,651	\$1,833	\$1,947	\$2,038	\$2,127	\$2,220	\$2,314	\$2,412	\$2,513	\$2,616
Maintenance	\$1,132	\$636	\$653	\$670	\$687	\$704	\$721	\$740	\$758	\$777
Management	\$2,970	\$2,873	\$2,893	\$2,916	\$2,813	\$2,780	\$2,745	\$2,717	\$2,677	\$2,595
Depreciation	\$1,292	\$1,397	\$1,507	\$1,801	\$2,313	\$2,515	\$3,384	\$3,455	\$3,165	\$2,962
Renewals	\$2,005	\$3,910	\$1,871	\$2,511	\$1,501	\$3,235	\$1,489	\$2,023	\$1,185	\$3,057
Improved LOS		\$164				\$1,023				
Augmentation		\$55				\$341				
Program Position	0	911	2,524	3,606	6,168	7,287	9,895	12,150	15,442	17,107
Values (\$000)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	\$11,005	\$10,002	\$10,302	\$10,611	\$10,930	\$11,258	\$11,595	\$11,943	\$12,301	\$12,671
Operations	\$2,723	\$2,776	\$2,859	\$2,945	\$3,033	\$3,124	\$3,218	\$3,314	\$3,414	\$3,516
Maintenance	\$796	\$824	\$849	\$874	\$901	\$928	\$956	\$984	\$1,014	\$1,044
Management	\$2,539	\$2,753	\$2,835	\$2,920	\$3,008	\$3,098	\$3,191	\$3,287	\$3,386	\$3,487
Depreciation	\$2,801	\$3,142	\$3,237	\$3,334	\$3,434	\$3,537	\$3,643	\$3,752	\$3,865	\$3,981
Renewals	\$1,451	\$2,417	\$2,490	\$2,565	\$2,642	\$2,721	\$2,803	\$2,887	\$2,973	\$3,062
Improved LOS		\$126	\$130	\$134	\$138	\$142	\$146	\$150	\$155	\$160
Augmentation		\$42	\$43	\$45	\$46	\$47	\$49	\$50	\$52	\$53
Program Position	20,603	21,667	22,763	23,892	25,055	26,253	27,486	28,757	30,065	31,413

Table 4.6: Projected Operating and Capital Expenditure (\$000)

Cash flow predictions are based on current business expectations with 5% as the indicator for revenue streams and 3% for expense streams. Developer service pricing also provide some uncertainty for revenue flows. The LWU business demonstrates a healthy state over the forward LTFP period.

Operating expenditure (OpEx) includes operations, maintenance and management activities (OMA). Capital expenditure (Capex) includes renewals program, improved LOS programs and augmentation programs. Asset Lifecycle profiles for the Sewer Business is shown in figure 4.7. The balance of funding for Sewer Assets represents transfers from the Sewer reserve fund. Annual consumption of assets (depreciation) is shown on the right axis.

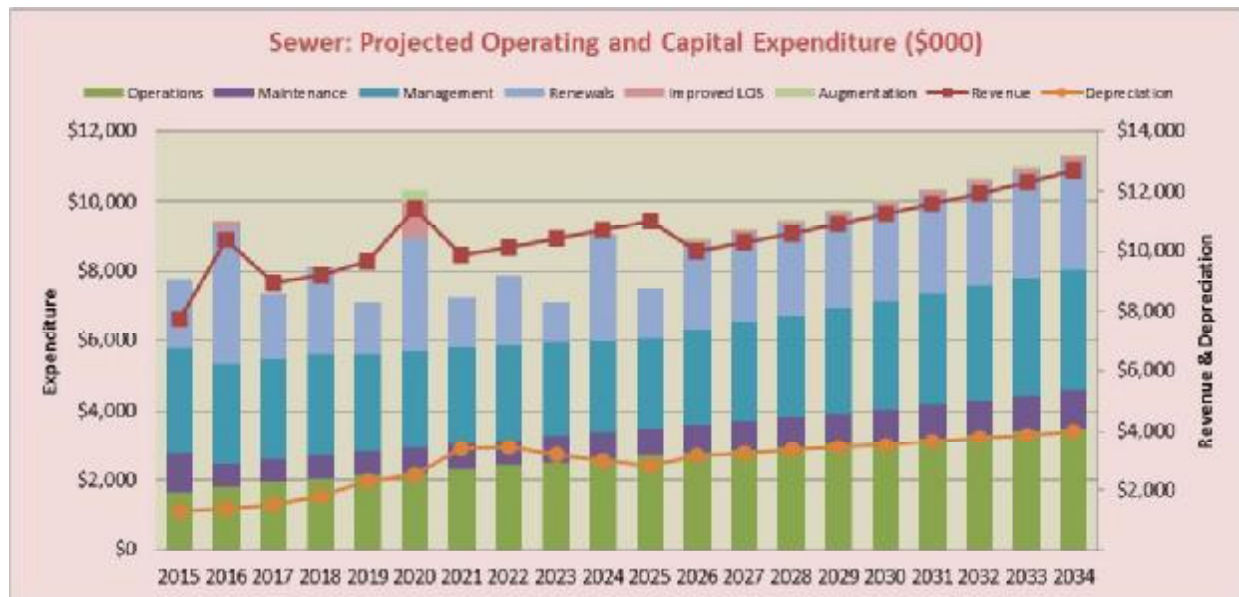


Figure 4.7: Projected OpEx and Capex

Asset Lifecycle profiles for the Sewer Business are shown in Figure 4.7, this illustrates the flow of funds for operating and capital expenditures over the forward period. Annual consumption of assets (depreciation) is shown on the right axis.

Funding for the sewer program includes operating budgets, capital grants and contributions and internal transfers from the restricted sewer fund. This means a shortfall is balanced by transfers from restricted assets and a surplus will result in a transfer to restricted assets. For the next 10 years the sewer program will transfer \$17.1 million to restricted funding.

4.5 Sustainability of Service Delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the Asset Renewal Funding Ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over five and 10 years of the planning period.

Asset Renewal Funding Ratio⁸ - 0.96

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 99% of the funds required for the optimal renewal and replacement of its assets.

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 asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is \$8.15 million per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years). The 10 year Average LTCM indicator is \$8.84 million per year

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this AMP is + \$690,000 per year (negative = gap, positive = surplus).

10 Year AM Financial Indicator - Life cycle expenditure is 108% of life cycle costs.

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 AMPs and LTFP.

Medium term – 10 year financial planning period

This AMP identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed LoS 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 AMP, a gap is generally due to increasing asset renewals for ageing assets.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first five years of the planning period is \$8.0 million on average per year.

⁸ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Estimated (budget) operations, maintenance and capital renewal funding is \$8.4 million on average per year giving a five year average funding surplus of \$446,000. This indicates that Council expects to have 100% of projected expenditures required to provide the services shown in this AMP.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the AMP and ideally over the 10 year life of the LTFP.

Long Term Financial Plan Works Program

Council's LTCW program has an 11 year (current Budget plus LTFP) figure of \$25.8 million for the sewer program. The asset register indicates \$24.2 million of assets or 94% of the program will be renewals over the forward planning period. The balance of the program is divided 75% into improved levels of service and 25% for scheme augmentation. Therefore 4% of the program or \$1.2 million is for LoS improvements and 1% or \$396,000 is for scheme augmentations over the planning period.

High Operating and Management Costs

The high cost of provision of sewerage services reflects the size of capital programs and effluent management for the lower river system. TRB of \$810 per assessment in 2009/10 increasing to \$930 per assessment is approaching two times the state median for of LWU's with 3000 to 10,000 properties. The high cost of infrastructure provision for small communities over a spread out region increases cost inefficiencies for the sewerage business.

5. Risk Management

Asset management is about managing strategic and operational risks. The greatest strategic risk is whether a Council is sustainable. Efficient asset management contributes to risk minimisation by providing reliable and relevant information to decision makers. Risk management is the demonstrated commitment to understand problems, to classify sensitivities, to prioritise solutions and to contain the adverse consequences of threats to an acceptable level.

A primary consideration when selecting risk protection and practices is to ensure that the costs incurred are not greater than the benefits gained. Factors affecting risk include the consequences of service failure, identification of significant and critical assets, and options to mitigate impact or reduce harm.

Risks are generally identified and classified by the consensus approach through workshops or risk management tools (risk spectrum or risk matrix approach). These tools systematically quantify risk attributes into a risk factor, economic deprivation, social disruption or environmental impact. Risk is associated with consequences completely enumerated in terms of probability. The consensus approach seeks answers to the types and source of risk, severity levels, possible outcomes and the scale of impact. Advanced techniques include 'what if' scenario type answers that seek to describe varying effects of events affecting a few customers through to widespread and unacceptable community risks.

Environmental Planning

Approval for the majority of sewer activity comes under the provisions of Part 5 of the *Environmental Planning and Assessment Act 1979*. *SEPP 4* (State Environmental Planning Policy) allows public authorities to undertake certain activities without the need for development consent. Sewerage treatment works is such an activity under *SEPP 4*.

Key issues arising from the North Coast Regional Environment Plan (NCREP) where Council should consider:

- Ø Maintain or improve the quality of flows of water into wetlands,
- Ø Any loss of habitat which is likely to be caused by carrying out the development,
- Ø Adequate public foreshore reserve is available,
- Ø An environmental audit or water quality study be prepared,
- Ø *SEPP 44* encourages the conservation of koala habitats, where tree listed in schedule 2 constitute at least 15% of tree component,
- Ø *SEPP 55* that contaminated land is not to be developed, and
- Ø *SEPP 77* that the natural, cultural, social and economic values of mapped coastal zones are preserved.

Sewerage Risk Strategy

The sewerage business risk strategy is developed IAW ISO 31000:2009 and addresses key risks in a logical manner. This strategy aims to ensure that sound risk management is fully integrated into Council's strategic and operational planning processes. In 2010 Council established an ongoing Enterprise Risk Management (ERM) framework.

The Council sewerage system includes four STP's. Casino's sewerage system includes 16 pumping stations, a network of rising mains and gravity reticulation mains and a Comminutor to macerate raw effluent prior to transfer to STP. STP includes three trickling filters and an extended aeration tank. Treated effluent is discharged into a tertiary pond, then constructed wetlands and eventually the Richmond River via Barlings creek. Evans Head sewerage includes nine pumping stations, rising mains and gravity reticulation mains. The STP augmented in 2007 improves quality of treated effluent discharging into the Salty Lagoon wetlands. Coraki sewerage includes two pumping stations, mains and a trickling filter STP. Treated effluent discharges into wetlands and then into the Richmond River. Rileys Hill STP is an activated sludge plant incorporating UV disinfection and Phosphorous removal; discharge is directly into the Richmond River.

NSW Office of Water (NOW) is responsible for the regulation of LWU's, coordinating the development of non-urban water policy and the management of surface water and groundwater resources. Council holds Environmental Protection Licences for all STP's under the POEO Act. Quality monitoring ensures compliance with load, concentration and volume limits; RVC also monitors LoS agreements and customer complaints. The National Water Initiative (NWI) is Australia's blueprint for national water reform.

NWI is BPM that provides objectives, outcomes and agreed actions across all aspects of water management. Demonstration of BPM is a requirement and is a pre-requisite for payment of dividends from LWU business and for financial assistance under the CTWS&S program. LWU BPM includes six criteria; SBP, Pricing, Water Conservation, Drought Management, Performance Monitoring and IWCM.

Councillors are the governing body and have the responsibility of directing and controlling affairs IAW LGA 1993. Council has a statutory role for development under both the EPA and LGA. Council determines the strategic direction, policy framework for business and for monitoring management performance and financial results. The strategic focus is guided by IWCM with a focus on developing community and natural attributes, which enable a pleasant and sustainable lifestyle through services that meet both present and future needs.

Key implications for Council include providing sewerage services that meet environmental licence requirements in order to protect public health and the environment; to efficiently manage the sewerage service and provide value for all customers; to incorporate ecologically sustainable principles into planning and OMA and to engage with customers in decision making processes.

Sewerage services operate under the Infrastructure and Environment directorate of Council. Council staff performs the majority of OMA activities with specialist services (including annual maintenance, effluent monitoring and mains relining) contracted out. Council retains general system design, construction and works control but outsources most major capital works including design, construction and commissioning of projects.

Council continues to develop asset management processes and LOS agreements that define standards and deliver value. Council implemented an integrated asset management information system (AssetMaster) which collects and stores asset data, to manage infrastructure maintenance and replacement programs and provides quantitative data for planning. Council's ERP system (TechnologyOne) provides qualitative data on customer, business processes and LWU learning, which are leading indicators for the business.

Risk Management Process

The ERM framework utilises the consequence and likelihood criteria to identify risks, which were identified by a project group in July 2011. A total of 11 key risks were identified with high residual risk after existing controls. Key risks related to poorly documented operational procedures, inadequate quality control, the pace of water reform and resulting non-conformance and more generally, uncertainty surrounding climate change. Existing mitigation measures include business improvements, financial planning, staff learning, and continued investigation into planning and BPM.

Risk treatment is an ongoing measure of performance and compliance monitoring. The LWU has directed much attention to resolving the Evans Head STP - Salty Lagoon issue with learning outcomes contributing to performance and compliance at the other STP's.

A total of 11 key risks were identified with a high residual risk rating (after existing controls). None were identified with an extreme residual risk rating:

- Ø In general, the high risks are categorised by either a high rating for Consequence coupled with a low rating for Likelihood or a low rating for Consequence coupled with a high rating for Likelihood. No risk events had a combination of elevated consequence and high levels of probability.
- Ø In some cases where either the Consequence or Likelihood is not known, the default rating of 4 out of 5 is assigned for these values. This results in a combined risk score which may be higher than the real risk. In these cases, the recommended risk treatment aims, at least initially, to address this uncertainty.

- Ø Key sewerage risks related to poorly documented asset management and operation procedures, inadequate quality control procedures, climate change, urban water reform, non-compliance with regulatory requirements and overflows from the sewerage system.
- Ø Factors contributing to the identified risks include uncertainty regarding urban water reform and climate change and how these will influence sewerage services, asset condition and high wet weather flows which contribute to the potential risk of overflows, and reliance on the knowledge of individual staff members combined with operations activities that are undertaken intuitively rather than following documented systems and procedures.
- Ø Existing risk mitigation measures include ongoing strategic planning and investigations (e.g. sewerage system licence pollution reduction programs, annual financial planning etc.), the Business Improvement Program, progressive development of operation and maintenance procedures, multi-skilling of operations staff, experienced staff members, conventional sewerage system design and treatment processes.
- Ø The causes of some key risks (e.g. climate change and urban water reform), cannot be directly addressed by the Council water group and therefore alternative mitigation measures need to be developed. In some cases, mitigation is expensive which means that Council may choose to accept a relatively high level of risk. However, improved management systems and emergency response procedures can assist Council to better respond to these risks.

6. Plan Improvement and Monitoring

All construction and maintenance costs are recorded in the Technology 1 Financial Management System. Capital costs are generally costed to a series of cost account numbers that can be related to a particular asset construction project.

The financial systems are primarily managed by Council's financial section. It is the responsibility of all persons with expenditure roles to ensure that costing is allocated to the correct account numbers so that financial reporting will be accurate and reliable.

6.1 Accounting Standards and Regulations

In accounting for Richmond Valley Council's assets, the following statutory requirements shall be adhered to:

- Ø NSW Local Government Act 1993,
- Ø NSW Code of Accounting Practice and Financial Reporting (updated annually),
- Ø Australian Accounting Standards, UIG Consensus Views and other prescribed requirements and standards,
- Ø AASB 13 Fair Value Measurement,
- Ø AASB 116 Property Plant and Equipment,
- Ø AASB 5 Assets Held for Sale, and
- Ø AASB 136 Impairment.

6.2 Asset management system

Council operates an integrated SQL based Asset Management System. The core programs include MapInfo a GIS asset information system and Asset Master, an Asset hierarchy and financial movements register. The programs are supported by MS office programs and information provided by Council's financial management systems. The financial systems are primarily managed by Council's

financial section. It is the responsibility of all persons with expenditure roles to ensure that costing is allocated to the correct account numbers so that financial reporting will be accurate and reliable.

The strength of the Asset Master process is the unique identifiers for each asset, accurate plans for work teams and detailed financial history of individual assets. Council has expanded its asset management and asset data team given the expansive task of data entry and data management. This is a continuing process that will produce more insight and accuracy into asset conditions, predictive strategies and financial observations.

Asset registers

Council utilises the Asset Master system from Open Office Australia. This system was deployed in 2012 and is continually being refined to produce quality asset information. Council systems are generally connected through an SQL server but often financial reporting is performed at a higher level. This is accomplished by excel reports exported by the various asset management and financial management systems.

All construction and maintenance costs are recorded in the Technology 1 Financial Management System. Capital costs are generally costed to a series of cost account numbers that can be related to a particular asset construction project. Personnel performing asset management system data functions require a high level of rounded numeracy and literacy skills. Although the functions have a high level of repetitive function primarily due to the scale of asset numbers, accuracy is required with each process. Council systems are SQL driven requiring some scripting knowledge and also general abilities with financial data, accounting interpretations and knowledge of Australian Accounting Standards.

Required changes to asset management system arising from this AMP

Council manages a wide range of physical assets. These assets provide a range of services to the Richmond Valley community. In order to better manage its assets, Council has implemented an Integrated Asset Management System (AMS) namely Asset Master by Open Office. Asset Master enables Council to collect and store asset data and to manage its infrastructure maintenance and replacement programs.

Council's objectives in the implementation and consequent management of Asset Master are as follows:

- Ø To have a central repository for all asset data;
- Ø To undertake life cycle management of all Council asset categories;
- Ø To facilitate an asset management culture;
- Ø To reduce the overall costs and risks associated with Council assets; and
- Ø To provide the ability to add advanced asset management functionality as the Council matures with respect to asset management.

Monitoring and Review Procedures

This AMP will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide these services as a result of budget decisions.

The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AMP has a life of four years (Council election cycle) and is due for a complete revision and updating within one year of each Council election.

Performance Measures

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

- Ø The degree to which the required projected expenditures identified in this AMP are incorporated into Council's LTFP,
- Ø 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 AMP,
- Ø The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- Ø The Asset Renewal Funding Ratio achieving the target of 1.0.

7. References

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/namsplus

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/AIFMG

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

Richmond Valley Council, Community Strategic Plan 2013 – 2025'

Richmond Valley Council Strategic Business Plan for Water Supply and Sewerage Services

RVC Strategic Planning FINMOD Analysis and Tariff Review – Water Supply Services

Richmond Valley Council - Annual Plan and Budget

The logo features a circular emblem with the words "RICHMOND VALLEY MADE" in a white, distressed, sans-serif font. The emblem is set against a background of overlapping triangles in various shades of teal, green, and brown. The text is arranged in three lines: "RICHMOND" on the top arc, "VALLEY" on the bottom arc, and "MADE" in the center.

Appendix F Asset Management Plan 2015-2025

Water Supply
Network

Richmond
Valley
Council





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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Table of Contents

Executive Summary	5
1. Introduction.....	7
1.1 Asset Management Plan.....	7
1.2 Background.....	8
Objectives of Asset Management	8
1.3 Integrated Water Cycle Management.....	9
1.4 Water Supply - Casino	10
Lower Richmond.....	11
Future Scheme Development.....	12
1.5 Water Supply	12
1.7 Legislative Requirements	14
2. Service Levels.....	16
2.1 Developing Levels of Service.....	16
Community Levels of Service	17
Technical Levels of Service	17
Water Business Levels of Service	19
2.2 Customer Research and Expectations.....	20
2.3 Key Assumptions made in Financial Forecasts	21
Forecast Reliability and Confidence.....	21
3. Future Demand.....	23
Key Water Demand Definitions	23
3.1 Drivers of Future Demand	23
3.2 Future Water Demand.....	25
3.3 Potential Demand Management Measures	26
Source Augmentation Strategies	27
3.4 NOROC Regional Water Study	27
3.5 Drought Management.....	28
3.6 Flood Management.....	29
3.7 Demand Management Plan.....	29
4. Lifecycle Management Plan.....	30
4.1 Background Data	30
4.2 Physical Parameters	31
Asset renewals.....	33
Asset Mix, Location and Current Issues	36
Casino	36

MLRR	37
4.3 Asset Conditions	37
4.4 Financial Summary	39
4.5 Sustainability of Service Delivery	41
Long term - Life Cycle Cost	41
Medium term – 10 year financial planning period.....	41
Medium Term – 5 year financial planning period.....	42
Long term Financial Plan Works Program	42
Operating and Management Costs.....	42
5. Risk Management	42
6. Plan Improvement and Monitoring.....	45
6.1 Accounting Standards and Regulations	45
6.2 Asset management system	45
7. References	48

Executive Summary

This Water Business Asset Management Plan addresses the responsible management of medium term operational and capital works necessary to comply with legal and regulatory frameworks and to achieve water program performance levels. The objective is to provide reliable networks that contribute towards the social, economic and environmental indicators of a regional hub. An asset plan is a crucial element of the strategic planning process providing outcomes that align with the Integrated Water Cycle Management (IWCM) and Strategic Business (SBP) water plans. It is a key element of Best Practice Management for Local Water Units under the NSW Governments Country Towns Water Supply and Sewerage program.

Council's water business is predicted to perform favourably over the 20 year outlook. Water network assets on average have a remaining useful life of 68% of their expected lifecycles, however more critical infrastructure assets including Water Pump Stations, Water Treatment Plants and Reservoirs are all approaching 60% of their useful life. Larger issues including water security and the structural integrity of Jabour Weir in the township of Casino provide ongoing uncertainty which necessitates a large commitment to improved levels of service and scheme augmentation programs.

The water program is well funded through water access and usage charges supplemented by grants, interest and developer service charges. Total revenues equal \$73.9 million, operating and management expenses equal \$55.6 million and capital works equal \$14.7 million. Water program restricted reserves will increase by \$3.6 million providing some certainty for future required large scale augmentation works. The Asset Renewal Funding Ratio is a critical indicator of the water programs long term stability, an ideal indicator is 1.0; therefore Council's indicator of 1.0 is good.

Executive Summary - What Does it Cost? (\$000)	10 Yr
10 Year total (Ops, Maint, Renewal Upgrades)	\$63,311
10 Year Average Cost	\$6,331
10 Year Total LTFP budget	\$68,253
10 Year Average LTFP Budget	\$6,825
10 Year AM Financial Indicator	108%
10 year average net improvement	\$494

Northern Rivers Regional Organisation of Councils, (NOROC) have investigated regional water security. Key findings include Rous Water's bulk supply will require augmentation by 2020, Casino by 2025 and Tweed by 2030. A regional approach to water security can provide improved financial outcomes through economies of scale as well as a range of options to improve efficiency, system resilience and operational flexibility.

Council will need an inter LGA and organisational wide approach towards improving the integrity of surface waters and catchments. Local environmental assessments indicate poor quality water resources and land use practices that may consume scarce resources and reduce the quality of raw water into the future. The result is uncertain water security beyond 10 years and higher costs of treating water to Australian Drinking Water Guidelines.

General observations for the local water unit include:

- Ø Number of Assets - 23,549.
- Ø Current Replacement Cost of asset base - \$81.9 million.
- Ø Annual depreciation - \$767,000.
- Ø Depreciated Replacement Cost - \$68.8 million, 84.6% of the fair values, reflecting modified depreciation schedules of long life assets.
- Ø Percentage of assets with condition rating of 1 or 2 is a very healthy 84.5%.
- Ø Percentage of network assets due for renewal in next 10 years is 6%.

The water business is currently performing favourably, however a regional collaborative approach to water security will require an external approach to value chain analysis and Council's commitment to ensuring an affordable and quality long term water supply.

1. Introduction

The Richmond Valley is located in the Northern Rivers region of North East NSW, 726 km north of Sydney and 228 km south of Brisbane. Located on the banks of the Richmond River the region supports a variety of agricultural industries, primarily beef, sugar cane and wheat. Richmond Valley Council was formed in February 2000 as the result of amalgamation between Casino Council and Richmond River Shire Council.

Council spreads across 3,050 square kilometres with six townships. Major urban areas are Casino and Evans Head and the villages are Woodburn, Coraki, Broadwater, Rileys Hill and Rappville. As at 2011, the resident population was 22,700 persons with a skew towards blue collar occupations. Richmond Valley is preparing to be one of the fastest growing areas in regional NSW with economic stimulus emerging from natural resource discoveries (uncertainty surrounds coal seam and natural gas developments).

The Region is expected to experience population growth (0.51% pa), decreasing occupancy rates and an ageing population. The number of dwellings in the Council LGA is expected to increase from 9,150 in 2011 to 10,750 in 2031, an increase of 1,600 dwellings at an average growth rate of 0.81% p.a.

Richmond Valley is in a sub-tropical area, characterised by hot humid summers and mild winters. Average rainfall ranges from 1,650 mm along the coast strip, to less than 1,025 mm over inland areas. The LGA is prone to natural disasters having had five Natural Disaster Declarations since 2009. Council is located on a flood plain and heavy rainfall can trigger flood events, while climate change and rising sea levels impact coastal areas and increase unpredictability.

The Richmond Valley is a region of balance where every individual, family and business has the opportunity to be successful.; It is an attractive place to live and play but as with most rural centres struggles to compete with the employment opportunities of the capital cities. This is reflected with a general decline of the working age cohort and professional occupations but does experience a large retiree and tree change population. This is consistent with the ALGA State of the Regions stylised fact number five that applies to the majority of LGA's.

The major issues facing Council generally include prosperity and economic development for individuals and the region. The community is engaged in the longer term prospects for the region with a focus on financial management and the provision of quality infrastructure networks. Council and the local business chamber are aligned in their purpose to provide employment, opportunities and lifestyle for the people of the Richmond Valley.

Timber and forestry and the associated production and manufacturing industries are creating strong demand for industrial development. A 58 hectare industrial development at North Casino (Intermodal Freight Handling Facility) has been approved by Council. Other major developments include coal seam methane gas fields and reticulation as a "green" energy source and an electrical power plant in the Casino area.

1.1 Asset Management Plan

An Asset Management Plan (AMP) provides understanding of the options, risks and consequences associated with managing large scale infrastructure, having an articulated basis for community engagement, expectations, priorities, funding levels and the related trade-offs and a strong understanding of the capital, operating and maintenance expenditures to be incorporated into the long term strategic planning process.

Planning assists Council to deliver services derived from a network of infrastructure assets including transport, recreation, stormwater drainage, community buildings, water supply and sewerage. The *Local Government Act 1993* requires NSW Councils to prepare asset management plans and annual reports.

Many of Council's water planning initiatives are driven by the Integrated Water Cycle Management (IWCM) strategy. IWCM is a 30 year strategic planning tool for local water authorities. IWCM enables utilities to manage their water services in a holistic manner, it deals with the complex linkages between the different elements of the water cycle. This is consistent with the NSW Best Practice Management of Water Supply and Sewerage Framework.

1.2 Background

This plan demonstrates responsive management of water network assets and their services, compliance with regulatory requirements and to communicate the funding needed to provide the required levels of service over a 10 year planning period. Continued access to reliable water is one of the greatest challenges facing Council. Council is responsible for water reticulation services across the LGA however, Council only supplies bulk water for the Casino area, with all other bulk water requirements supplied by Rous Water.

This plan is to be read in conjunction with Council's Strategic Business Plan for Water and Sewer, IWCM Strategy Plan, Business Continuity Plan, Drought Management Plan, Demand Management Plan, Risk Management Strategy Water Supply, Council's Long Term Capital Plan and Council's Community Strategic Plan. The document [Water & Sewer Review](#) synthesises 50 plus planning and investigative reports for the Local Water Utilities, capturing the major issues and opportunities for Council's water and sewer business.

Objectives of Asset Management

The organisation exists to provide long-term quality services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our vision is:

We will ensure the Richmond Valley is well positioned for the future – socially, environmentally and economically, with all the right ingredients to be a primary regional hub in NSW.

Our mission is:

To develop and operate infrastructure networks that supports the fabric of a modern vibrant society. Our aim is to provide reliable networks that build trust and dependency not only within their network, but also between one network and another network.

Our goal is:

In managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Ø *Providing a defined level of service and monitoring performance,*
- Ø *Managing the impact of growth through demand management and infrastructure investment,*

- Ø *Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,*
- Ø *Identifying, assessing and appropriately controlling risks, and*
- Ø *Having a Long Term Financial Plan (LTFP) which identifies required, affordable expenditure and how it will be financed.*

Key elements of this plan are:

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

1.3 Integrated Water Cycle Management

IWCM is a 30 year strategic planning tool for Local Water Utilities (LWUs) enabling them to manage their urban water services in a holistic manner within a catchment context. LWUs have the goal of providing an appropriate, affordable, cost-effective and sustainable urban water services that meet the community needs, protects public health and the environment and makes best use of regional resources.

IWCM involves looking at the three components of the urban water services (water supply, sewerage and stormwater) in an integrated way when identifying all the IWCM issues and developing scenarios to address these issues. The scenarios are evaluated and compared on the basis of their social, environmental and economic impacts. Council completed its IWCM Strategy Plan in 2008.

The objectives of the Strategy are:

- Ø Improve land use management through education and demonstration,
- Ø Coordinated approach to sharing of surface and ground waters,
- Ø Maximise high value (priority to substitution of potable water) reuse,
- Ø Increase the number of alternative water sources,
- Ø Improved security of urban water supply, and
- Ø Provide the highest level of service relative to users' willingness to pay.

The issues addressed by the Strategy are:

- Ø Town water supply security,
- Ø Ground and surface water sharing plans. Council must be involved in the water sharing process to ensure town water supplies are adequate,
- Ø Council must implement sustainable effluent reuse with end user requirements considered,
- Ø Existing land use practices and urban impacts affecting surface water quality,
- Ø High operating and management costs for water and sewerage systems leading to relatively high typical residential bills,
- Ø Compliance with current and future potable water standards,

- Ø Hydrologic stress in catchments contributing to unsustainable extraction particularly during low flows,
- Ø The need for sustainable stormwater/rainwater reuse,
- Ø Climate change altering the rainfall and temperature patterns of the study area, and
- Ø Poor demand management in terms of consumption and unaccounted for water.

The key components to be implemented by the water business are:

- Ø High level demand management,
- Ø Alternate water supply source and emergency drought management for Casino,
- Ø Agricultural and open space irrigation reuse of recycled effluent,
- Ø Dual reticulation for new developments, where feasible,
- Ø Investigation and participation in regional water management strategies,
- Ø Contribution to macro water sharing planning process,
- Ø Condition based asset renewal and inflow/infiltration reduction program, and
- Ø Management of risks associated with climate change.

The IWCM Strategy has set the future direction for Council water supply by addressing a number of priority issues identified by Council staff, government agencies and the local community. The implementation of the strategy is reliant on Council's commitment to the capital works program developed, as well as its ability to maintain financial stability in the future. The capital works program associated with the adopted strategy has set the direction for Council's Strategic Business Planning. Council will need to continuously develop, implement and review the components of the IWCM Strategy to ensure it is successful.

Performance monitoring is an essential part of the IWCM process to ensure that the implementation of strategies which have been identified through the process have been successful at addressing the water cycle issues. Annual reporting to the Office of Water should provide an indication of the success of Council's IWCM Strategy and the other best-practice planning documents in achieving sustainability and progress in meeting Council's business goals and social and environmental responsibilities.

1.4 Water Supply - Casino

Richmond Valley water supply is comprised of two separate systems. The Casino system comprises one water filtration plant and raw water pumping station, four reservoirs and a network of pipes (total length 115 km) that distributes water to customers. Raw water from the Richmond River is fully treated and reticulated to the town of Casino. Historically rainfall tends to exceed evaporation for only two months (February and March) with a rainfall deficit from April to January (Figure 1.1, average monthly rainfalls).

The town of Casino is serviced by a water treatment plant and raw water pump station constructed in 1985 (which replaced the old water treatment plant located at South Casino). Raw water from the Richmond River flowing over Jabour Weir is extracted via a pumping station at the river. Casino's water supply sourced from the Richmond River at Casino has an entitlement of 3,427ML/pa or 25% of the total entitlement in that water source. The water is treated and reticulated to the town of Casino through a network of pipes and four reservoirs, three at North Casino and one at South Casino.

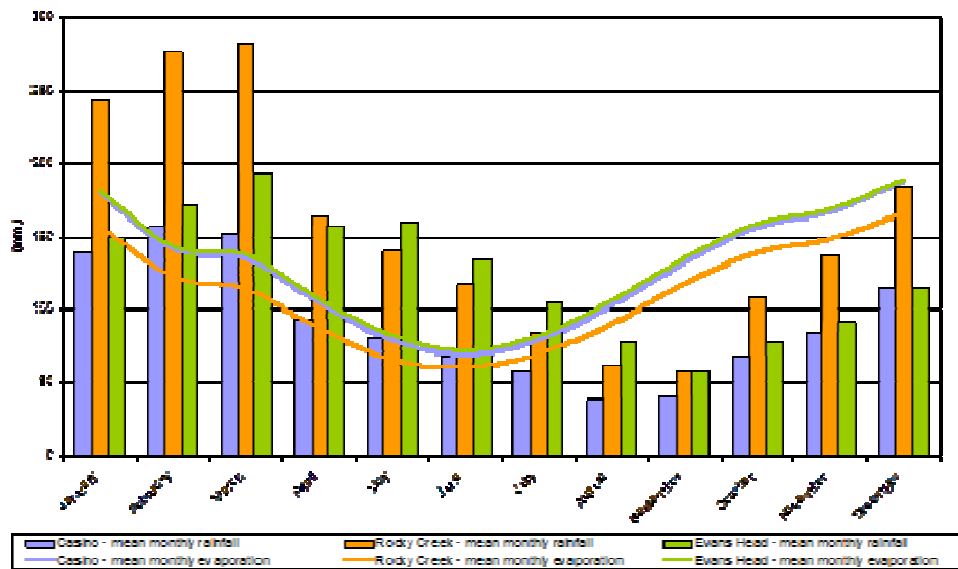


Figure 1.1: Average Monthly Rainfall and Evaporation at Casino, Evans Head and Rocky Creek¹

Lower Richmond

The Lower Richmond River reticulation system distributes water purchased from Rous Water. The source of water is a combination of Rocky Creek Dam and bores. Historically, rainfall exceeds evaporation for eight months in the Rocky Creek Dam catchment (which is the source of water for lower river towns). The system supplies water to the towns of Evans Head, and the villages of Broadwater, Woodburn, Rileys Hill and Coraki (which also services nearby Box Ridge). Council owns eight reservoirs and a network of pipes (total length 77 km) from the Reservoirs. Rous Water leases Council's Langs Hill Reservoir.

The water is treated by Rous Water while Council owns all pipes downstream of the Reservoirs, one of which (Langs Hill Reservoir) is leased to Rous Water. The town of Evans Head is provided with water by two reservoirs. North Evans Head is serviced by the Lower Reservoir whilst water supplied to South Evans Head is pumped from the Lower Reservoir to the Higher Reservoir.

The village of Woodburn is served by one Reservoir located at Langs Hill. Coraki village is comprised of a Lower Reservoir and two smaller tower Reservoirs that also serve the locality of Box Ridge via interconnecting pipes. An in-line booster system provides increased pressure to the Box Ridge community during nominated hours of the day.

Broadwater and Rileys Hill villages are serviced by two Reservoirs. Water from the Lower Reservoir is pumped to the Higher Reservoir, which feeds the town of Broadwater. Rileys Hill receives water from the Broadwater Reservoirs. There is a small Reservoir at Rileys Hill which acts as a backup when the Broadwater Sugar Mill is operating. The villages of Rappville and Fairy Hill are not supplied with a reticulated water supply, water is provided by individual rainwater tanks.

¹ SILO, 2006



Figure 1.2: Richmond Valley Waterways

Future Scheme Development

Council plans to augment the water supply and sewerage schemes to cater for growth, improve sustainability and achieve more integrated systems. Major projects will include:

- Ø Augmentation of the Casino water source to increase yield and improve reliability of supply,
- Ø Implementation of an emergency water source for Casino to improve reliability in drought and emergencies, and
- Ø Potential implementation of an irrigation reuse scheme to recycle water from Evans Head Sewer Treatment Plant (STP).

1.5 Water Supply

The Casino water supply is comprised of two separate water supply systems – Casino and the Mid to Lower Richmond River (MLRR) area. The Casino system comprises a Water Treatment Plant (WTP), four Reservoirs, one distribution pump station and a network of pipes (115 km) that distributes water to 9,600 people.

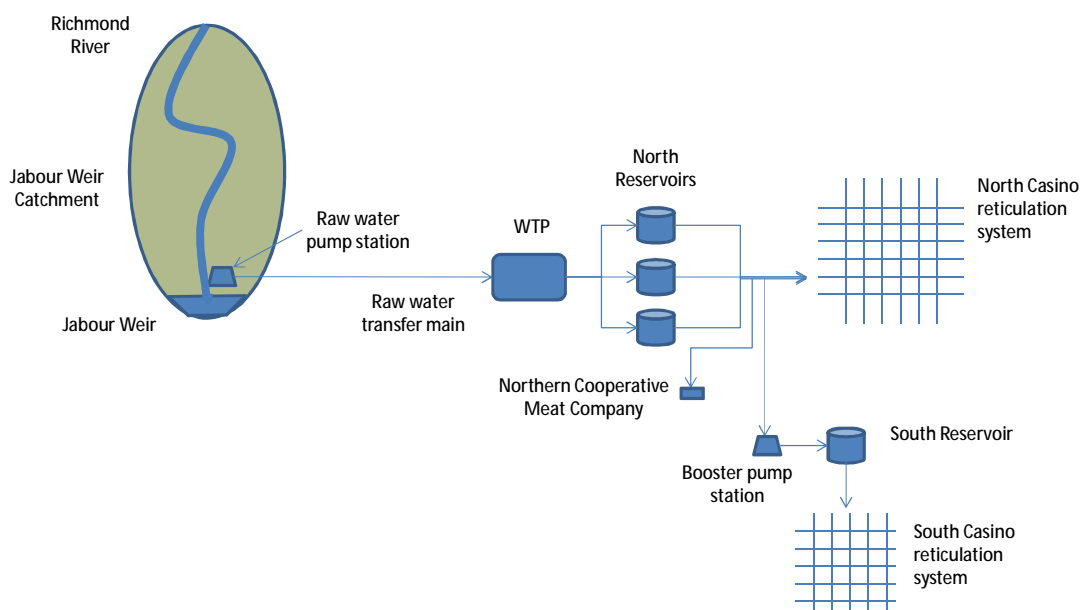


Figure 1.4: Casino Water Supply System Flow Chart

Rous Water supplies bulk water under a Water Supply Agreement (WSA) to four constituent Councils in the Northern Rivers (Lismore, Byron Bay, Ballina and Richmond Valley). Rous Water is responsible for the construction, extension, protection, maintenance, control and management of bulk water supply works. Council is responsible for assets used to distribute water services in the MLRR water supply system.

Council distributes water to Council customers in the Lower River area through four separate distribution systems and 77 km of pipes as follows:

- Ø Evans Head - population served approximately 2,700 people,
- Ø Woodburn - population served approximately 630 people,
- Ø Broadwater and Rileys Hill - population served approximately 660 people, and
- Ø Coraki (including Box Ridge) - population served approximately 1,220 people.

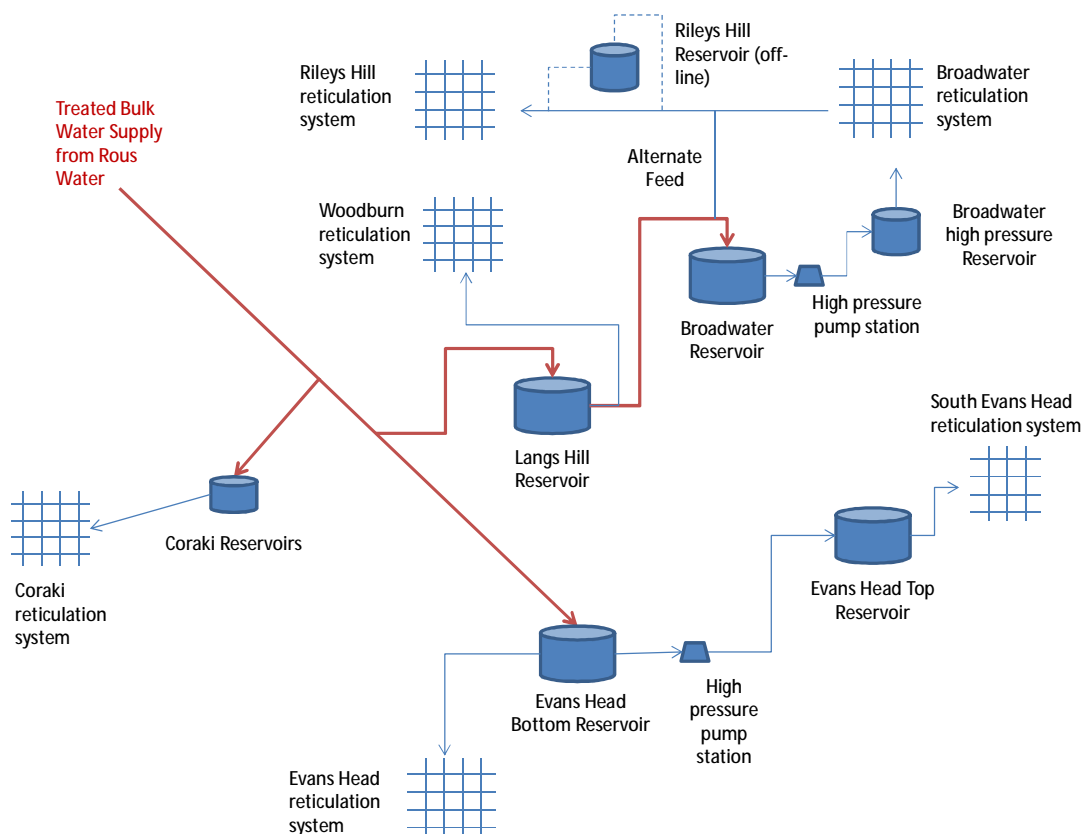


Figure 1.5: Lower River Water Supply System Flow Chart

1.7 Legislative Requirements

As a local government owned business, LWUs are subject to a number of legislative obligations and requirements. The Local Government Act establishes the conformance criteria which enables sustainable performance achievements. Through the NSW Government's *Country Towns Water Supply and Sewerage Program*, sections 283 to 322 of the *Water Management Act 2000*, and sections 56 to 66 of the *Local Government Act 1993*, the Minister for Water is responsible for overseeing the performance of LWUs.

Goal 22 under the NSW Governments 10 year plan is to protect our natural environment and improve the health of wetlands and catchments through actively managing water. Water reforms in NSW included the implementation of the Water Management Act 2000, the development of 63 water sharing plans (improving the management of water resources) and a National Water Initiative (NWI) that commits NSW to achieving sustainability in the use of its water resources².

The NSW Best Practice Management (BPM) of Water Supply and Sewerage Framework encourages the effective and efficient delivery of LWUs water supply and sewerage services. This framework promotes continuing improvement in sustainable water conservation practices, water demand management and appropriate, affordable and cost-effective water supply.

National requirements include Australian Drinking Water Guidelines, 2011, National Water Initiative (reforms and pricing principles), National Urban Water Planning Principles and the COAG Strategic

² EPA, 2012, NSW State of the Environment.

Framework for Water Reform. Table 1.1 provides an overview of relevant legislations and their guidance towards sustainable LWUs outcomes.

Legislation	Requirement
Local Government Act	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.
Public Works and Procurement Act 1912	Sets out the role of the Department of Water and Energy (DWE) and Department of Commerce in the planning and construction of new assets.
Soil Conservation Act 1938	An Act to make provision for the conservation of soil resources and farm water resources and for the mitigation of erosion. It addresses preservation of watercourse environments.
Environmental Planning and Assessment Act 1979	An Act to institute a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Work Health and Safety Act 2011 and Workers Compensation Act 1987	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work and covering injury management, emphasising rehabilitation of workers particularly for return to work. Council is to provide a safe working environment and supply equipment to ensure safety.
Public Health Act 2010	An Act relating to the maintenance of proper standards of health for the public. Council operations need to be carried out in a manner that protects public health.
Independent Pricing and Regulatory Tribunal Act 1992	The Act empowers the Independent Pricing and Regulatory Tribunal (IPART) which sets principles and guidelines related to charging for water supply.
Competition Policy including Competition Policy Reform Act 1995	Council is subject to prohibition on anti-competitive behaviour, according to the Trade Practices Act.
Threatened Species Conservation Act 1995	An Act to conserve threatened species, populations and ecological communities of animals and plants.
Protection of the Environment Operations Act 1997	Council is required to exercise due diligence to avoid environmental impact and among others are required to develop operations emergency plans and due diligence plans to ensure that procedures are in place to prevent or minimise pollution.

Water Management Act 2000	An Act to provide for the protection, conservation and ecologically sustainable development of the water sources of the State, and for other purposes. Allows Council to levy developer charges and addresses water sharing and environmental flows.
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Table 1.1: Legislative Requirements

2. Service Levels

For Council, serving customers and the community is our principal objective. Our first priority is to understand their needs, wants, values, concerns and what aspects of services are important to them.

Understanding customer concepts of value is achieved by understanding their expectations and preferences. Typically customers perceive the value provided by a service as the benefits they receive less their contributions in the form of rates and service charges. That is, a customer's utility or satisfaction level increases when their benefits exceed the costs they pay. Customers want to maximise their utility through saving time, reliability and consistency of service, safety and wellbeing.

Customers want services that are easy to use, that simplify their lives and provide lifestyle satisfaction. However customer value is a compromise between their perceived benefit and their willingness to contribute financially towards these benefits. Asset and service attributes like healthy, timeliness, 'safe and reliable', convenience and quality are intrinsic with best practice Asset Management (AM), but they are not always tangible to the consumer. Public organisations need to communicate these attributes and/or the consequences resulting from their removal if the community cannot afford them.

2.1 Developing Levels of Service

Levels of service are key business drivers. They influence the range, quality and quantity of assets and services provided. Level of Service (LoS) indicators are usually based on the following:

- Ø Customer expectations and willingness to pay,
- Ø Legislative and environmental compliance which impose standards of service, and
- Ø The business context including strategic objectives, available resources and financial constraints.

LoS statements describe Council's intention to deliver customer services in terms of quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost. Statements should be written so customers can relate to them and Council is accountable through a customer satisfaction measure and a technical performance measure.

The relationship between costs and LoS depends on the type of activity. Some infrastructure has a steep initial cost with minimal servicing costs while other services will have higher proportions of operational and maintenance type costs. Costing needs to be meaningful and understandable, the cost per user should represent a tangible benefit or a better LoS.

Community Levels of Service

Service levels are defined as either customer LoS or technical LoS. Community LoS measure how the community receives the service and whether Council is providing the community value.

Community LoS measures used in the AMP are:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

The Council's current and expected community service levels are detailed in Tables 2.1 and 2.2. Table 2.1 shows the agreed expected community LoS based on resource levels in the current LTTP and community consultation/engagement.

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTTP
COMMUNITY OUTCOMES				
Key findings from a customer satisfaction survey find that largest performance gaps for resident satisfaction were maintaining local roads, economic development and financial management.				
COMMUNITY LEVELS OF SERVICE				
Quality	Water supplied taste is acceptable and is Clear	Customer surveys Customer requests	To be provided from the Resident Survey	Requests received should not increase annually
Function	Reliable water supply	Customer surveys Customer requests Ongoing monitoring	To be provided from the Resident Survey	Requests received should not increase annually
Safety	Safe to drink Meets health standards	Monitoring and reporting program	Meets all health requirements	Meets all health requirements

Table 2.1: Community Level of Service

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 organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Ø Operations – the regular activities to provide services such as opening hours, cleansing, mowing grass, energy, inspections, etc.,
- Ø Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. road patching, unsealed road grading, building and structure repairs),

- Ø Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement), and
- Ø Upgrade – the activities to provide a higher LoS (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).

Service and AMPs, implement and control technical service levels to influence the customer service levels.³

Table 2.2 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan.

Description	Units	Target Level of Service
System Performance		
Minimum pressure at water meter	m head	12 except for existing high level zones
Average annual demand	kL/res property	200
Domestic quantity available per peak day	L/tenement/day	2,500
Consumption Restrictions in Droughts		
Maximum frequency of restrictions (subject to supply volume, blue green algae and Rous Water Drought Management Strategy)	number of times per 10 years	5
Maximum duration of Restrictions	months/10 yr period	12
Ability to supply demand through the worst drought on record	% of water demand	80 (i.e. a 20% reduction in consumption).
Interruptions to Supply (per year per supply)		
<i>Planned (95% of time)</i>		
Notice given to domestic customers (between 9am and 4pm)	days	1
Notice given to industrial and commercial customers (times to be negotiated)	days	7
<i>Unplanned</i>		
Maximum duration	hours	8
Maximum interruptions to supply	per 1,000 properties p.a.	70
Main breaks	per 100 km main p.a.	10

³ IPWEA, 2011, IIMM, p 2.22

Service Provided		
Time to provide an individual, residential connection to water supply in serviced area	working days	10
Customer Complaints		
Number	events per 1000 properties p.a.	5
Water Quality		
Potable Water Quality		ADWG 2011
Response Time (time to have staff onsite or to investigate a problem or answer an enquiry)		
Priority, Issues and Effects	Customer given informed feedback	Repairs to commence
<i>Priority 1: A complete failure to maintain continuity of supply to large number of customers or critical user at critical time</i>		
Possible Issues: Broken water main, broken service, jammed hydrant, no water, dirty water, leak creating a major issue. Typical Effects: Personal injury or risk to public health, loss of supply, major property damage, failure to maintain quality or quantity of service, large volume of water wasted, significant unplanned depletion of service reservoir, major environmental impact.	Within 1 hour	Within 2 hours
<i>Priority 2: Partial failure to maintain continuity of supply to small no. of customers or critical user at a non-critical time</i>		
Possible Issues: Missing hydrant/valve lid, poor pressure, leaking tapping, ferrule, stop tap, water main/service, valve or hydrant, minor leak on footpath or roadway, partial failure of connections, water hammer, faulty or damaged meter. Typical Effects: Minor property damage, minor environmental impact	Within 1 working day	Within 24 hours
<i>Priority 3: Known fault, non-urgent</i>		
Possible Issues: Service disconnection, faulty hydrant/valve, missing hydrant. Typical Effects: Need for preventative maintenance, minor customer impact.	Within 3 working days	Programmed Maintenance List

Table 2.2: Water Supply Levels of Service

Water Business Levels of Service

Technical LoS is a function of ongoing serviceability (Operations, Maintenance and Administration (OMA) and renewing of depleted assets. Council factors 79% of budget for OMA or serviceability costs (\$55.6 million), 19% for renewing depleted assets (\$13.4 million) and 4% for new assets (\$2.8 million) over the long term financial planning period (LTFP).

The LTFP water program allocates \$13.4 million for budgeted renewals, \$2.8 million for new works with a total program depreciation of \$13.7 million and total asset disposals of \$5.3 million. This results in a water business renewals ratio of 0.99 and a Bring to Satisfactory (BTS) ratio of 0.0.

Figure 2.3 shows the technical LoS expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and the trade-off of service levels performance, costs and risk management of resources available in the LTFP.

Water \$000 (LTFP)	Renewals	New	WDV	Disposals	Depreciation	BTS	RR
Encasement	\$44	\$4	\$544		\$43		1.03
Fire Hydrant	\$399	\$38	\$5,276	\$54	\$396		1.01
Main Encasement	\$14	\$1	\$236		\$13		1.03
Pipe Main	\$5,134	\$492	\$46,002	\$556	\$4,974		1.03
Reservoir	\$1,329	\$123	\$17,629	\$703	\$1,397		0.95
Service Connection	\$874	\$82	\$5,351	\$472	\$863		1.01
Water Meter	\$44	\$4	\$126		\$45		0.99
Water Meter	\$951	\$86	\$1,865	\$147	\$954		1.00
Water Pump Station	\$1,052	\$110	\$3,743	\$660	\$1,043		1.01
Water Treatment Plant	\$3,273	\$305	\$13,252	\$2,651	\$3,400		0.96
Water Valve	\$315	\$29	\$1,800	\$106	\$309		1.02
WSP	\$6	\$1	\$83		\$6		1.02
Program	\$13,435	\$1,276	\$95,908	\$5,349	\$13,445		1.00

Figure 2.3: Water Business Levels of Service (\$000)

2.2 Customer Research and Expectations

Council engaged Micromex to conduct the Richmond Valley Council Community Research 2013⁴. The poll from a sample of residents revealed their level of satisfaction with Council's services. Council sought to examine community attitudes and perceptions towards current and future services and facilities provided by Council. Key objectives of the research included:

- ❑ To assess and establish the community's priorities and satisfaction in relation to Council activities, services and facilities,
- ❑ To identify the community's overall level of satisfaction with Council's performance,
- ❑ To identify the community's level of satisfaction with regards to contact they have had with Council staff.

Overall, the research has found a generally positive result for Council, with 29 of the 32 services/facilities/criteria rated as being of 'moderate satisfaction' to 'very high satisfaction'.

At an overall level, residents expressed a 'moderate' level of satisfaction with the performance of Council, with 82% of the respondents giving a rating of 'somewhat satisfied' to 'very satisfied'. Only 4% of residents indicated that they were 'not at all satisfied' with Council's performance.

Compared to an *All of NSW measure and Regional Councils*, Richmond Valley has performed better than average. The most recent community satisfaction survey reported satisfaction levels for the following services in Table 2.3. The community is generally satisfied with services provided by Council and is very satisfied with the regional water supply service.

⁴ Micromex Research, 2013, Richmond Valley Council Community Research

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Economic development and Local Employment			√		
Community Consultation			√		
Financial Management			√		
Support for Community Organisations		√			
Council Provision of Information for Residents			√		
Council Policies and Plans			√		
Town Water Supply	√				
Maintaining Local Roads			√		

Table 2.3: Community Satisfaction Survey Levels

2.3 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this AMP 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.

Forecast Reliability and Confidence

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a five level scale⁵ in accordance with Table 2.4

⁵ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

Table 2.4: Data Confidence Grading System

Key assumptions made in this AMP and risks that these may change are shown in Table 2.5

Key Assumptions	Risks of Change to Assumptions
Use of existing inventory data	Data set is reliable; monetary movements have a confidence level of A.
Use of existing valuations and useful lives	<ul style="list-style-type: none"> Design lives confidence level A RUL confidence level B, some slight deviation observed when applying modified pattern asset movements over the LTFFP.
Use of current expenditure information as best as this can be determined	Confidence level A. Council has integrated asset schedule.

Table 2.5: Key Assumptions made in AM Plan and Risks of Change

The estimated confidence level for and reliability of data used in this AMP is shown in Table 2.6.

Data	Confidence Assessment	Comment
Demand drivers	TBD	Need calibration
Growth projections	Highly Reliable	ABS and NSW DPI
Operations expenditures	Highly Reliable	Low variations over four years
Maintenance expenditures	Highly Reliable	Low variations over four years
Projected Renewal exps. - Asset values	Reliable	Dataset complete with some expected errors
- Asset residual values	Reliable	Dataset complete with some expected errors

Table 2.6: Data Confidence Assessment for Data used in AM Plan

3. Future Demand

Demand management is an action plan to improve usage and efficiency for the water supply system. The capacity of an organisation is dependent on quantitative analysis and best judgements across the many factors impacting on service delivery. Issues include asset integrity, preventative maintenance, periodic renewal and network expansion to accommodate community development.

The potential benefits of a demand management program include sustainable usage patterns, delaying investment in new infrastructure and to reduce the operational costs of reticulated water services. LWU's can balance demand management initiatives with supply side works and achieve triple bottom line benefits including lower rates for their customers, a more secure water supply; and increase residual water for environment uses.

Council experiences low water supply security resulting in water restrictions as an additional demand management measure. The region has benefited from recent above average rainfall seasons, therefore limiting restrictive measures. The average annual residential water usage has declined from 201 kL/year (NSW median 215 kL/year) in 2006 to 171 kL/year in 2011, 166 kL/year in 2012 and 184 kL/year in 2013 (NSW medians 159, 155 and 166 kL/year)⁶. These patterns demonstrate sustainable gains but at a lesser rate than LWUs across NSW.

Key Water Demand Definitions

Key definitions used to discuss water demand are:

- Ø Water production - the total water that is passed through bulk meters and treatment facilities into the reticulation system, and
- Ø Water consumption - the amount of water recorded in the Council customer database through monitoring of water meters at each property.

In ideal systems water production and water consumption would be the same. Unaccounted For Water (UFW) represents system leakages and unmetered consumption. This is water that is produced but not charged for under the water supply tariff structure, it is non-revenue water (NRW). Historical water patterns indicate that the Casino water business had high UFW levels around 20% or twice the level of 10% considered as best practice⁷.

3.1 Drivers of Future Demand

Predicted population growth for the Casino area is expected to be the biggest driver of demand for the reticulated water service. Other drivers of future demand include changes in household lot size, occupancy rates, dwelling mix and the uptake of water efficient devices.

The Region is expected to experience population growth (0.51% pa), decreasing household occupancy rates and an ageing population. The number of dwellings in the LGA is expected to increase from 9,150 in 2011 to 10,750 in 2031, an increase of 1,600 dwellings at an average growth rate of 0.81% p.a., with cumulative growth of 17.5%.

⁶ NSW Government, 2013, NSW Water Supply and Sewerage: Performance Monitoring Report

⁷ JWP, 2007, Richmond Valley Council Demand Management Plan

Key Water Statistics

Council water business data analysed for the period 2011/12 to 2013/14 is summarised in Table 3.1. The data is averaged to smooth variations in particular the UFW indicator. Across the region the average residential household uses 153 kl per year, rural households use 3.6 times as much as urban households, businesses 6 times as much while a large industrial business use the equivalent of 1,555 urban households. This is reflected in the average usage in Table 3.1, with Casino having four large industrial businesses and Broadwater having one large industrial business.

Average 2011-2013	Supply	Consumption	UFW	Households	Average
Coraki	118,723	105,073	11%	529	199
Woodburn	66,798	59,020	12%	311	190
Broadwater	101,719	95,077	7%	280	340
Evans Head	320,452	282,548	12%	1,631	173
LRR	607,691	541,717	11%	2,751	197
Casino	2,237,100	2,047,552	8%	4,712	435
RVC	2,844,791	2,589,269	9%	7,463	347

Table 3.1: Council Water Data

Across the region UFW averages 9% which represents a significant gain from 2007 when the figure was estimated at 24%. Figure 3.1 and Figure 3.2 demonstrate seasonal variations in supply versus demand for the Lower Richmond River communities and for the urban centre of Casino. The gap between supplied water and consumed water represents UFW.

UFW can result from water leakage, unmetered or poorly recorded metering. Generally a UFW indicator of 10% is considered best practice but there is evidence to indicate a 6% target can provide economic benefits.

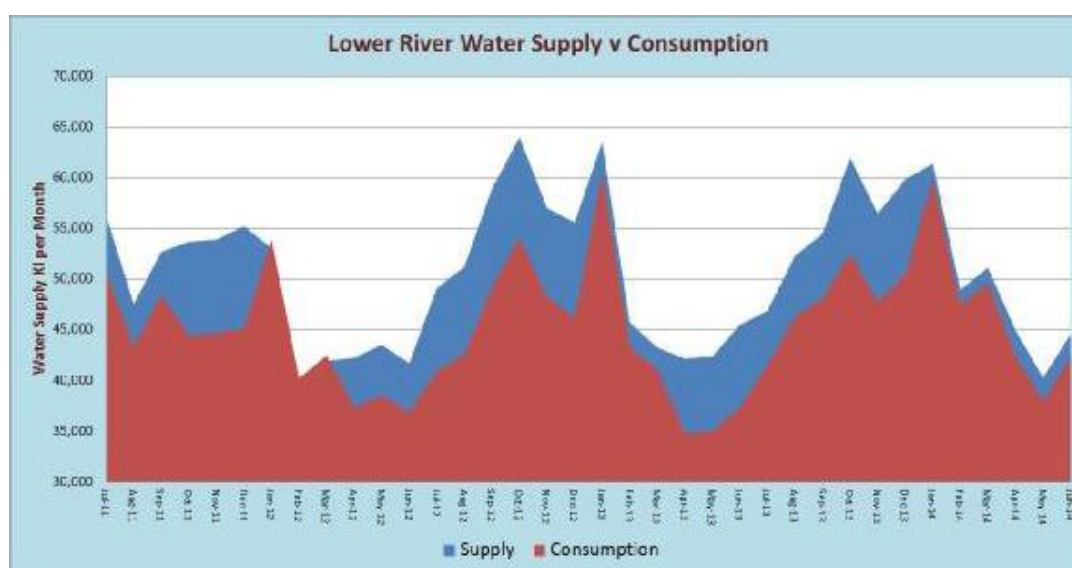


Figure 3.1: Water Supply and Consumption for Lower Richmond River Communities

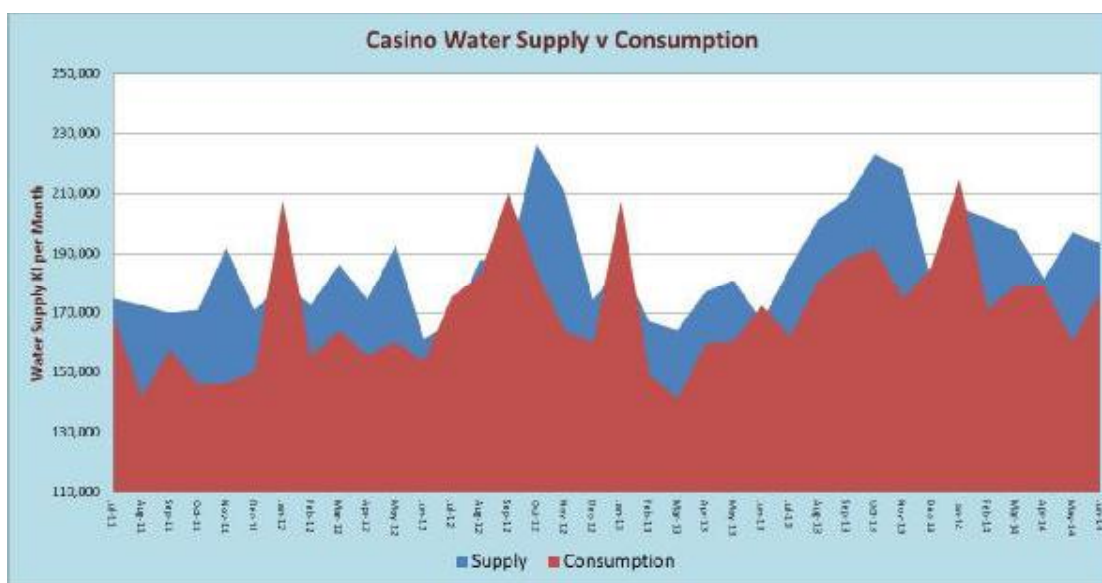


Figure 3.2: Water Supply and Consumption for Casino

3.2 Future Water Demand

Previous water demand modelling has confirmed that population and therefore number of households is the best predictor of water demand. For the region this equates to a growth rate of 0.81% p.a. The demand for Casino and Broadwater communities is skewed by the presence of large industrial businesses with the Broadwater sugar mill consuming 33 ML p.a. and the four industries consuming a combined 1,158 ML p.a.



Figure 3.3: Future Water Demand

Future demand as displayed in Figure 3.3 is based on the growth in household numbers with demand from the large industrial businesses remaining constant. Previous demand management forecasting for Casino anticipated consumption to exceed the Jabour Weir extraction limit of 3,427 ML/year by 2035.

Improved performance by Council in limiting UFW, more exact demand drivers and adjustment for industries like the Meatworks could extend supply availability from the Jabour Weir extraction licence out to 2118. The scenario described would be considered ideal, a more prudent scenario would factor uncertainty especially around the security of supply.

The ideal scenario is optimistic because growth would be based on employment opportunities with new industrial businesses. Using the same ratio of industrial to residential water usage from present users would see available supply in Casino extending to 2071 before augmented water sources were required. Water supply modelling is however highly variable (it is unrealistic to expect average 30 year stream flows to repeat over the next 30 years) and water supply security is the **number one** risk for the Council water business.

Jabour Weir is an on stream storage and has a capacity of 1,623ML, resulting in the reliability of the water system being relatively low and level 1 to 4 restrictions could be expected in any year. Monte Carlo simulations noted that the reliability of the water supply system was 17% and that the probability of running out of water is high (0.5%)⁸. To put this in perspective the probability of running out of water in Sydney is 0.01%. Council's IWCM strategy identified and evaluated a range of opportunities to manage IWCM issues.

3.3 Potential Demand Management Measures

Estimating the economic cost benefit relationship from water saving initiatives (NSW regulatory BASIX measures) and therefore delaying the costs of capital works and reducing future operational costs (i.e. customer benefits) has been modelled in the Richmond Valley Demand Management Plan. Table 3.2 shows the cost effectiveness of these reticulated water demand management measures.

Measure	Cost Benefit Effectiveness		
	Water Utility	Community	Overall
Pricing Measure Model (75% revenue from usage)	High	Very High	Very High, mandatory
Rainwater Tanks under BASIX	Very High	Very Low	Medium, but mandatory
Education Program (external uses)	Medium	Medium	Medium, but complementary
Unaccounted for Water (UFW)	High	High	High
Shower Retrofit	Medium	Medium	Medium
Water Conservation	Medium	Medium	Medium
Business Audit	High	Low	Medium
Rainwater Tanks Rebate	Low	Very Low	Low
Residential Audit Program	Very Low	Low	Low
Dual Flush Toilet Retrofit	Low	Low	Low

Table 3.2: Cost Effectiveness of Demand Management Measures

⁸ JWP, 2008, Richmond Valley IWCM Strategy

Council implemented a Demand Management Plan in 2007, (Integrated 1 scenario - BASIX measures) focusing on best practice pricing, UFW reduction and a water conservation education campaign supplemented by a water showerhead retrofit program. Appropriate pricing through a 'pay-for-use' structure, the promotion of better gardening practices (mulching and watering methods) and a better than 50% reductions in UFW has improved water supply security.

Source Augmentation Strategies

Council's IWCM strategy identified water resource scarcity as an ongoing concern. In 2008, a TBL assessment (of economic, social and environmental measures), including a measured risk approach factoring the relatively long lead times to investigate viable source augmentation options resulted in a demand management approach.

After a period of protracted drought, recent favourable seasons have, increased river flows, enhanced the productivity of aquatic ecosystems and increased the water available in storages. Increased water security has complemented the Council LWU demand management approach.

Droughts occur naturally in Australia and can have major repercussions for all water users and the environment. Achieving a secure and sustainable LWU will require a large capital works program based on a high level regional study. The cost of a regional study is estimated at \$500,000, it would need to be coordinated by the relevant state government departments.

Investigations would evaluate the cost benefits of augmenting current sources, identifying new sources and potential new sources, desalination, underground water, stormwater harvesting, recycled water and treated effluent. The scope of the investigations could include:

- Ø Description and evaluation of current systems,
- Ø Baseline studies (demand analysis, surveying, water resources, preliminary geotechnical, environmental, etc.),
- Ø Identification of options,
- Ø Provision of an indicative assessment of the costs, benefits and risks of each identified option, and
- Ø Identification of the issues (political, economic, social and environmental) that need to be resolved in more detailed studies; and Identification of the tasks required to progress from pre-feasibility to an implementation stage.

3.4 NOROC Regional Water Study

NOROC has resolved to develop a long term (50 year) regional water supply strategy to evaluate potential benefits and future water supply security resulting from a regionally integrated system.

The current system serves approximately 80,000 residential properties and 7,000 non-residential properties with 23,000 ML p.a. demand/capacity. The current secure yield is 32,000 ML p.a. with a current supply surplus of 8,000 ML p.a. or 27%. The major sources are Rocky Creek Dam and Clarrie Hall Dam which provide 86% of supply to 90% of the region's population.

By 2060 the Northern Rivers water supplies are expected to serve approximately 146,000 residential properties and 14,000 non-residential connections. Regional demand will increase by 74% to 40,000 ML p.a., while the secure yield is expected to reduce by 26% to 26,000 ML p.a. The net effect is that the region will experience a water supply deficit of 14,000 ML p.a. or 43% of requirement.

Hydrosphere Consulting has preliminarily investigated options and recommended five scenarios to secure the long-term supply of water services in the Northern Rivers. Number one recommendation is for a large-scale centralised desalination plant that provides benefits in term of yield, climate independence and scalability. Potential risks include energy cost and acceptable solutions for brine disposal. The overall attractiveness (based on five key criteria) is high and meets the objectives of the study.

Rous Water's bulk supply will require augmentation by 2020, Casino by 2025 and Tweed by 2030. A regional approach to water security can provide improved financial outcomes through economies of scale as well as a range of options to improve efficiency, system resilience and operational flexibility. Financial outcomes can be achieved through staged development of water sources, increased flexibility of water schemes, reduction in duplicated infrastructure and sharing of OMA costs over a larger customer base.

The second regional option is to raise the Clarrie Hall Dam to increase yield by 8,250 ML/a and to develop Dunoon Dam (50,000 ML/a) on the Richmond River with a predicted yield of 6,100 ML/a. This option has an overall attractiveness of moderate, but is still susceptible to climate changes.

The third option includes raising the capacity of Dunoon Dam to 85,000 ML/a, but has a low attractiveness in not achieving any benefits over Option 2. Option 4 includes the usage of Toonumbar Dam with 20m of wall-raising, this provides benefits for Kyogle and Casino however its overall attractiveness is low. Option 5 involves Toonumbar Dam and raising the Clarrie Hall Dam; this scenario meets objectives of the study but is still susceptible to climate impact. Rous Water's current preferred option is extraction of groundwater from coastal sands. This is currently under investigation.

The success of long-term regional planning will depend on a comprehensive water sharing plan developed by NOW, a two transfer system between major surface water sources a coordinated approach to scheme development. Individual LWU proceeding with large scale scheme developments to secure their own supplies would limit economies of scale achievable from a coordinated approach. Ultimately this will require sophisticated modelling to determine local cost benefit against regional cost benefit and ownership direction from NOW.

3.5 Drought Management

The LGA is characterised by a sub-tropical climate with hot and humid summers and mild winters. The average rainfall for the area is 1,100 mm ranging from 1650mm along coastal areas and 1,025mm over the inland regions.

Council's Drought Management Plan ensures sound and robust mechanisms to manage town water supplies during periods of drought. These include a staged approach to water security with five levels of water restrictions for Casino triggered by river flows at Jabour weir, and seven levels of restrictions for the MLRR area managed by Rous Water based on Rocky Creek dam storage levels.

This provides the LWU and residents with a timely, efficient and affordable response to reduce water consumption during drought periods. The LWU actively cooperates with key stakeholders from Kyogle Council, Rous Water and the Department of Natural Resources to ensure the provision of minimum water supplies for basic sanitation and health requirements.

A key planning objective of demand management and drought management is to ensure that, in the long term, restrictions are not required more than 5% of the time and that the average frequency of restrictions is less than once every 10 years (the level of service).

3.6 Flood Management

Flooding in Casino and the downstream river towns is a regular occurrence due to the confluence of three major river inflows being the Richmond River, Wilsons River and Bubgawalbyn Creek. Approximately 35% of the LGA is vulnerable to flooding, with events in the lower river towns having reoccurrence intervals of five to ten years.

The Floodplain Risk Management Plans identify immediate and longer-term mitigation measures, including:

- Ø Flood warning and emergency planning,
- Ø Raising community awareness,
- Ø Development control planning,
- Ø Voluntary house raising/purchase, and
- Ø Infrastructure measures including levees, creek protection and drainage measures⁹.

3.7 Demand Management Plan

Council's OMA practices continue to advance with improved predictive knowledge from information systems and the adoption of industry best practices. Managing demand for services is a combination of preventative and reactive maintenance practices that maintain asset serviceability, and the timely renewal of assets that have reached end of life.

Council continues to invest in information systems and evidence based data including conditions ratings, remaining useful life, depreciation patterns which improve the infrastructure and long term financial planning functions. Figure 3.4 illustrates the capital works planning for the next ten years and new works scheduled to improve the water business.

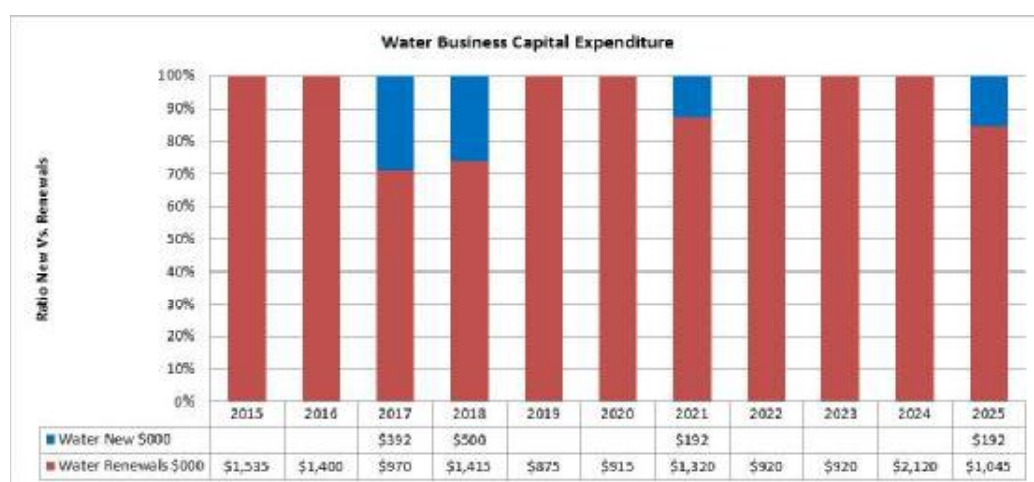


Fig 3.4 New Assets from Growth

⁹ RVC Casino Floodplain Risk Management Plan (2002a), RVC Mid-Richmond Floodplain Risk Management Risk (2002b)

Opportunities identified for demand management include monitoring community expectations to determine LoS and analysing the cost of provision to determine the long term affordability. There is a gap between community aspirations and their willingness to pay for these services. It is the responsibility of Council to articulate the evidence presented in asset and financial planning, therefore narrowing the expectations gap.

Financial results from best practices applied to the water business identify that 91% of capital expenditure will be required to maintain the existing network of assets. A total of \$1.3 million has been allocated for new and improved serviceability of the water business. It is important to note that acquiring additional assets from growth or by provision of additional infrastructure services, will ultimately commit Council to fund ongoing operations and maintenance costs. These future costs should be identified and considered in developing forecasts of future operating and maintenance costs.

4. Lifecycle Management Plan

A Lifecycle Asset Management Plan details how Council plans to manage and operate water business assets at the agreed levels of service while optimising lifecycle costs. The objective is to look at the lowest long term cost rather than seeking short term savings when making decisions. Sustainable financial management is about managing community outcomes by providing assets and services with the lowest long term cost.

4.1 Background Data

The Council water network includes 10 asset classes (encasements are a part of the pipe network) consisting of 23,549 unique assets with a Current Replacement Cost (CRC) of \$81.93 million. Reservoirs and WTPs have the oldest average age of 33 years and 27 years respectively and water meters are the newest assets in the network. The remaining useful life (RUL) for all water assets as a percentage of total life is 67.8%. Table 4.1 provides the descriptive attributes for water network assets.

Asset Type	No Of Assets	New Assets	Age	RUL	Dep Pattern	Distance m	Area sqm	Age %	Value %
Reservoir	219	21	33	23	Moderate	6,966	10,555	40.7%	91.2%
Water Meter	6,323	0	6	17	Moderate			73.2%	88.9%
Water Pump Station	163	33	20	19	Moderate	19,890	75	49.5%	80.7%
Water Treatment Plant	340	8	27	20	Moderate	1,503	8	42.1%	76.1%
Service Connection	6,870	207	23	41	Moderate			63.8%	83.2%
Encasement	361	85	3	55	Moderate			94.4%	98.7%
Fire Hydrant	2,138	53	23	54	Moderate			70.4%	91.0%
Water Meter	469	162	2	20	Moderate			91.1%	95.5%
Pipe Main	5,353	96	23	54	Moderate	193,816		70.0%	85.1%
WSP	40	0	10	66	Moderate			86.7%	95.8%
Main Encasement	38	8	4	70	Moderate	617		94.2%	98.7%
Water Valve	1,235	25	23	38	Moderate			61.6%	83.3%
Grand Total	23,549	700	18	38		222,793	10,638	67.8%	84.6%

Table 4.1: Water Asset Statistics

Long life assets have modified depreciation schedules reflecting reduced consumption patterns in earlier years and increasing consumption as the asset integrity declines towards end of useful life (Figure 4.1). Standard lifecycle asset terms include:

- Ø CRC - the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset with the same economic benefits or service potential,
- Ø Depreciable amount (DA) - CRC for depreciable assets less residual value (RV),
- Ø Depreciated replacement cost (DRC) - CRC less accumulated depreciation, and
- Ø Asset valuations by the valuer employ a modified depreciation pattern which results in asset valuations as a percentage (DRC/CRC) being higher than the age percentage (RUL/Useful Life).

Council Water Asset Values (Table 4.2) shows the fair value of assets (CRC) is \$81.93 million, with DA totalling \$67.78 million with a residual component of \$13.15 million; and DRC or the written down value (WDV) is totalling \$69.34 million. Council water assets DRC is currently 84.6% of CRC (vs. current age of 67.8%) illustrating the effect of modified depreciation schedules. Annual depreciation of \$767,194 reflects an asset consumption rate of 1.12%. The asset renewal funding ratio¹⁰ is 0.99 indicating Council plans to renew assets at the rate they are being consumed.

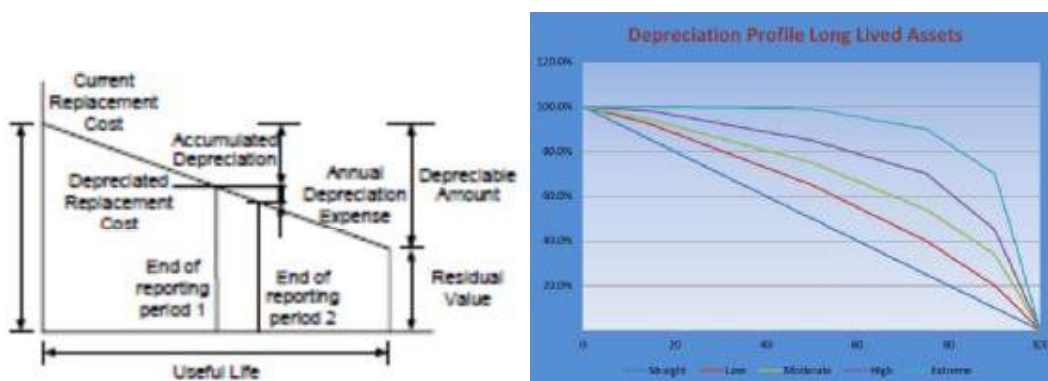


Figure 4.1: Depreciation Profile for Long Lived Assets

4.2 Physical Parameters

The age profile of water assets shows that significant construction took place in the post-World War 2 time period. It is likely that much of this infrastructure will be well through its useful life and will require renewal in the near future. The profile also indicates that the age data on infrastructure requires development/further investigation.

Figure 4.2 examines the data by time periods. This graphic illustrates that the Reservoir network is aged with major works over 50 years ago supported by renewals in recent years. The average age of Reservoir assets is 33 years and their remaining useful life is 23 years indicating the network is 60% through its lifecycle.

¹⁰ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16
Page 31 of 48

Asset Type (\$000)	Opening CRC	Reval	Additions	Annual Dep	Closing CRC	Dep Amount	Accum Dep	WDV
Reservoir	\$11,767	\$772	\$554	\$57	\$13,094	\$5,448	\$1,159	\$11,935
Water Meter	\$1,907	\$53		\$43	\$1,961	\$1,961	\$218	\$1,742
Water Pump Station	\$3,081	\$86	\$688	\$55	\$3,855	\$2,768	\$745	\$3,110
Water Treatment Plant	\$13,683	\$407	\$59	\$179	\$14,149	\$9,724	\$3,381	\$10,768
Service Connection	\$4,572	\$128	\$86	\$56	\$4,785	\$4,785	\$803	\$3,982
Encasement	\$310	\$9	\$55	\$3	\$374	\$374	\$5	\$369
Fire Hydrant	\$3,723	\$104	\$84	\$24	\$3,911	\$3,911	\$353	\$3,557
Water Meter	\$78	\$2	\$34	\$3	\$115	\$115	\$5	\$110
Pipe Main	\$36,249	\$1,014	\$599	\$326	\$37,861	\$37,861	\$5,655	\$32,206
WSP	\$56	\$2		\$0	\$58	\$58	\$2	\$56
Main Encasement	\$134	\$4	\$21	\$1	\$158	\$158	\$2	\$156
Water Valve	\$1,549	\$43	\$23	\$20	\$1,616	\$1,616	\$270	\$1,346
Grand Total	\$77,110	\$2,624	\$2,203	\$767	\$81,937	\$68,779	\$12,599	\$69,338

Table 4.2: Water Asset Values

The water pump station and treatment plant networks built during the 1980's have an average age of 20 and 27 years respectively and their remaining useful lives are 19 and 20 years and therefore approaching the latter stages of their respective lifecycles.

The remaining water supply hierarchy of assets are relatively new with their average useful lives greater than their average age. Water valve and service connection assets are approaching the 40% mark of their lifecycle with average ages of 23 years and remaining useful lives of 38 and 41 years. The water pipe and water hydrants assets on average have a remaining lifecycle of 70%. The water swabbing pits are comparatively new with an average remaining lifecycle of 87% and water meters with an average remaining life of 91%. Water asset construction data is presented in Table 4.3 and Figure 4.2.

Asset Construction (CRC \$000)	Pre 1970s	1970s	1980s	1990s	2000s	Total
Encasement					\$374	\$374
Fire Hydrant	\$450	\$267	\$563	\$1,161	\$1,469	\$3,911
Main Encasement				\$4	\$154	\$158
Pipe Main	\$3,283	\$5,971	\$7,739	\$8,635	\$12,233	\$37,861
Reservoir	\$6,128	\$4,187	\$1,105	\$691	\$983	\$13,094
Service Connection	\$713	\$381	\$735	\$1,250	\$1,706	\$4,785
Water Meter				\$1	\$114	\$115
Water Meter	\$0			\$0	\$1,960	\$1,961
Water Pump Station			\$2,496	\$431	\$928	\$3,855
Water Treatment Plant			\$13,014	\$164	\$972	\$14,149
Water Valve	\$181	\$194	\$309	\$358	\$574	\$1,616
WSP	\$1	\$1	\$1	\$1	\$52	\$58
Total	\$10,757	\$11,002	\$25,962	\$12,696	\$21,519	\$81,937

Table 4.3: Water Asset Construction data (\$000)



Figure 4.2: Water Asset Age Profile

Asset renewals

Council's asset register provides RUL's for each asset which can be used to predict the capital renewals by decade (Table 4.5). Years with the highest renewal expenditures include 2084 with \$10.8 million of works, 2075 with \$10.2 million of works, 2058 with \$9.6 million of works, 2040 with \$5 million of works and 2033 with \$4.6 million of asset renewal capital works.

Planning forward works is a function of renewals due and resourcing capacity. Over the LTFP period Council has \$5.3 million of water assets requiring renewal and has allocated 2.51 times this amount to allow for contingencies, and the preservation of the network. The following tables display asset financial movements for EOL Disposals, Renewals and Depreciation values (\$000s) for each water asset this current LTFP. These tables produce the key BTS and Renewals Ratios discussed below.

Council demonstrates a mature and integrated approach towards budget development, LTFP and capital works planning. This approach is influenced by best practice management and the future sustainability of Council businesses. Asset and financial planning primary considerations include replacement of end of life assets represented as a BTS Ratio, and the preservation of assets represented as a Renewals Ratio.

The following tables provide a time series for EOL disposal values, proposed capital renewals, annual depreciation values (which measure the consumption of assets) and WDV (which measure the remaining service potential of assets). The table with capital renewals presents Councils approach to achieving benchmark ratios of less than 0.02 for BTS and 1.0 for asset renewals.

Water EOL \$000	2015 Disp	2016 Disp	2017 Disp	2018 Disp	2019 Disp	2020 Disp	2021 Disp	2022 Disp	2023 Disp	2024 Disp	2025 Disp	Total
Encasement												
Fire Hydrant	\$13		\$19			\$22						\$54
Main Encasement												
Pipe Main	\$11	\$11	\$154			\$381						\$556
Reservoir		\$3								\$700		\$703
Service Connection	\$21	\$47			\$54					\$350		\$472
Water Meter												
Water Meter	\$1								\$4		\$143	\$147
Water Pump Station					\$74	\$59		\$4	\$367	\$106	\$50	\$660
Water Treatment Plant							\$96	\$10	\$8	\$2,193	\$343	\$2,651
Water Valve	\$16	\$5		\$17					\$67			\$106
WSP												
Total	\$62	\$65	\$173	\$17	\$128	\$462	\$96	\$14	\$446	\$3,349	\$536	\$5,349

Table 4.4.1: Capital End of Life Disposal Values (\$000)

Water Renewals \$000	2015 Add	2016 Add	2017 Add	2018 Add	2019 Add	2020 Add	2021 Add	2022 Add	2023 Add	2024 Add	2025 Add	Total
Encasement	\$6	\$5	\$3	\$4	\$3	\$3	\$3	\$2	\$3	\$8	\$4	\$44
Fire Hydrant	\$41	\$41	\$30	\$40	\$25	\$29	\$35	\$23	\$24	\$73	\$38	\$399
Main Encasement	\$2	\$2	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$2	\$1	\$14
Pipe Main	\$640	\$578	\$397	\$539	\$326	\$355	\$429	\$273	\$290	\$878	\$429	\$5,134
Reservoir	\$134	\$118	\$82	\$125	\$79	\$79	\$146	\$117	\$114	\$205	\$130	\$1,329
Service Connection	\$103	\$97	\$66	\$87	\$58	\$64	\$79	\$52	\$56	\$141	\$69	\$874
Water Meter	\$5	\$4	\$3	\$5	\$3	\$3	\$4	\$2	\$3	\$7	\$5	\$44
Water Meter	\$89	\$96	\$65	\$90	\$56	\$63	\$77	\$49	\$78	\$193	\$95	\$951
Water Pump Station	\$122	\$107	\$72	\$135	\$75	\$67	\$141	\$74	\$57	\$135	\$66	\$1,052
Water Treatment Plant	\$355	\$316	\$226	\$356	\$228	\$229	\$375	\$309	\$275	\$422	\$181	\$3,273
Water Valve	\$38	\$35	\$23	\$31	\$21	\$21	\$28	\$18	\$19	\$53	\$26	\$315
WSP	\$1	\$1	\$0	\$1	\$0	\$0	\$1	\$0	\$0	\$1	\$1	\$6
Total	\$1,535	\$1,400	\$970	\$1,415	\$875	\$915	\$1,320	\$920	\$920	\$2,120	\$1,045	\$13,435

Table 4.4.2: Capital Renewals Values (\$000)

BTS communicates the quantum of assets that are at risk or require immediate attention to restore their serviceability. With Council implementing best practice through professional revaluations on a five yearly cycle, Council's control systems have dependable data on the current state of assets. Therefore calculation of BTS is a simple calculation of the total value of EOL assets in year (x) less the value of renewals in that year compared to the total WDV of the asset class. For the LTFP period the water network has a BTS measure of 0.0 and this is consistent across all asset types.

The Renewables Ratio communicates the preservation of asset integrity. Asset consumption as measured by depreciation reflects the loss of future service potential in infrastructure assets. In accordance with AASB 116, p60 Council estimates asset consumption most closely reflecting their real world deterioration rates. This increases the complexity of financial calculations and will ultimately focus attention on best practice maintenance and renewals programs to preserve asset integrity.

An ideal renewables ratio is 1.0. This simply means that the value of renewables in year (x) matches the consumption of asset in that year. The LTFP process has focused on a sustainable asset position at the end of 10 years across all community assets and this is reflected in improving Renewables Ratios each year. For the LTFP period the water network has a renewables ratio of 0.99 which is ideal.

Water Depreciation \$000	2015 Dep	2016 Dep	2017 Dep	2018 Dep	2019 Dep	2020 Dep	2021 Dep	2022 Dep	2023 Dep	2024 Dep	2025 Dep	Total
Encasement	\$3	\$3	\$3	\$3	\$3	\$4	\$4	\$4	\$5	\$6	\$6	\$43
Fire Hydrant	\$21	\$25	\$28	\$30	\$31	\$37	\$38	\$40	\$42	\$49	\$54	\$396
Main Encasement	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$2	\$13
Pipe Main	\$329	\$354	\$380	\$400	\$404	\$453	\$465	\$478	\$500	\$594	\$616	\$4,974
Reservoir	\$69	\$72	\$79	\$93	\$98	\$101	\$158	\$205	\$197	\$139	\$187	\$1,397
Service Connection	\$53	\$60	\$63	\$65	\$72	\$81	\$86	\$92	\$97	\$95	\$99	\$863
Water Meter	\$2	\$3	\$3	\$4	\$4	\$4	\$4	\$4	\$4	\$5	\$8	\$45
Water Meter	\$46	\$59	\$62	\$66	\$69	\$81	\$84	\$86	\$134	\$131	\$136	\$954
Water Pump Station	\$63	\$66	\$69	\$100	\$93	\$86	\$153	\$130	\$98	\$92	\$95	\$1,043
Water Treatment Plant	\$182	\$194	\$216	\$264	\$283	\$292	\$407	\$542	\$474	\$286	\$260	\$3,400
Water Valve	\$19	\$21	\$22	\$23	\$26	\$27	\$31	\$31	\$34	\$36	\$37	\$309
WSP	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$1	\$1	\$1	\$1	\$6
Total	\$788	\$858	\$928	\$1,049	\$1,085	\$1,168	\$1,431	\$1,614	\$1,588	\$1,435	\$1,501	\$13,445

Table 4.4.3: Capital Depreciation Values (\$000)

Water WDV \$000	2015 WDV	2016 WDV	2017 WDV	2018 WDV	2019 WDV	2020 WDV	2021 WDV	2022 WDV	2023 WDV	2024 WDV	2025 WDV	Total
Encasement	\$384	\$399	\$415	\$433	\$447	\$461	\$479	\$493	\$508	\$528	\$544	\$544
Fire Hydrant	\$3,715	\$3,866	\$4,016	\$4,199	\$4,331	\$4,463	\$4,631	\$4,772	\$4,914	\$5,118	\$5,276	\$5,276
Main Encasement	\$163	\$170	\$177	\$185	\$191	\$197	\$205	\$212	\$219	\$229	\$236	\$236
Pipe Main	\$33,493	\$34,718	\$35,944	\$37,444	\$38,497	\$39,552	\$40,909	\$42,020	\$43,141	\$44,770	\$46,002	\$46,002
Reservoir	\$12,465	\$12,982	\$13,504	\$14,125	\$14,577	\$15,047	\$15,583	\$15,983	\$16,402	\$17,109	\$17,629	\$17,629
Service Connection	\$4,129	\$4,241	\$4,374	\$4,541	\$4,645	\$4,746	\$4,878	\$4,975	\$5,069	\$5,234	\$5,351	\$5,351
Water Meter	\$113	\$116	\$118	\$121	\$122	\$122	\$124	\$124	\$124	\$126	\$123	\$126
Water Meter	\$1,784	\$1,809	\$1,831	\$1,862	\$1,865	\$1,857	\$1,857	\$1,842	\$1,775	\$1,735	\$1,668	\$1,865
Water Pump Station	\$3,203	\$3,289	\$3,372	\$3,450	\$3,492	\$3,543	\$3,551	\$3,555	\$3,593	\$3,686	\$3,743	\$3,743
Water Treatment Plant	\$11,125	\$11,460	\$11,773	\$12,131	\$12,321	\$12,511	\$12,675	\$12,612	\$12,615	\$12,978	\$13,252	\$13,252
Water Valve	\$1,394	\$1,439	\$1,483	\$1,539	\$1,572	\$1,606	\$1,649	\$1,682	\$1,713	\$1,765	\$1,800	\$1,800
WSP	\$58	\$60	\$63	\$66	\$68	\$70	\$72	\$75	\$77	\$80	\$83	\$83
Total	\$72,026	\$74,550	\$77,071	\$80,095	\$82,128	\$84,175	\$86,612	\$88,344	\$90,149	\$93,359	\$95,709	\$95,908

Table 4.4.4: Capital Written Down Values (\$000)

Asset Renewal (DRC \$000)	2010s	2020s	2030s	2040s	Post 2050s	Total
Encasement					\$374	\$374
Fire Hydrant	\$30	\$149	\$174	\$97	\$3,461	\$3,911
Main Encasement					\$158	\$158
Pipe Main	\$153	\$1,426	\$1,073	\$342	\$34,868	\$37,861
Reservoir		\$678	\$1,633	\$2,767	\$370	\$5,448
Service Connection	\$43	\$536	\$135	\$940	\$3,133	\$4,785
Water Meter			\$115			\$115
Water Meter	\$1	\$108	\$1,852			\$1,961
Water Pump Station		\$572	\$1,744	\$28	\$425	\$2,768
Water Treatment Plant		\$2,014	\$2,800	\$4,400	\$510	\$9,724
Water Valve	\$20	\$131	\$28	\$471	\$965	\$1,616
WSP		\$1			\$57	\$58
Total	\$246	\$5,615	\$9,553	\$9,045	\$44,319	\$68,779

Table 4.5: Capital Renewal Schedule (\$000)



Figure 4.3: Asset Renewals Profile

Asset Mix, Location and Current Issues

Casino

Council has four Reservoirs located within Casino. Three of these are situated in North Casino with their install years varying from 1914 to 1977, while the fourth is situated in South Casino with an install year of 1943. Maintenance is mainly reactive with defects being fixed as they occur. Reservoir 1 at North Casino has easily eclipsed its useful life while the Reservoir at South Casino is approaching the end of its useful life. All Reservoirs regularly have safety inspections to ensure compliance with current Australian Standards.

Jabour Weir, constructed in 1972, has been raised twice, with the final weir raising constructed in 1976. The structure is generally in good condition with no signs of movement or major deterioration. The condition of the existing rockbolts has been assessed as at the limit for safety and stability. The structure is not considered stable for the flood operating condition unless the stabilising load in the existing rockbolts reaches ultimate capacity. This renewal work is programmed for 2015/16 year.

Council's two pump stations at Colches Street and the Richmond River intake were both commissioned in 1985. Maintenance of pump stations since their initial construction has mainly being reactive with defects being fixed as they occur.

Council's Water Filtration Plant was constructed in 1985 (which replaced the old water filtration plant at South Casino). The filtration plants performance is satisfactory although there have been some taste and odour complaint issues in the Casino area with fluctuations in the water quality. Fluctuating parameters include taste and colour, blue-green algae occurrence, residual chlorine levels and high manganese levels. A potassium permanganate dosing plant will be installed at the raw water pump station in the future to alleviate some of these problems. Maintenance on the Water Filtration Plant is carried out according to a schedule by the appropriate staff.

MLRR

Council has nine reservoirs located within the Lower River district, with construction dates varying from 1949 to 2007. All Reservoirs regularly have safety inspections to ensure compliance with current Australian Standards.

Council's four pump stations within the Lower River district were commissioned between 1990 and 2005. Maintenance of these pump stations since initial construction has mainly been reactive with defects being fixed as they occur.

Council's asset management systems provide condition based intelligence that flows through to asset maintenance and asset rehabilitation programs. This provides engineers and field support staff with an early warning system the assets flagged as nearing the end of their useful lives. A network analysis of Council's water supply system needs to be carried out to ensure the system meets service requirements in terms of pressure, flow and reliability.

Council in accordance with *AASB 13 Fair Value Measurement* and *AASB 116 Property Plant and Equipment* is progressively revaluing and conditioning each asset class by professional valuers. Council employed an additional engineering assistant in the 2014 financial year to improve condition based rating data which will generally enhance the predictive intelligence of asset management systems.

Fire Hydrants and Stop Valves are subject to quarterly inspections, but at this stage it is unknown how many hydrants or stop valves get inspected within the time allocated. Maintenance is carried out after these inspections and on a reactive basis.

Water Meters are inspected quarterly when the meters are read for billing purposes. Any defects are noted at this time and fixed accordingly. Other valves at this stage are not inspected. Maintenance of these valves is mainly reactive with defects being fixed as they occur.

Water service lines have no replacement or maintenance schedule with the maintenance of these lines being reactive with defects fixed when they occur. Council is progressively replacing existing asbestos piping with uPVC (Blue Brute) pipes. This follows a Council initiative to identify asbestos assets across the networks and to systematically replace these assets.

4.3 Asset Conditions

Asset conditions are monitored on a rotating asset class schedule. This is a recent development at Council and it ensures that all assets will receive an observational rating once every four years. The water and sewer network of assets were rated in 2012, stormwater in 2014 and land and building assets in 2015. The condition profile of our water supply assets is shown in Figure 4.3. 85% of Council assets have a current condition rating of 1 or 2 generally reflecting a network in good condition.

Figures 4.3 and 4.3.1 illustrate the current condition profile for each asset type as a percentage with the black diamond showing the average condition (right hand scale) for each asset. Using Pipe Main as an example, in 2014, 84% of pipe assets were condition 1 or 2, with the black diamond indicating an average condition of 1.7. By 2025 all of the condition 1 Assets have moved to a condition 2 level, resulting in a weighted average condition of 3.4.



Figure 4.3: Asset Condition Rating Profile



Figure 4.3.1: Asset Condition Rating Profile

4.4 Financial Summary

Council's LWU operates the water business as single program with a restricted reserves fund to meet Capex under and over expenditure requirements. Council revenue streams include access and usage charges, grants revenue, developer service charges and interest on restricted reserves. Operating expenditure (OpEx) includes operations, maintenance and management activities (OMA). Capital expenditure (Capex) includes renewals program, improved LOS programs and augmentation programs. Table 4.6 provides a summary of cash flows for 20 years.

Cash flow predictions are based on current business expectations with 5% as the indicator for revenue streams and 3% for expense streams. Developer service pricing also provide some uncertainty for revenue flows. The LWU business demonstrates a healthy state with a net flow of \$2 million into the restricted fund over the forward period.

Asset Lifecycle profiles for the water business is shown in Figure 4.4. The balance of funding for water asset class represents transfers from the water reserve fund. Annual consumption of assets (depreciation) is shown on the right axis.

Table 4.6 provides a summary of cash flows for 20 years. Cash flow predictions are based on current business expectations with 3% indexation for revenue and expense streams beyond the LTFP. Funding for the water program includes operating budgets, capital grants and contributions and internal transfers from the restricted water fund. This means a shortfall is balanced by transfers from restricted assets and a surplus will result in a transfer to restricted assets. For the next 10 years the water program will transfer \$2.1 million to restricted funding.

Asset Lifecycle profiles for the water business are shown in Figure 4.4, this illustrates the flow of funds for operating and capital expenditures over the forward period. Annual consumption of assets (depreciation) is shown on the right axis.

Values (\$000)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	\$5,911	\$5,673	\$5,933	\$6,570	\$7,162	\$6,717	\$6,915	\$7,120	\$7,330	\$7,571
Operations	\$2,533	\$2,627	\$2,747	\$2,828	\$2,909	\$2,990	\$3,074	\$3,160	\$3,249	\$3,341
Maintenance	\$505	\$478	\$490	\$503	\$551	\$528	\$542	\$555	\$569	\$583
Management	\$1,338	\$1,318	\$1,444	\$1,474	\$1,477	\$1,517	\$1,556	\$1,611	\$1,660	\$1,677
Depreciation	\$788	\$858	\$928	\$1,049	\$1,085	\$1,168	\$1,431	\$1,614	\$1,588	\$1,435
Renewals	\$1,535	\$1,400	\$970	\$1,415	\$875	\$915	\$1,320	\$920	\$920	\$2,120
Improved LOS			\$294	\$375			\$144			
Augmentation			\$98	\$125			\$48			
Program Position	0	150	260	410	940	1,706	1,938	2,811	3,743	3,593
Values (\$000)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	\$7,006	\$7,530	\$7,756	\$7,989	\$8,229	\$8,475	\$8,730	\$8,992	\$9,261	\$9,539
Operations	\$3,441	\$3,544	\$3,651	\$3,760	\$3,873	\$3,989	\$4,109	\$4,232	\$4,359	\$4,490
Maintenance	\$601	\$619	\$637	\$657	\$676	\$697	\$717	\$739	\$761	\$784
Management	\$1,727	\$1,779	\$1,832	\$1,887	\$1,944	\$2,002	\$2,062	\$2,124	\$2,188	\$2,253
Depreciation	\$1,501	\$1,522	\$1,568	\$1,615	\$1,664	\$1,713	\$1,765	\$1,818	\$1,872	\$1,928
Renewals	\$1,045	\$1,314	\$1,354	\$1,394	\$1,436	\$1,479	\$1,524	\$1,570	\$1,617	\$1,665
Improved LOS	\$144	\$86	\$89	\$92	\$94	\$97	\$100	\$103	\$106	\$109
Augmentation	\$48	\$29	\$30	\$31	\$31	\$32	\$33	\$34	\$35	\$36
Program Position	3,593	3,752	3,916	4,085	4,259	4,438	4,622	4,812	5,008	5,210

Table 4.6: Projected Operating and Capital Expenditure (\$000)

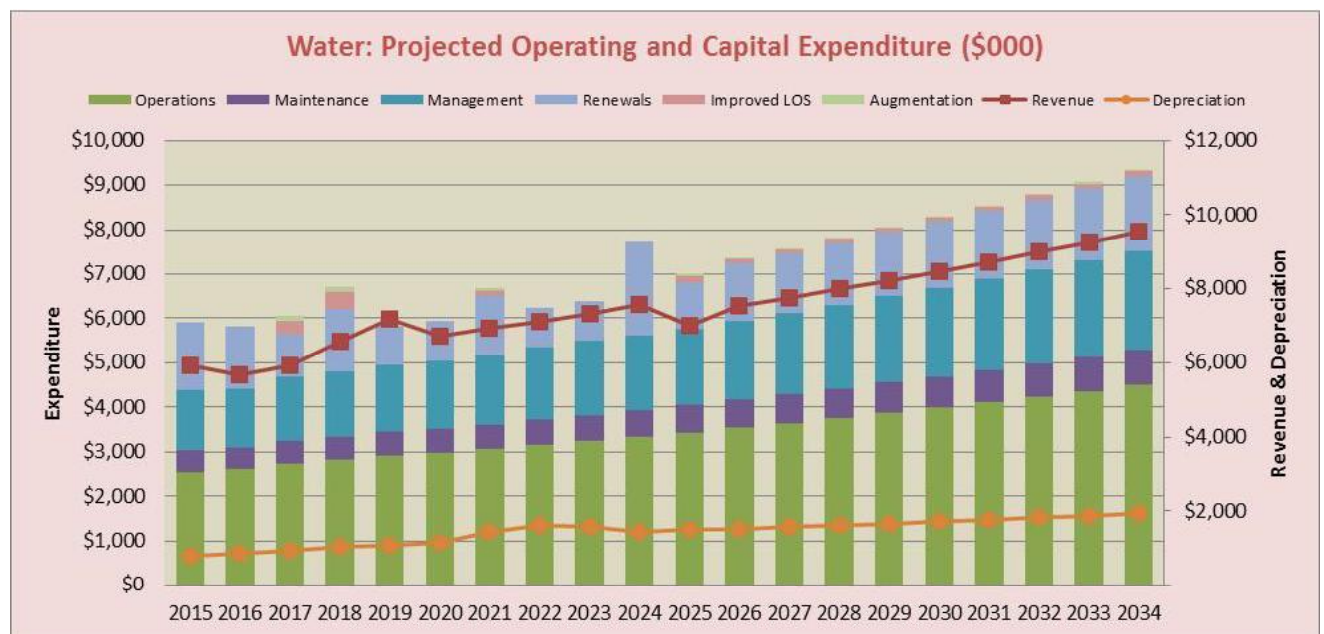


Figure 4.4: Projected OpEx and Capex

4.5 Sustainability of Service Delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the Asset Renewal Funding Ratio, Long Term Life Cycle Costs/Expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio¹¹ - 1.0

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 99% of the funds required for the optimal renewal and replacement of its assets.

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 asset life cycle. Life Cycle Costs include operations and maintenance expenditure and asset consumption (depreciation expense).

Life Cycle Costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is \$6.33 million per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years). The 10 year Average LTCM indicator is \$6.82 million per year

A shortfall between Life Cycle Costs and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is + \$494,000 per year (negative = gap, positive = surplus).

10 Year AM Financial Indicator - Life cycle expenditure is 108% of Life Cycle Costs.

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 Costs, 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 AMPs and LTFP.

Medium term – 10 year financial planning period

This AMP identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed LoS 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.

¹¹ AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

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

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first five years of the planning period is \$6.06 million on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$6.37 million on average per year giving a five year average funding surplus of \$308,000. This indicates that Council expects to have 100% of projected expenditures required to provide the services shown in this AMP.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the AMP and ideally over the 10 year life of the LTFP.

Long term Financial Plan Works Program

Council's LTCW program has an 11 year (current Budget plus LTFP) figure of \$16.2 million for the water program. The asset register indicates \$13.4 million of assets or 91% of the program will be renewals over the forward planning period. The balance of the program is divided 75% into improved LoS and 25% for scheme augmentation, therefore 7% of the program or \$0.9 million is for LoS improvements and 0% or \$0.3 million is for scheme augmentations over the planning period.

Operating and Management Costs

The Typical Residential Bill (TRB) for water is low at \$368 p.a. per assessment compared to state median of \$516. OMA costs for water supply were 101c/kl similar to state median of 99c/kl. OMA for sewerage are 147c/kl slightly favourable to state median of 155c/kl for LWU's with 3,000 to 10,000 properties.

5. Risk Management

AM is about managing strategic and operational risks. The greatest strategic risk is whether a Council is sustainable. Efficient AM contributes to risk minimisation by providing reliable and relevant information to decision makers. Risk management is the demonstrated commitment to understand problems, to classify sensitivities, to prioritise solutions and to contain the adverse consequences of threats to an acceptable level.

A primary consideration when selecting risk protection and practices is to ensure that the costs incurred are not greater than the benefits gained. Factors affecting risk include the consequences of service failure, identification of significant and critical assets, and options to mitigate impact or reduce harm.

Water supply and quality has a high dependency on external factors not immediately addressed at the local level, they often require regional coordination and planning. Some uncertain risks have longer time frames and mitigation measures are too expensive to add value and therefore Council may choose to accept the risk.

The 2004 Australian Drinking Water Guidelines (ADWG) is a framework for managing drinking water quality. Hydrosphere developed a Gap Analysis to determine Council's progress towards compliance and requirements for implementation of areas of responsibility. The Gap Analysis found that Council is proactive and responsive to known water quality risks when they were within their area of responsibility. Staff are experienced and qualified, planning is progressive to needs as they arise, however Council is yet to achieve compliance with ADWG.

Risks are generally identified and classified by the consensus approach through workshops or risk management tools (risk spectrum or risk matrix approach). These tools systematically quantify risk attributes into a risk factor, economic deprival, social disruption or environmental impact. Risk is associated with consequences completely enumerated in terms of probability. The consensus approach seeks answers to the types and source of risk, severity levels, possible outcomes and the scale of impact. Advanced techniques include 'what if' scenario type answers that seek to describe varying effects of events affecting a few customers through to widespread and unacceptable community risks.

In 2011 Council water group engaged consulting firm Hydrosphere to assess and report on Council's water supply business and strategies in accordance with ISO 31000:2009. A total of 20 key risks were identified with either a high or extreme residual risk after existing controls. An assessment of risks (by Hydrosphere Consulting)¹² associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from water network 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 are identified in the Infrastructure Risk Management Plan. A total of 20 key risks were identified with either a high or extreme residual risk rating (after existing controls):

- Ø In general, the high or extreme risks are categorised by either a high rating for Consequence coupled with a low rating for Likelihood or a low rating for Consequence coupled with a high rating for Likelihood. No risk events had a combination of elevated Consequence and high levels of Probability.
- Ø In some cases where either the Consequence or Likelihood is not known, the default rating of 4 out of 5 is assigned for these values. This results in a combined risk score which may be substantially higher than the real risk. In these cases, the recommended risk treatment aims, at least initially, to address this uncertainty.
- Ø Key water supply risks related to failure of critical assets (e.g. Jabour Weir, raw water transfer system), drought, contamination of the Jabour Weir catchment, failure of the bulk

¹²Hydrosphere Consulting, August 2011, Risk Management Strategy: Water Supply
Page 43 of 48

supply system, leakage, poorly documented AM and operation procedures, inadequate quality control procedures, climate change, urban water reform and non-compliance with regulatory requirements;

- Ø Only one risk was rated as Extreme. This was related to the potential failure of Jabour Weir, the unknown condition of the rockbolts and the lack of knowledge regarding the ability to access residual storage within the river if the Weir storage fails. Factors contributing to the identified risks include ageing infrastructure, catchment influences on raw water quality, uncertainty regarding climate change and how this will influence water supply services and reliance on the knowledge of individual staff members combined with operations activities that are undertaken intuitively rather than following documented systems and procedures.
- Ø Existing risk mitigation measures include ongoing strategic planning and investigations (e.g. assessment of Jabour Weir rockbolts, annual financial planning etc.), the Business Improvement Program, progressive development of operation and maintenance procedures, multi-skilling of operations staff, experienced staff members, conventional water supply system design and treatment processes.
- Ø The causes of some key risks (e.g. drought, contamination of Jabour Weir catchment, leakage, climate change and urban water reform), cannot be directly addressed by the Council water group and therefore alternative mitigation measures need to be developed. In some cases, mitigation is expensive which means that Council may choose to accept a relatively high level of risk however, improved management systems and emergency response procedures can assist Council to better respond to these risks.

Key water supply risks related to failure of critical assets (e.g. Jabour Weir, raw water transfer system), drought, and contamination of the Jabour Weir catchment, failure of the bulk supply system, leakage, inadequate quality control procedures, climate change, urban water reform and non-compliance with regulatory requirements.

Factors contributing to the identified risks include ageing infrastructure, catchment influences on raw water quality, uncertainty regarding climate change and how this will influence water supply services, and reliance on the knowledge of individual staff members combined with operations activities that are undertaken intuitively rather than following documented systems and procedures.

Existing risk mitigation measures include ongoing strategic planning and investigations (e.g. assessment of the Jabour weir rockbolts, annual financial planning etc.), the Business Improvement Program, progressive development of operation and maintenance procedures, multi-skilling of operations staff, experienced staff members and conventional water supply system design and treatment processes.

The causes of some key risks e.g. drought, contamination of Jabour Weir catchment, leakage, climate change and urban water reform cannot be directly addressed by the Council water group and therefore alternative mitigation measures need to be developed. In some cases, mitigation is expensive which means that Council may choose to accept a relatively high level of risk. In any case, improved management systems and emergency response procedures (listed below) can assist Council to better respond to these risks.

A structural assessment report on Jabour weir found that its integrity relies heavily on rockbolts to remain stable from overturning or sliding in flood operation condition. A Factor of Safety rating FOS of 0.9 was determined and it should be 1.1.

It was concluded that the ultimate strength of the rockbolts increased the FOS to 1.1, preventing failure from flooding to date. Condition testing by Halcrow in 2012 indicates that 6 out of 8 bolts are fully functioning, the limit for acceptable stability and safety.

Council has engaged NSW Public Works to undertake a concept and design for the strengthening of Jabour weir (\$57,860 scheduled for the 2014-15) and a capital works program totalling \$540,000 in 2015/16 financial year. Jabour Weir is the sole water supply for Casino and weir strengthening using prestressed anchor bars will provide structural surety for at least 100 years.

6. Plan Improvement and Monitoring

Asset systems is an outward function which interacts across the organisation and attempts to consolidate operational plans, risk management plans, business continuity planning, emergency response planning with higher level strategic and governance objectives. Overall the function is still developing and seeking regular appropriate input from the various asset delivery areas of Council which remain focused on their primary objectives. This restricts some asset planning outcomes but will rise in importance when quality AMPs align with higher strategic goals and provide a clear line of sight between operational, maintenance and asset rehabilitation initiatives. It is the intention of Council to ensure that the practices documented within the Asset Plans are a prime focus of culture within the workplace, so that the links from service delivery to long term strategic plans remain strong.

6.1 Accounting Standards and Regulations

In accounting for Council's assets, the following statutory requirements shall be adhered to:

- Ø NSW Local Government Act 1993,
- Ø NSW Code of Accounting Practice and Financial Reporting (updated annually),
- Ø Australian Accounting Standards, UIG Consensus Views and other prescribed requirements and standards,
- Ø AASB 13 Fair Value Measurement,
- Ø AASB 116 Property Plant and Equipment,
- Ø AASB 5 Assets Held for Sale, and
- Ø AASB 136 Impairment.

6.2 Asset management system

Council operates an integrated SQL based Asset Management System. The core programs include MapInfo a GIS asset information system and Asset Master, an Asset hierarchy and financial movements register. The programs are supported by MS Office programs and information provided by Council's financial management systems. The financial systems are primarily managed by Council's financial section. It is the responsibility of all persons with expenditure roles to ensure that costing is allocated to the correct account numbers so that financial reporting will be accurate and reliable.

The strength of the Asset Master process is the unique identifiers for each asset, accurate plans for work teams and detailed financial history of individual assets. Council has expanded its asset management and asset data team given the expansive task of data entry and data management. This is a continuing process that will produce more insight and accuracy into asset conditions, predictive strategies and financial observations.

Asset registers

Council utilises the Asset Master system from Open Office Australia. This system has been deployed in 2012 and is continually being refined to produce quality asset information. Council systems are generally connected through an SQL server but often financial reporting is performed at a higher level. This is accomplished by excel reports exported by the various asset management and financial management systems.

All construction and maintenance costs are recorded in the Technology 1 Financial Management System. Capital costs are generally costed to a series of cost account numbers that can be related to a particular asset construction project. Personnel performing asset management system data functions require a high level of rounded numeracy and literacy skills. Although the functions have a high level of repetitive function primarily due to the scale of asset numbers accuracy is required with each process. Council systems are SQL driven requiring some scripting knowledge and also general abilities with financial data, accounting interpretations and knowledge of Australian Accounting Standards.

Required changes to asset management system arising from this AMP

Council manages a wide range of physical assets. These assets provide a range of services to the Richmond Valley Community. In order to better manage its assets, Council has implemented an Integrated Asset Management System (AMS) namely Asset Master by Open Office. Asset Master enables Council to collect and store asset data and to manage its infrastructure maintenance and replacement programs.

Council's objectives in the implementation and consequent management of Asset Master are as follows:

- Ø To have a central repository for all asset data,
- Ø To undertake life cycle management of all Council asset categories,
- Ø To facilitate an asset management culture,
- Ø To reduce the overall costs and risks associated with Council assets, and
- Ø To provide the ability to add advanced asset management functionality as the Council matures with respect to asset management.

Monitoring and Review Procedures

This AMP will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide these services as a result of budget decisions.

The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into Council's LTFP.

The AMP has a life of four years (Council election cycle) and is due for a complete revision and updating within one year of each Council election.

Performance Measures

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

- Ø The degree to which the required projected expenditures identified in this AMP are incorporated into Council's LTFP,
- Ø 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 AMP,
- Ø The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- Ø The Asset Renewal Funding Ratio achieving the target of 1.0.

7. References

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

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/AIFMG.

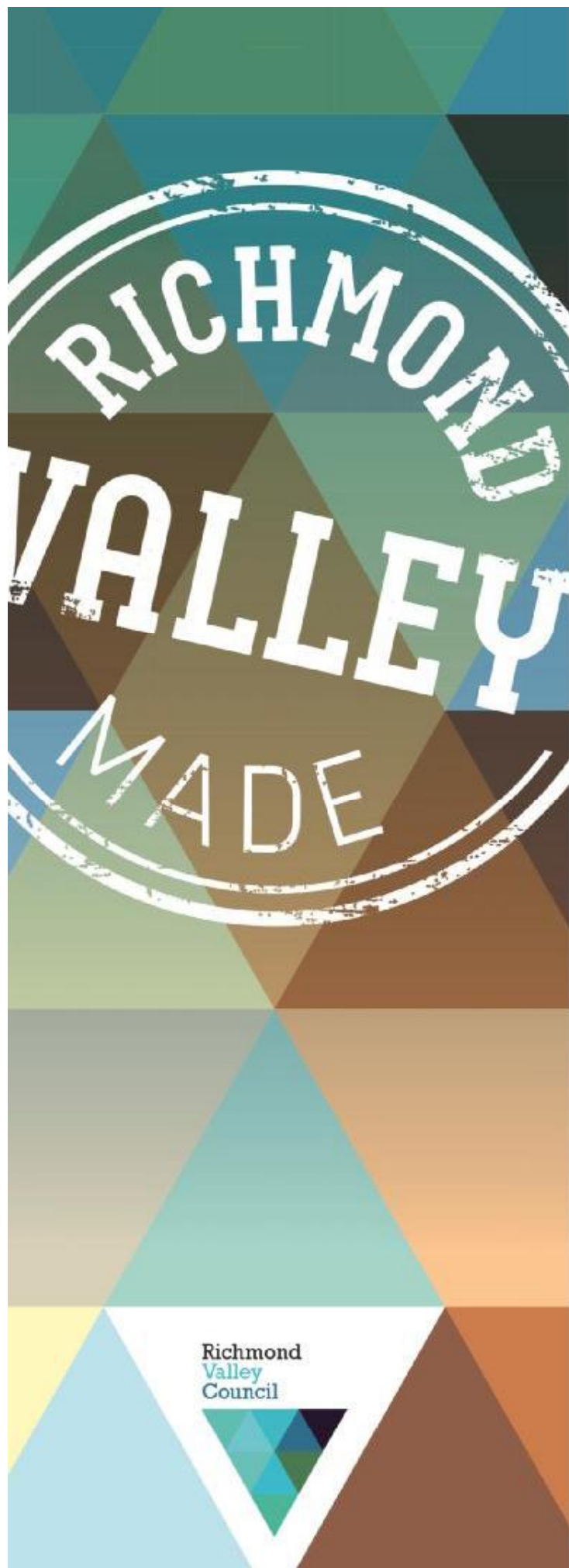
IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org/IIMM

Richmond Valley Council, Community Strategic Plan 2013 – 2025',

Richmond Valley Council Strategic Business Plan for Water Supply and Sewerage Services,

RVC Strategic Planning FINMOD Analysis and Tariff Review – Water Supply Services

Richmond Valley Council - Annual Plan and Budget



Appendix G

Organisational Development Strategy (revised) 2013-2017

Customer Service. Initiative. Teamwork. Communication. Reliability. Accountability.



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Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Contents

Contents	3
Meeting the challenges of change	4
Developing a high performance business.....	5
Build capability	5
Develop our people	5
Continually improve our service	5
How we work together	5
Richmond Valley Council's current structure @ May 2015	7
A culture of performance, innovation and customer service	8
Shifting attitudes and behaviour	8
Organisational culture	9
Aligning structures, processes, practices	9
Leading community and regional opportunities	10
Our Performance and Recognition Management System (PARMS)	11
Building capability in our people	14
Recruiting for cultural fit	14
Youth Employment Strategy	14
Working with our community	15
Developing talented individuals and teams.....	15
Health and well-being	18
Safety and risk management	19
Improving our service	20
Measuring and monitoring	20
Appendix A	21
Organisational Development - key benchmarks.....	21
Build Capability.....	21
Develop our People	24
Continually improve our service	25
Appendix B	27
Richmond Valley Council demographics as at May 2015	27
Availability of local staff	28

Meeting the challenges of change

Richmond Valley Council's Organisational Development Strategy underpins the Delivery Program 2013 to 2017 to ensure we have the right people, capability and culture to deliver efficient, quality services to our community.

Richmond Valley Council is committed to developing a culture of performance and innovation to respond to the challenges that face the sector and position us as a benchmark local government organisation shaping positive change in our community and across the region.

Council has been modernising its organisation and how we operate over the past three years, refreshing the culture and renewing structures, systems and processes to develop a winning culture and business practices to deliver our commitments to the community.

A marker of how the organisational transformation program is impacting community perception and developing a reputation for effective service delivery was reflected in a recent poll of the region's ratepayers conducted by the local "Northern Star" newspaper in November 2014 which voted Richmond Valley Council as the best council in the Northern Rivers.

Developing a high performance business

Richmond Valley Council's Organisational Development Strategy provides an overarching context and direction to guide the shaping of our culture and development of our people and business practices to enable us to respond to the key challenges and opportunities for the period 2013-2017.

The Organisational Development Strategy aims to:

Build capability

- provide a 'flat' structure that promotes matrix management and a project approach with collaboration achieving coordinated action and outcomes
- build a culture of engagement and performance enabling our people to respond to change with an agile, innovative and collaborative approach
- attract new talent to refresh our workforce and bring innovative ideas and new capabilities
- enable effective, coordinated communication and decision-making supported by quality information

Develop our people

- invest in developing our leaders and recognising and rewarding our high performers
- identify and develop emerging leaders as part of succession planning
- develop the skills and capacity of our people with flexible learning approaches
- promote diversity and inclusiveness to optimise our mix of talent and reflect our community
- establish objectives and key performance indicators that align across the organisation to maintain purpose and direction and monitor progress
- encourage active leave management to maintain health and well-being
- maintain sound safety and risk management practices to protect the community and our employees

Continually improve our service

- build integrated technology platforms that facilitate a productive way of doing business
- identify priorities through service level reviews
- improve efficiency and effectiveness through ongoing business process reviews

How we work together

Providing an optimal structure for change and growth is one enabler of organisational performance.

Richmond Valley Council has undergone significant structural change over the past two years to develop a customer facing organisation with an outcome focus. The management team was refreshed and restructured with areas of responsibility adjusted to reflect the talents of the team and the needs of the changing organisation. A leadership development program was initiated to create a high performing leaders group with the capability to lead the organisation through change.

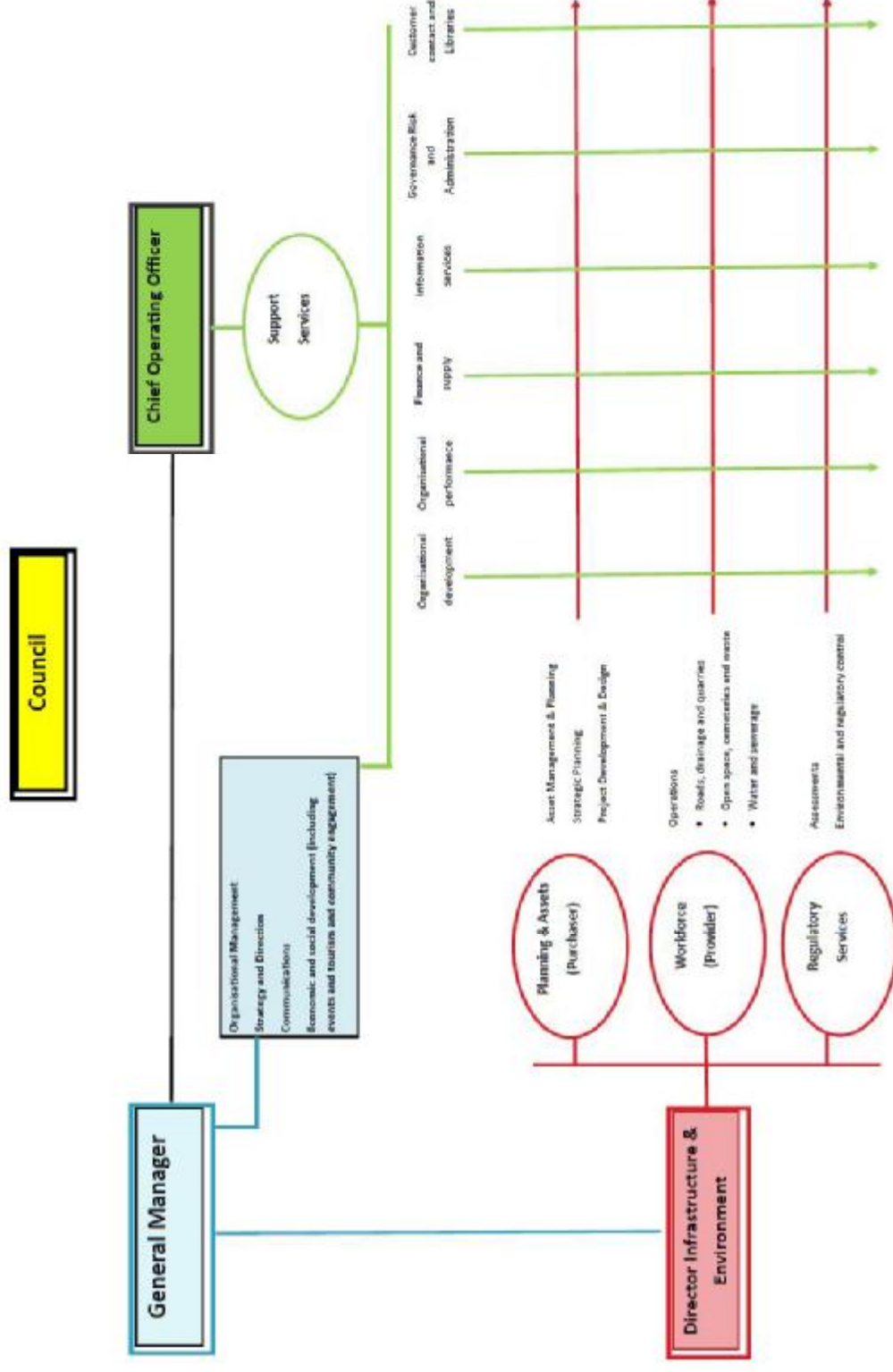
The initial restructure was revised again a year later with the introduction of a new business model. At the executive level of the organisation the General Manager's title has been modernised to Chief Executive Officer (CEO) and a new Chief Operating Officer (COO) was recruited, responsible for overseeing service teams and organisational performance. A Director of Infrastructure and Environment was appointed from within, responsible for the frontline workforce and service deliverables. Adjustments were again made to management and teams across the organisation to reinforce the business model.

The current structure, based on business units and service teams as enablers of organisational performance, supports a customer focused organisation delivering quality outcomes.

The structure provides the context for a flexible matrix management approach and a flat organisation with an integrated outcomes focus. This move away from distinct departmental functional responsibilities and hierarchical management has addressed the issue of a silo paradigm and a bureaucratic approach which produced ineffective communication and service across the organisation.

The matrix approach is enhancing collaboration across the different business units and promoting lateral communication. This has been further supported by the establishment of a Project Management Office to drive delivery of Council's priority projects and monitor organisational performance.

The organisation structure when supported by high performing leaders and an engaged and enabled staff builds a strong foundation for organisational performance and customer service.



A culture of performance, innovation and customer service

Through application of the integrated planning and reporting framework, Richmond Valley Council has refined its strategic planning and annually clarifies priorities and deliverables, reviewing the resources required for strategy execution. People deliver strategy and Council is focused on how we will develop a winning culture and business practices that enable us to realise our commitments.

It is commonly understood that culture can make or break organisations. Richmond Valley Council is building a successful culture to drive strong performance and strengthen reputation, innovation and service delivery.

Culture is defined as the intangible assumptions, social norms, values, vision, systems, language and habits common in an organisation that determine how people will interact, influencing behaviours and outcomes. The context in which people operate is influenced by numerous factors which can be influenced as levers for change. The following model informs an integrated approach to change leadership:

	Interior perspective	Exterior perspective
Individual	People's ideals, beliefs, mindsets	People's behaviour
Collective	Organisational & community culture	Organisational systems (structures, processes, practices)

Adapted from Ken Wilber's four-quadrant model and applied to organisations

Council is addressing the quadrants in a number of ways:

Shifting attitudes and behaviour

- Organisation communication strategy and plan developed and implemented.
- Senior leadership development program.
- Ending of the Working Hours Agreement in 2012 to provide for maximum flexibility of working arrangements for service delivery.
- Reviewing the salary system in consultation with staff to reflect the needs of a modern workplace.

- Introducing a Performance and Recognition Management System (PARMS) as a framework to align staff values and behaviours with corporate and community direction and to facilitate performance coaching conversations into daily operations.
- Recognition and reward initiatives to celebrate high performing individuals and teams and reward achievements directly linked to activities contributing to Council's strategic goals.
- Emerging leaders and talent management programs in development to recognise the needs of an increasingly diverse workforce.

Organisational culture

- Rebranding project with new modern corporate logo, town entry signs and brand awareness campaign designed with the local Chamber of Commerce ("I did it in Casino" promotional campaign supported by a "Richmond Valley Made" merchandise stamp) to build civic pride and economic development.
- Our people promoting Richmond Valley Council as an employer of choice.
- Restructuring the organisation to move to a matrix management approach and outcome focus.
- Reviewing the recruitment and retention strategy to attract, develop and retain talented employees to promote innovative ideas and new capability.
- Initiating a Youth Employment Strategy to create job opportunities for the region's youth and refresh the culture bringing diversity and new approaches (21 traineeships offered to local youth in 2014/2015).
- Building capability by reducing reliance on contractors and directly employing more local people and investing in plant and equipment stock.

Aligning structures, processes, practices

- Renewal of internal systems and processes to manage and utilise data for effective decision-making.
- Implementation of an integrated technology solution improving the overall business experience and delivering professional customer interactions.
- Corporate information systems managing Council's knowledge base with online standardised, centralised procedure manuals for each area being developed.
- Project Management Office established to ensure efficient and effective delivery of projects and facilitate cross-collaboration of teams.
- Establishment of "one stop" Customer Service Centres with extended hours to support a customer focused organisation.

Leading community and regional opportunities

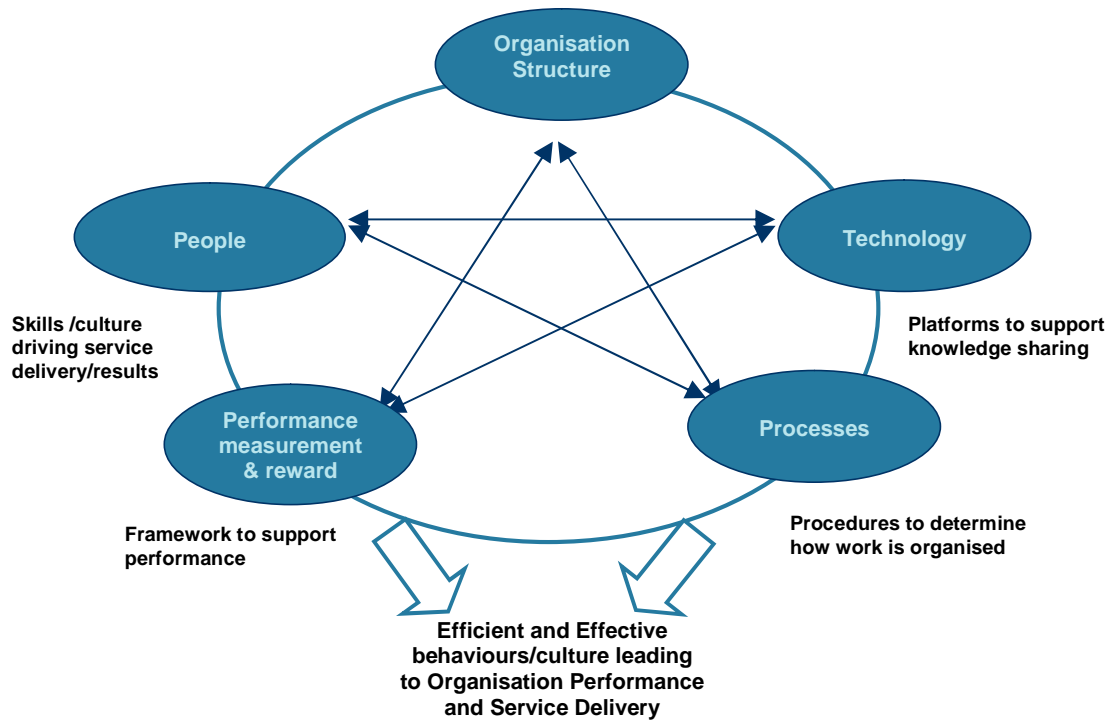
- Taking initiatives to the NOROC General Managers group and supporting the development of the Northern Rivers Joint Organisation.
- Capitalising on CEO appointment as Chair of Northern Rivers Regional Development Australia.
- Developing, promoting and hosting regional training initiatives.
- Collaborating to develop innovative approaches to regional IT projects.
- Contributing to the Northern Rivers Human Resources Interest Group and extending its focus to organisational development in a regional context.
- Leading the way with regional procurement to achieve savings to enable additional investment in the region.

Our approach to cultural transformation demonstrates Richmond Valley Council's commitment to developing a culture of performance, collaboration and innovation to respond to the challenges that face the sector and become a benchmark local government organisation shaping positive change in our community and across the region.

Our Performance and Recognition Management System (PARMS)

Council introduced a new Performance and Recognition Management System (PARMS) in 2013 to drive a performance culture and support employees to engage and fully contribute to organisational goals. Progression through the organisation is tied to evidence of consistently strong performance. A flexible incentives program is applied to recognise and reward the achievements of individuals and teams.

PARMS is positioned as part of an integrated approach to organisational development and is a key mechanism to engage our people in an ongoing conversation for performance.



In the initial implementation of PARMS the emphasis was to integrate Council's values, core qualities and behaviours into the way of doing business by:

- Reviewing key responsibilities and accountabilities in all role descriptions to reflect the needs of the delivery program;
- incorporating our values, core qualities and behaviours into all role descriptions and hiring primarily for cultural fit as well as experience and skill;
- defining the core qualities and behaviours expected of all employees and integrating a rating assessment of behaviours into performance reviews;
- performance coach training delivered to all supervisors;
- recognising and celebrating high performing individuals and teams role modelling the values and behaviours.

Whilst performance coaching must be a continuous process, an annual review cycle is also provided to formally assess outcomes for the past year and set objectives for the next year.

The annual performance review facilitates a positive conversation to assist all employees to:

- clarify key responsibilities and priorities;
- review performance against expected outcomes;
- assess the application of values, core qualities and behaviours;
- acknowledge the past year's achievements;
- receive feedback on areas for development;
- establish clear objectives and performance indicators linked to organisational goals;
- discuss how the supervisor can better support employee performance.

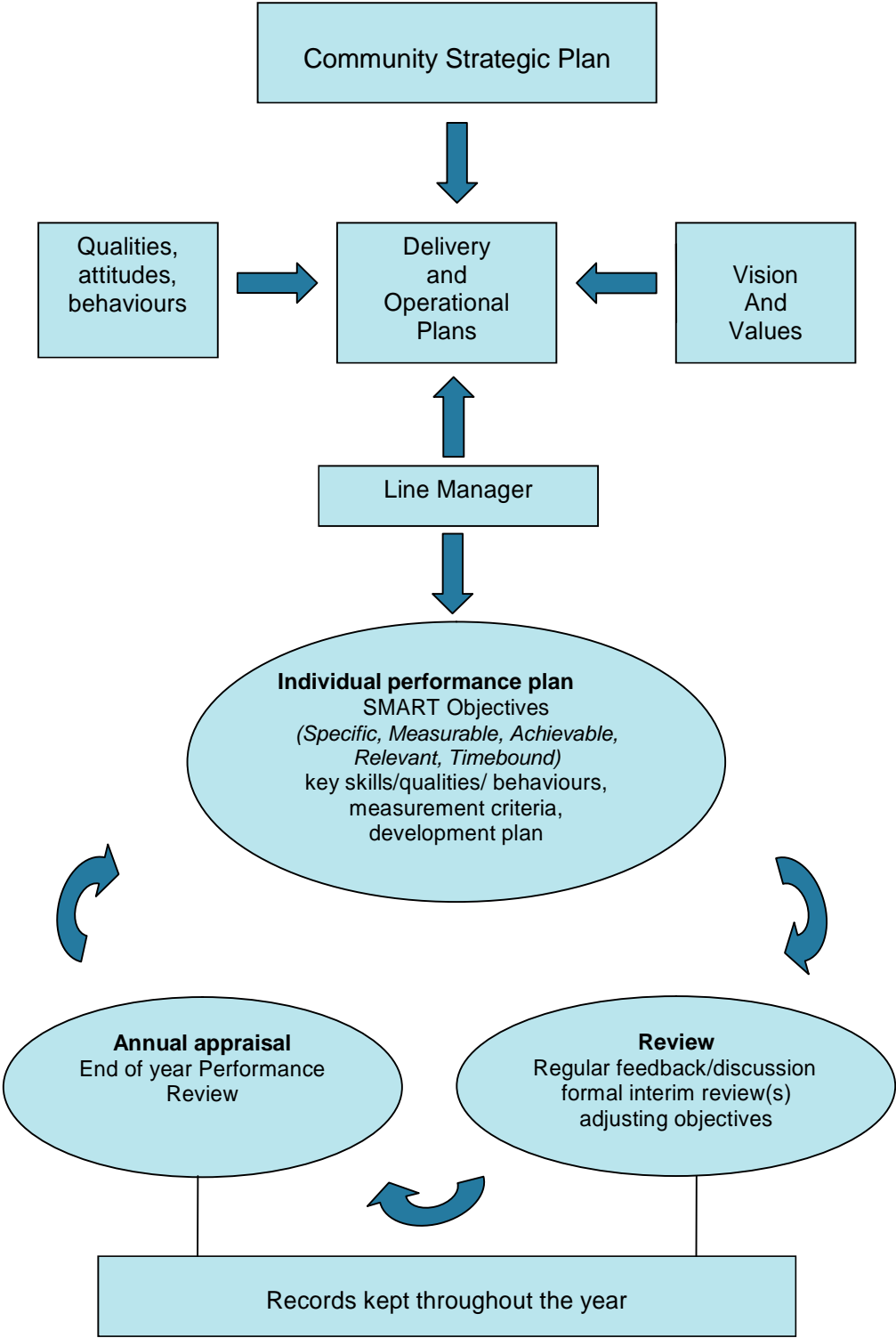
In addition, the review process:

- identifies training and development needs to inform the organisational Training and Development Plan;
- encourages active leave planning to maintain health and well-being;
- assesses short-term succession planning requirements to cover leave absences.

With a platform of consistent behaviours in place, the second cycle of PARMS performance reviews built on this foundation by bringing an emphasis to forward planning. Every employee was supported to develop "SMART" objectives and performance indicators which align with the priority goals and key performance indicators of Council.

PARMS is central to engaging staff to fully contribute to organisational goals by integrating performance coaching into the way we do business. To engage and contribute fully to organisational goals every employee must understand how their role fits into the overall strategy of the organisation, and have clear objectives and actions plans with defined performance indicators that link to Council's strategic goals.

The following overview depicts how managing performance is intrinsically linked to our planning and delivery processes:



Building capability in our people

Recruiting for cultural fit

Richmond Valley Council's values statement recognises that organisational success is based on our people's ability to perform:

“Council promotes a workforce of passionate people, loyal to the organisation, colleagues and the community. Our people are held as our primary asset and integrity and trust is the foundation of our culture.”

Attracting and developing the right people and recognising the benefits of a diverse workforce are key to shaping a successful culture. Council has been modernising the organisation and refreshing the culture over the past three years to achieve efficiency and effectiveness. This environment coupled with the lifestyle opportunities of the region form our core proposition to attract people to live and work in the beautiful Richmond Valley.

Key initiatives to attract the right people to employment opportunities include:

- review of Council's employer brand proposition to promote Richmond Valley Council as an employer of choice offering an attractive lifestyle package;
- review and improvement of recruitment processes to create a positive, efficient experience;
- hiring for cultural fit as well as skill and experience;
- refresher training for supervisors in the recruitment process;
- deployment of the HR modules in the integrated technology system to streamline HR processes.

Youth Employment Strategy

Council has an aging workforce which is being addressed by our Youth Employment Strategy (YES) designed to attract and develop younger recruits. This initiative also supports a key priority of Richmond Valley's community to create youth employment opportunities as part of its economic development strategy.

In 2014/2015 twenty one (21) local high school students said “yes” to our invitation to develop a career at Richmond Valley Council through scholarships, apprenticeships and traineeships. The key success factors of our Youth Employment Strategy, an ongoing initiative, are:

- annual career's evening and information sessions hosted by Council to promote the wide range of career opportunities available in local government;
- building strong relationships with local educational institutions to promote career opportunities in Council;
- 21 local high school students recruited in 2014/2015 to a range of roles including business administration, civil construction, electro technology, engineering, fabrication, finance, horticulture, planning and development, mechanical, stores and water

operations (2 scholarships, 1 internship, 5 apprenticeships, 7 traineeships and 6 school-based traineeships);

- scholarships offered for Civil Engineering and Social and Urban Planning degrees at the region's Southern Cross University to address future skill shortages;
- mentors assigned to trainees with regular progress reporting.

Working with our community

Complementing the YES initiative, Council also creates employment and development opportunities through the following initiatives:

- Reducing reliance on contractors by directly employing more local people and investing in plant and equipment stock. The success of this strategy is evidenced by delivery of Council's scheduled capital works projects to time and budget with quality outcomes since 2013.
- Implementing our Aboriginal Employment Strategy to ensure indigenous employment at Council reflects the local population percentage.
- Providing work experience opportunities for young people to gain skills and get a feel for working at Council.
- Working with the local university to provide work experience for under graduates.
- Offering traineeships to existing and new employees (33 trainees employed by Council at May 2015).
- Partnering with agencies to implement community projects providing work placement opportunities for young unemployed people to assist them in becoming job ready.
- Partnering with agencies to support school-based traineeships for aboriginal youth providing ongoing employment opportunities at Council upon successful completion in a number of cases.
- Providing placements for Work for the Dole participants.
- Contributing to career events at local educational institutions.
- Promoting and facilitating volunteer involvement in community programs.

Developing talented individuals and teams

Council offers a diverse range of careers and fosters a culture of learning and development. In 2014 Council undertook a full review of training to ensure current and future training needs would support Council's strategic goals.

Training needs are identified with staff as part of the PARMS process and reviewed in the context of the delivery program. Council's training and development investment is over \$500K annually.

Development of all our people commences with a three-month induction program including a Corporate Induction day presented by the General Manager and incorporating a tour of Council's assets. The induction process creates a good understanding and sense of engagement with Council's business at all levels of the organisation.

In addition to our formal training plan, developing talent management programs that recognise the different needs of an increasingly diverse workforce is a critical part of our career and succession planning. Some examples of talent management initiatives include:

- Emerging leaders program exposing rookie recruits to senior leaders.
- Mentoring programs in development for all trainees.
- Gen Y/Z development and networking initiatives.
- Master classes.
- Leadership development program for the senior management team.
- Women in leadership programs.
- Succession plans and mentoring programs in place for key roles.
- Short-term succession planning and mentoring in place for all roles.

Recent examples of informal talent management initiatives include:

- Participation of some of our younger recruits in the Beef Week fashion parade, modelling the "Richmond Valley Made" merchandise.
- Tour of the Casino Saleyard for our Casino based YES recruits during Beef Week.
- Smart devices Master class delivered by Gen Y/Z for our outdoor staff and others.
- Scholars and interns invited to management and meetings.

Another key talent management strategy is to create an environment of innovation and accelerated learning from 'action-reflection-action' so that knowledge enhancement and skill development shifts from the formal environment of classroom training to the more informal learning environment of the workplace itself (a marker of a healthy culture). In this environment the teachers are colleagues, peers and leaders, who are engaged with each other in 'action learning'. Within this context coaching or extracting the learning and knowledge transfer from the immediate work challenges is a value added activity.

Initiatives to support collaboration, innovation and action learning include:

- Establishing 'change agents' across the organisation to support the change process.
- "Ideas in a box" concept.
- Establishing cross organisational working groups focused on priority challenges/opportunities.
- Project teams, involving people from across the organisation, driving priority programs.

- Engaging and enabling staff in coaching conversations integrated into daily operations.
- Peer mentoring programs to facilitate knowledge transfer across generations.
- Development of interpersonal skills to facilitate a positive and productive response to change and action learning.
- Communication planning to expose staff to senior management and engage all employees in organisational development and change.
- Development of a practical guide to deliver regular and consistent communication activities via a range of media to provide ongoing purpose and direction to staff in execution of their roles and in the development of a high performance culture.
- Promotion of outstanding performance and achievements of our people/teams via a range of media, including a weekly message from the CEO delivered online to smart devices.
- Consultative mechanisms in place to facilitate the change process and minimize disruption to our service.
- Partnering with our neighbours on regional initiatives.

Health and well-being

Council actively encourages employees to utilise the leave provided to them to assist in proactively maintaining their health and wellbeing.

Council is committed to implementing a focused health and wellbeing program to promote a healthy workplace. The aim of the program is to:

- create a healthy, supportive and safe work environment evidenced by fewer injuries/claims;
- ensure health becomes an integral part of business planning; and
- deliver flow on effects to worker families, the community and the environment.

Studies provide compelling evidence supporting the value of workplace health and wellbeing initiatives for the physical, mental, and social wellbeing of employees. There is direct evidence of this at Richmond Valley Council reflected in a downward trend of injuries over the past two years.

One simple example of a successful intervention for well-being was the introduction of a morning exercise program at our depots before the work crews commence jobs to ensure they have warmed up their muscles to prevent strains.

When injury does occur in the workplace a focused injury management process is implemented to assist employees with appropriate support interventions. Rehabilitation programs are also implemented to assist employees to return to work as soon as possible after injury by providing alternative/suitable duties.

All employees are encouraged to access our Employee Assistance Program to proactively support them with personal or work related issues.

The health and wellbeing program integrates with the organisational development plan and complements the cultural change process by supporting:

- increased productivity;
- reduced worker turnover;
- increased staff morale, satisfaction and motivation;
- increased ability to attract new employees;
- reduced sick leave.

Safety and risk management

Council is committed to promoting and improving Work Health, Safety and Risk Management to ensure a safe and healthy environment for our workers and our community. A Safety Management Plan is implemented across Council ensuring a strong safety culture throughout the organisation.

Through the ongoing development of our systems we ensure our responsibilities are achieved by focusing on proactive safety and risk initiatives which are integrated into daily operations by:

- Ongoing WHS training for all employees and volunteers.
- Regular toolbox talks on safety issues.
- Proactive Safety Committee.
- Risk identification, assessment and control measures.
- Incident reporting and corrective actions developed and implemented.
- Ongoing auditing and review.
- Communication and consultation with all stakeholders.

Work Health and Safety and Risk Management is a corporate priority in both strategic and day to day conduct of Council and its related activities reinforcing a proactive safety culture across the organisation.

Improving our service

Council must continually adapt to meet the changing service expectations of the community whilst achieving efficiency savings across Council. This requires an ongoing review and scrutiny of all Council's operations. Service level reviews will be conducted as part of planning and prioritising activities in consultation with the community.

Council has invested over \$1.7M to implement an integrated Corporate Information System, deploying the following modules in this delivery program period: Financials & Supply Chain, HR & Payroll, Property & Rating, including a Customer Request Management system. This integrated system has provided significant improvement to our service provision and continues to provide opportunities for improving business processes and information management. Ongoing Business Process Improvement working groups are in place to ensure Council continually improves efficiency, effectiveness and productivity.

Operating in an environment of change is now the norm and developing an adaptable and flexible culture is our aim for continual improvement.

Measuring and monitoring

Management relies on timely and accurate data to track performance and make informed decisions. Richmond Valley Council introduced sustainability and performance benchmarking at both the elected and operational levels to address this need. Regular dashboard reporting of organisational key performance indicators supports senior management to identify challenges and opportunities, proactively facilitating a culture of innovation and continuous improvement.

Performance monitoring has also been integrated across the organisation via the performance review process as part of PARMS. All employees have key objectives and performance indicators aligned to organisational objectives to monitor progress against deliverables and service levels.

Staff surveys are used to measure the success of the culture transformation program. In addition, ad hoc internal surveys of business units/processes are utilised to ensure continuous improvement to customer service.

This focus on corporate performance measures and reporting of outcomes is maintaining a performance culture for service delivery. It also enables Council to recognise and reward employees for activities directly linked to achievement of its strategic goals.

Richmond Valley Council is one of 78 councils participating in the NSW Local Government Operational and Management Effectiveness Insights Surveys conducted by PwC and Local Government Professionals Australia. The reports from the surveys are being utilised to benchmark our progress and identify areas for improvement. Appendix A below outlines the priority benchmarks being reviewed to support Richmond Valley Council in becoming a high performing organisation.

Appendix A

Organisational Development - key benchmarks

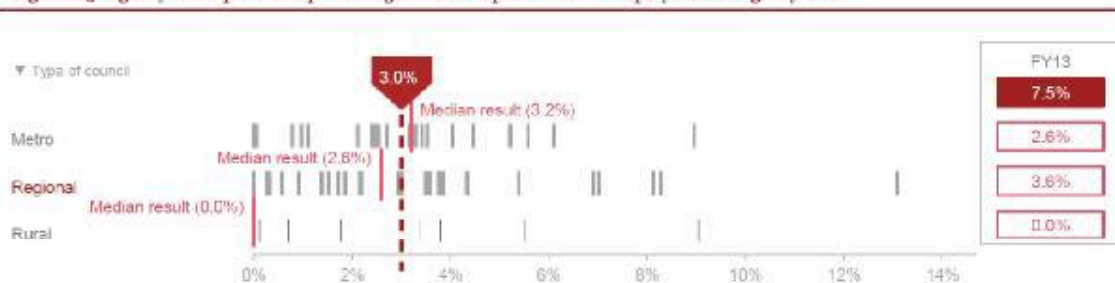
Richmond Valley Council is one of 78 councils participating in the NSW Local Government Operational and Management Effectiveness Insights Surveys conducted by PwC and Local Government Professionals Australia. The reports from the surveys are utilised to benchmark progress and identify areas of improvement.

Outlined below are extracts from the FY14 report highlighting the priority benchmarks being tracked to support Richmond Valley Council in becoming a high performance organisation:

Build Capability

Agency staff (agency staff spend as a percentage of total expenditure on employees/agency)

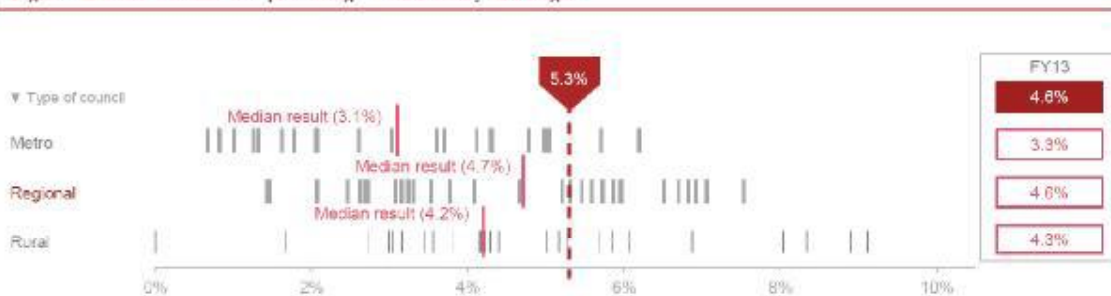
Figure 1.3: Agency staff spend as a percentage of total expenditure on employees and agency staff



- Reflects Council's decision to reduce reliance on contractors and directly employ local people and invest in plant and equipment. Percentage expected to reduce to zero.

Paid overtime

Figure 1.2: Paid overtime as a percentage of total salary and wages



- Overtime has increased partly due to leave replacement additional hours by specialist staff (usually funded by absent staff salary allocation).
- Reviewing ordinary time productivity and prioritisation and flexibility of start/finish times.
- Overtime is now trending downwards. Aim to reduce overtime to 4% benchmark.

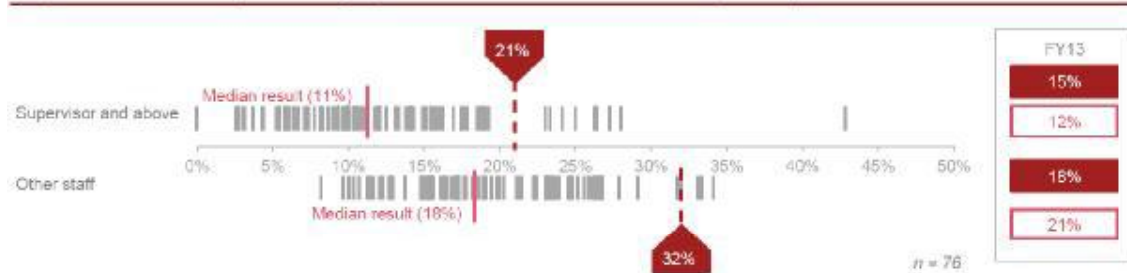
Leave management



- Active leave management plan in place to reduce AL to 8 weeks and LSL to 13 weeks, with a further reduction to 4 weeks AL / 8 weeks LSL in line with industry benchmarks.

Rookie rate (percentage of new employees in past 2 years)

Figure 1.5: Rookie rate by staff level (proportion of staff who commenced in the past two years)

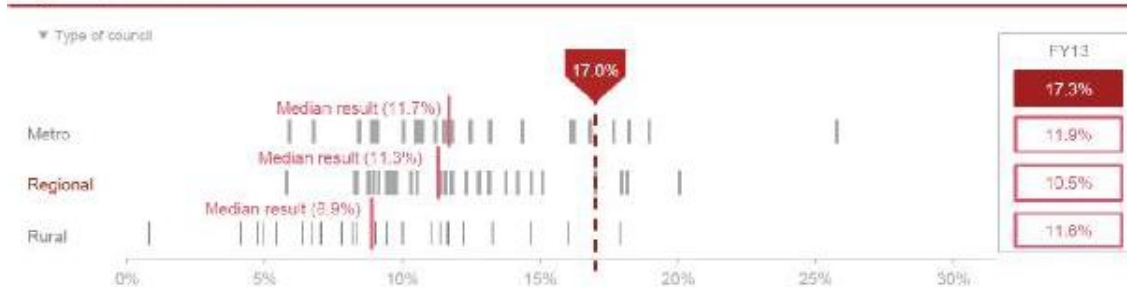


Overall survey population rookie rate is 17%

- Part of the strategy to refresh our culture.
- Attracting talent into new roles to build capability to reflect the changed priorities.
- Recruiting young and local people to address an aging workforce and drive economic development.
- Branding proposition review to attract for cultural fit.
- Recruitment process review to ensure a positive experience for applicants.

Staff turnover rate (excluding casuals)

Figure 1.7: Staff turnover rate

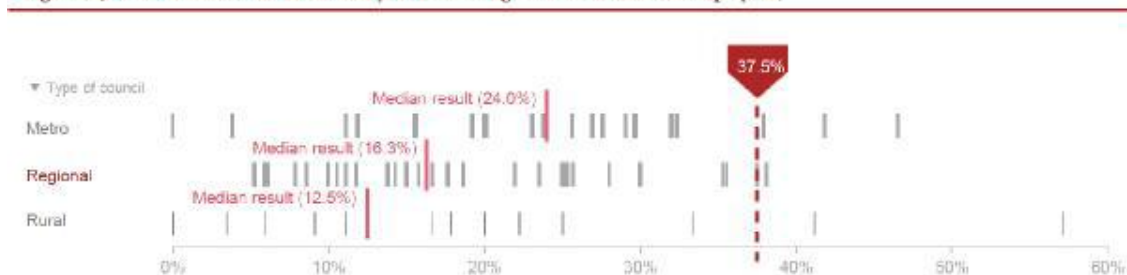


Survey population median staff turnover rate is 11%

- Reflects our change strategy to clear and refresh our culture. The benchmark will be monitored and adjusted as the organisation stabilises.

Turnover rate in first year of employment (excluding casuals and fixed term employees)

Figure 1.9: Staff turnover rate in the first year (excluding fixed-term contract employees)

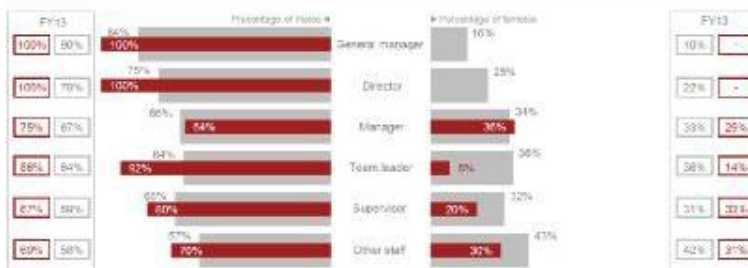


Survey population median staff turnover in the first year is 18%

- FY13 proportion of leavers with less than one year service was 11%.
- 25% female turnover in first year (regional benchmark 20%).
- 67% Gen Y turnover in first year (regional benchmark 18%) – area of concern being addressed by tailored development programs and flexible incentives.

Gender diversity – 28% female staff

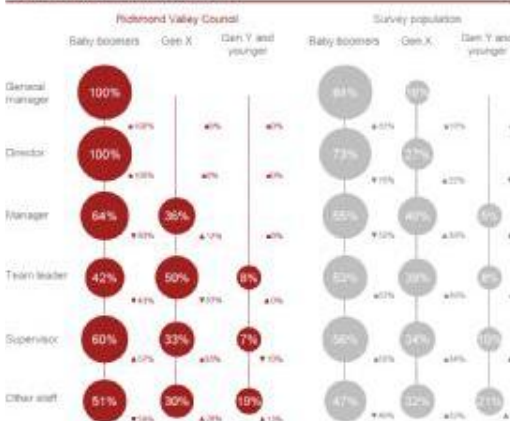
Figure 1.43: Staff-level gender split at 30 June 2014



- Area of focus to improve diversity, particularly in leadership roles. Recruitment process review with refresher training to promote active diversity strategy. Succession planning commenced to actively develop younger leaders.
- Newly promoted female Director will be reflected in FY15 report.

Generational diversity

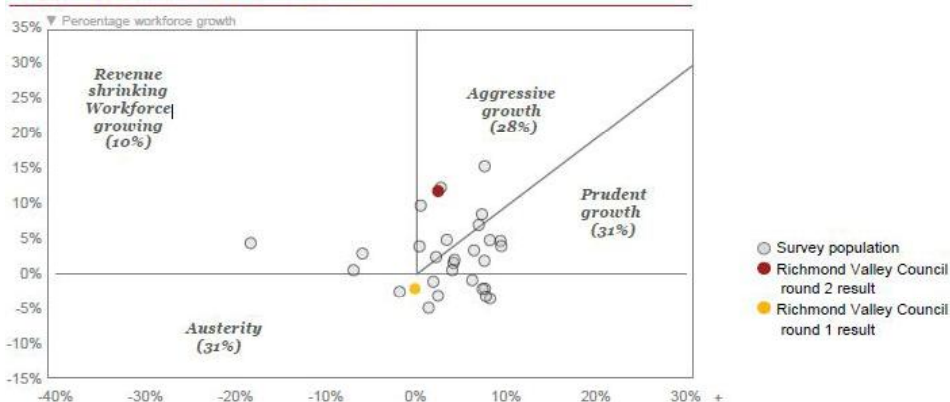
Figure 1.44: Generational staff level mix



- Area of focus to support career development of young talent with emerging leaders program.
- 21 young local recruits into scholarships, apprenticeships and traineeships in 14/15.

Productivity (output: controllable revenue growth; workforce: growth in total employee costs)

Figure 1.44: Productivity - Regional councils



- Movement from austerity to aggressive growth during significant period of change (Special Rate Variation, workforce cost increases as part of intentional strategy).

- Aim for prudent growth as the organisation stabilises.

Develop our People

Training Spend

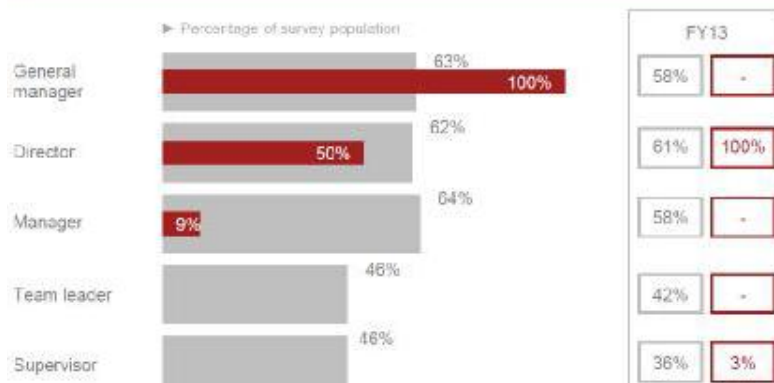
Figure 1.37: Actual training spend against training budget per FTE



- Formal training plan developed annually as part of PARMS process.
- Informal development interventions for collaboration, innovation and action learning.
- Mentoring programs in place for scholars, apprentices and trainees.

Management development training

Figure 1.39: Percentage of staff who participated in management development training



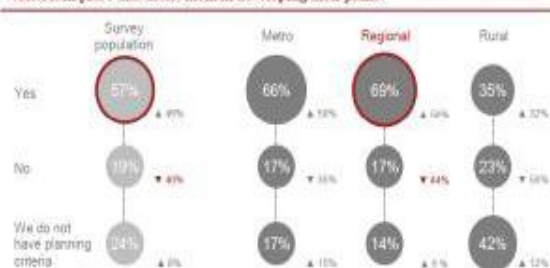
- Leadership development program for senior management team.

Staff engagement

Figure 3.6: Did your staff engagement levels improve during the year ending 30 June 2014?



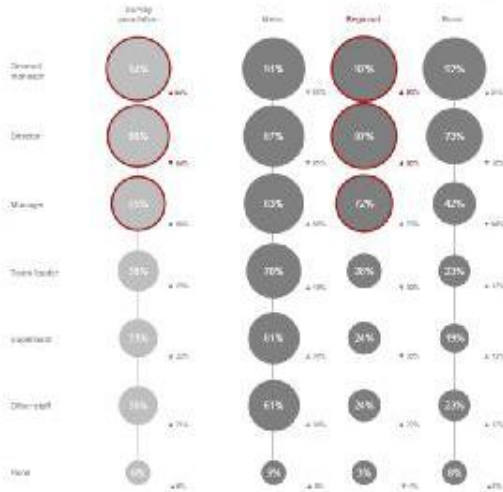
Figure 3.7: As part of the business planning process, do your staff have planning criteria in place that assist them in developing their plans?



Continually improve our service

Linking performance outcomes to the Delivery Program

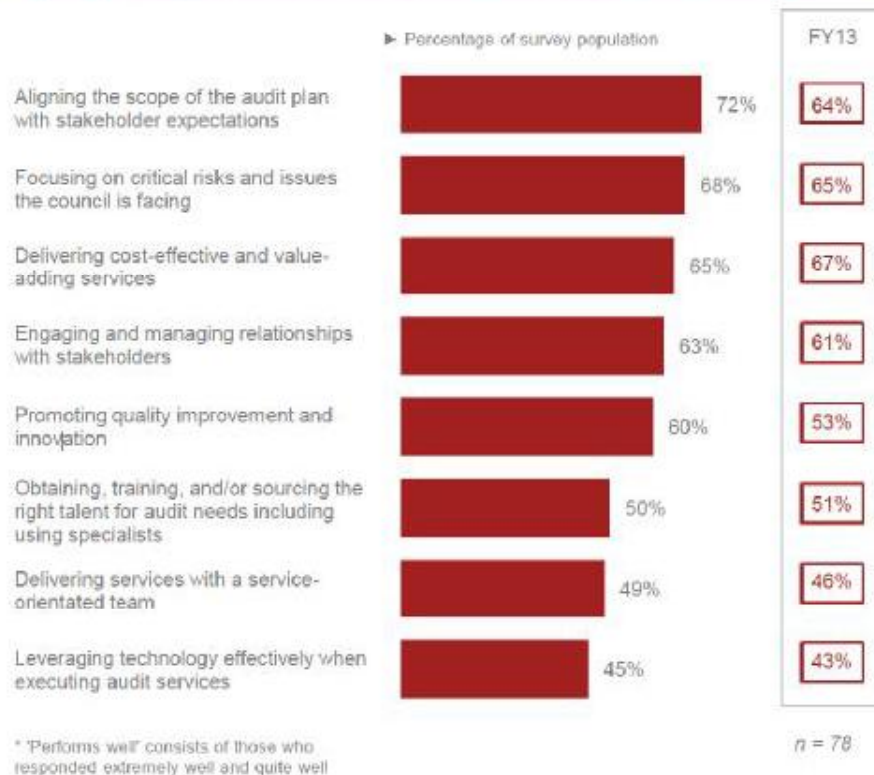
Figure 4.3: Which staff levels have their performance appraisal outcomes linked directly to the Delivery Program?



- Area of focus to align individual/team objectives with strategic and operational goals. During the PARMS process in FY14/15 all staff were supported to establish clear objectives and performance indicators linked to organisational goals for the next financial year.

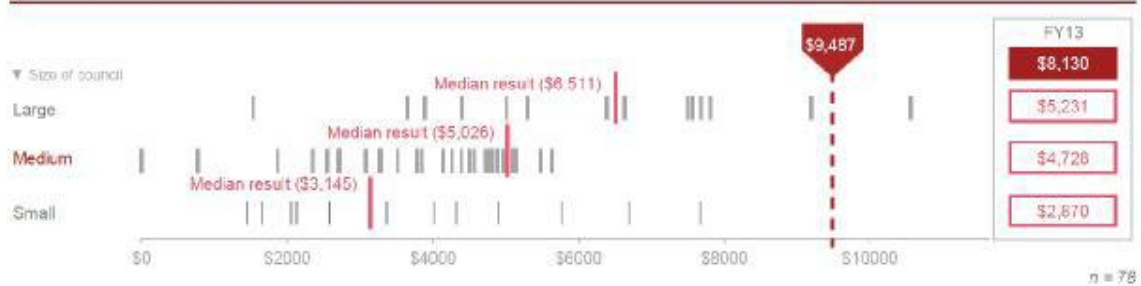
Internal audit effectiveness

Figure 4.9: Does your internal audit function perform well* in the following areas?



IT Strategy

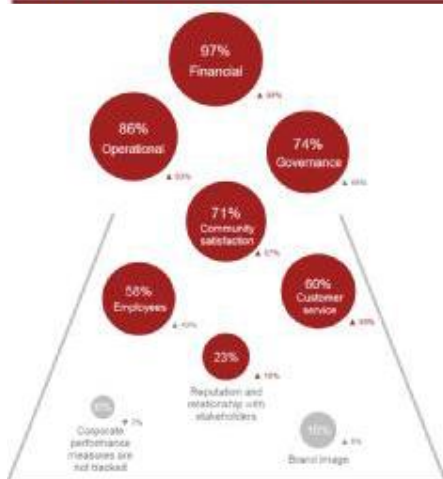
Figure 3.8: IT spend (\$) per employee



- \$1.7M investment in integrated technology system.
- IT innovation budget.
- Draft IT strategy being finalised to outline a clear vision on how technology will support outcomes and develop efficiency and effectiveness.

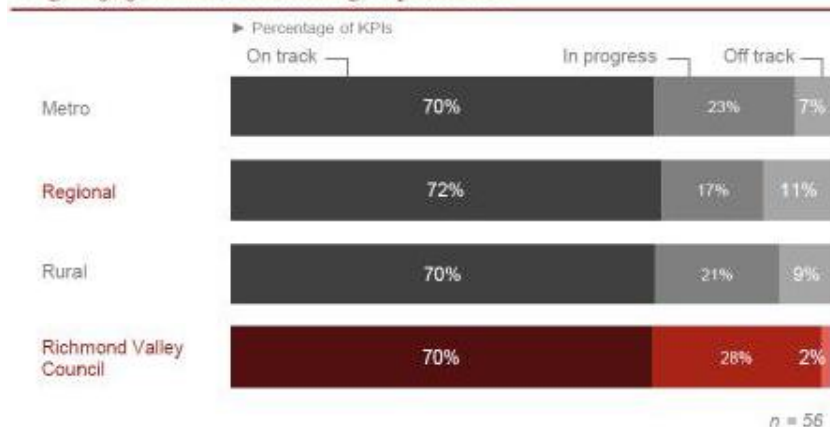
Corporate performance measures

Figure 5.11: Which corporate performance measures are formally tracked and reported to council?



- Regular dashboard reporting of key performance indicators in development.
- Performance coaching and tracking integrated across Council via PARMS process.
- Communication plan in place to regularly update employees on how KPIs are tracking.

Figure 5.13: Results from tracking corporate KPIs



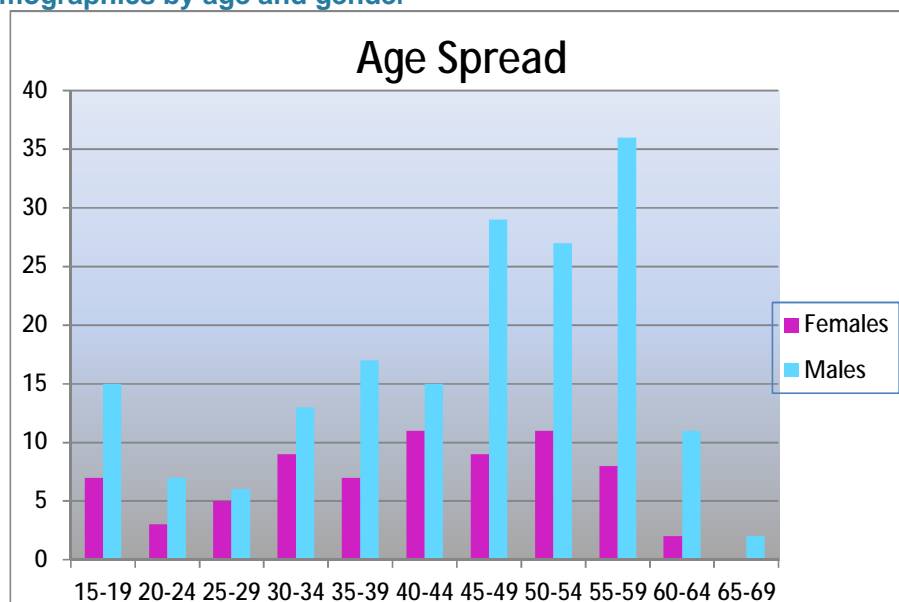
Appendix B

Richmond Valley Council demographics as at May 2015

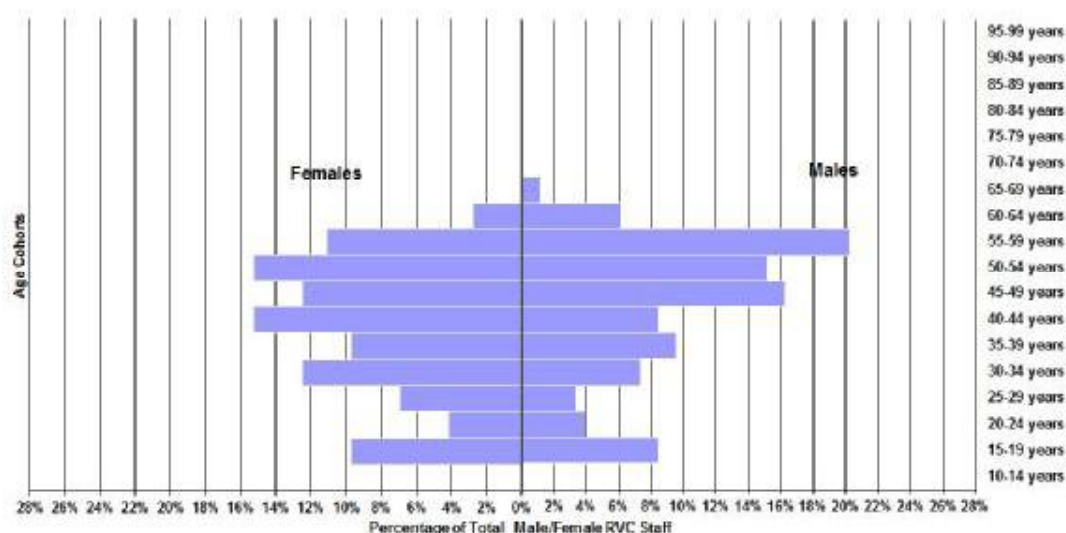
At first glance the age range of Richmond Valley Council employees towards being an older workforce is readily apparent, particularly amongst the male population.

The Youth Employment Strategy has increased the Gen Y cohort in 2014/2015.

Staff demographics by age and gender



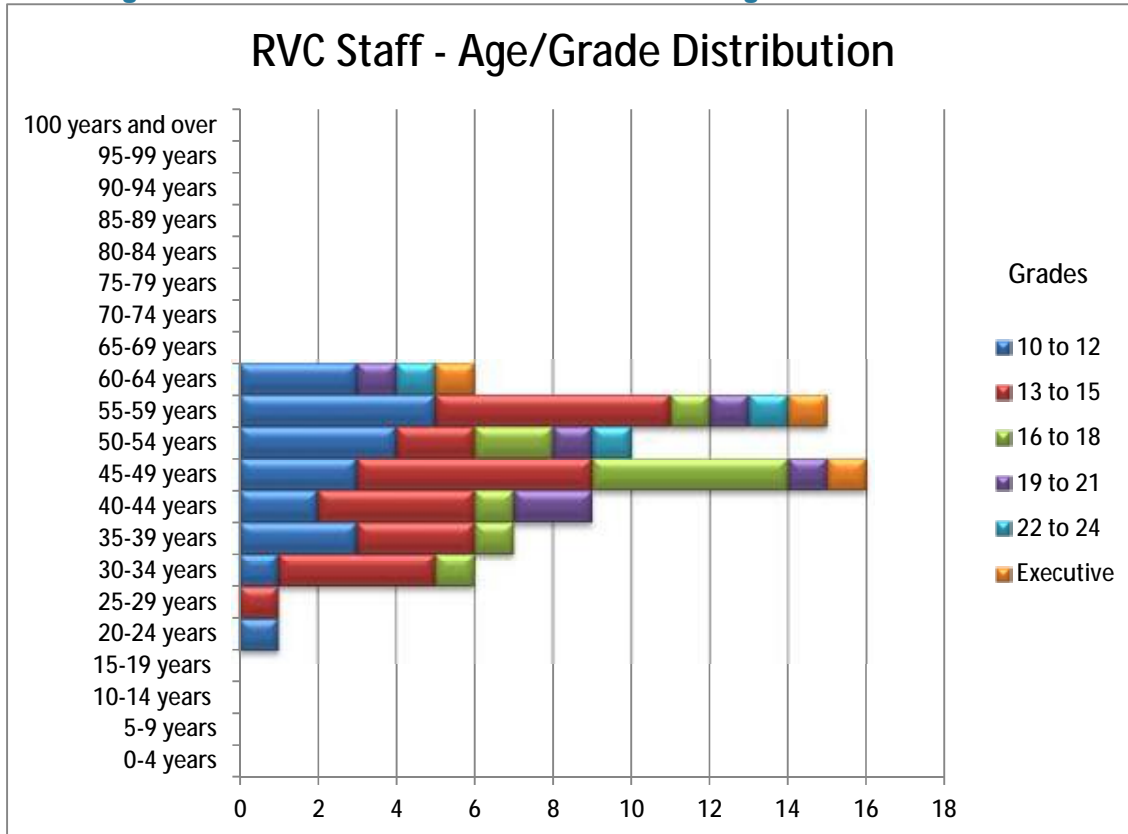
Percentage distribution of female/male staff numbers



NB: The above represents the age distribution of each male and female cohort, not a percentage of total staff numbers.

Another risk factor is that of losing trained professional staff and managers.

Percentage distribution of female/male staff numbers at grade 10 and above



The above graph shows the age profile of employees in roles that are considered critical skills within Council.

These roles are considered "critical" skills as they are drawn from the professional, university trained and para-professional groups, together with those operational supervisors and managers who bring extensive experience to their roles.

Supporting traineeships and implementing mentoring programs for succession planning is addressing this risk.

Availability of local staff

Apart from staff in high risk roles, over half of Council's employees occupy positions at less than Grade 10 and the availability of people to fill those roles in the future also requires consideration.

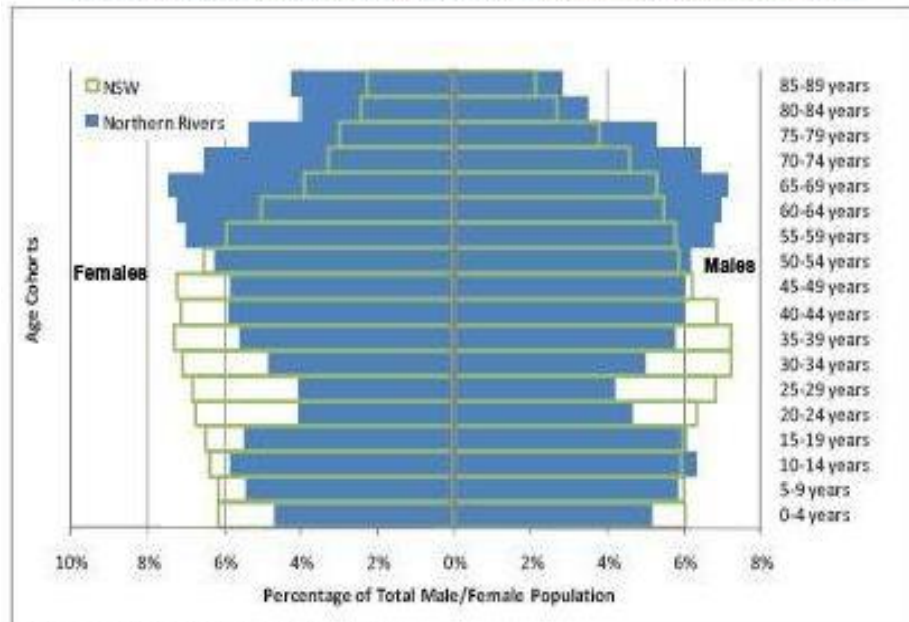
Predominantly, these employees perform operational and manual tasks, are drawn from the local area and are relatively stable in their employment pattern.

The availability of post school aged youth to join Council's staff is limited, as shown below. However, implementation of the Youth Employment Strategy is ensuring Richmond Valley Council is successfully attracting bright young school leavers.

Comparison of Northern Rivers and NSW age distribution

Figure 4: Population by Age and Sex, Northern Rivers and NSW – 2006

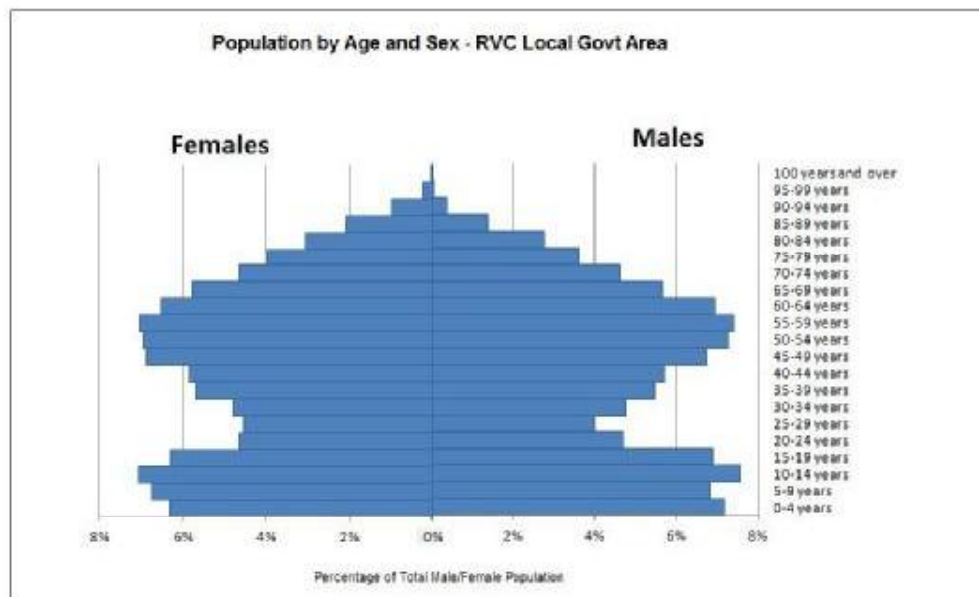
Figure 5: Forecast Population by Age and Sex, Northern Rivers and NSW – 2027



Age Forecast for Northern Rivers compared with NSW for 2027

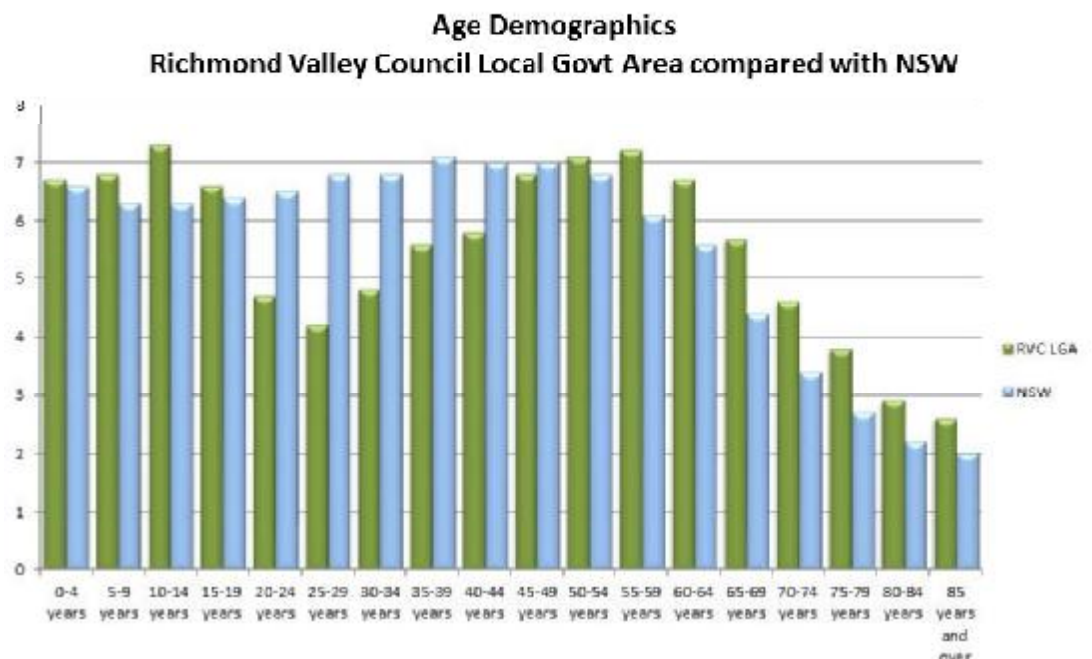
It would appear the loss of people in the Northern Rivers from 19 to 39 years, contrary to the state-wide trend, will be maintained over the next 15 years. At the same time however, the number of people aged above 60 years has increased dramatically. This emphasises the importance of the Youth Employment Strategy.

Age Distribution in Richmond Valley Local Government Area



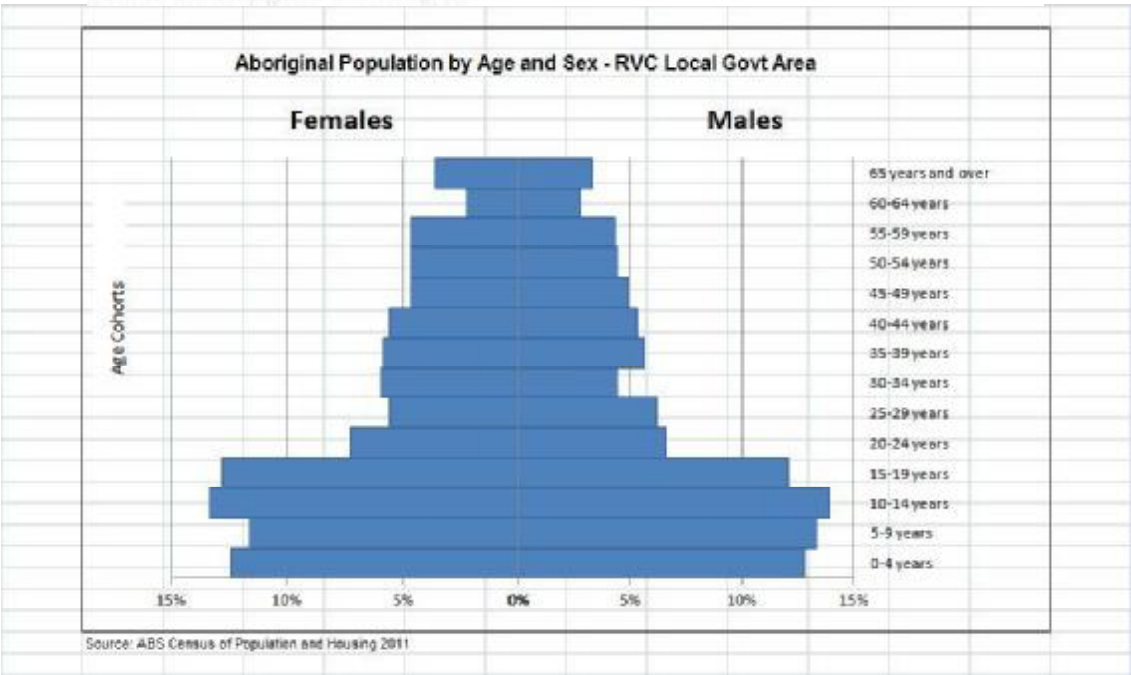
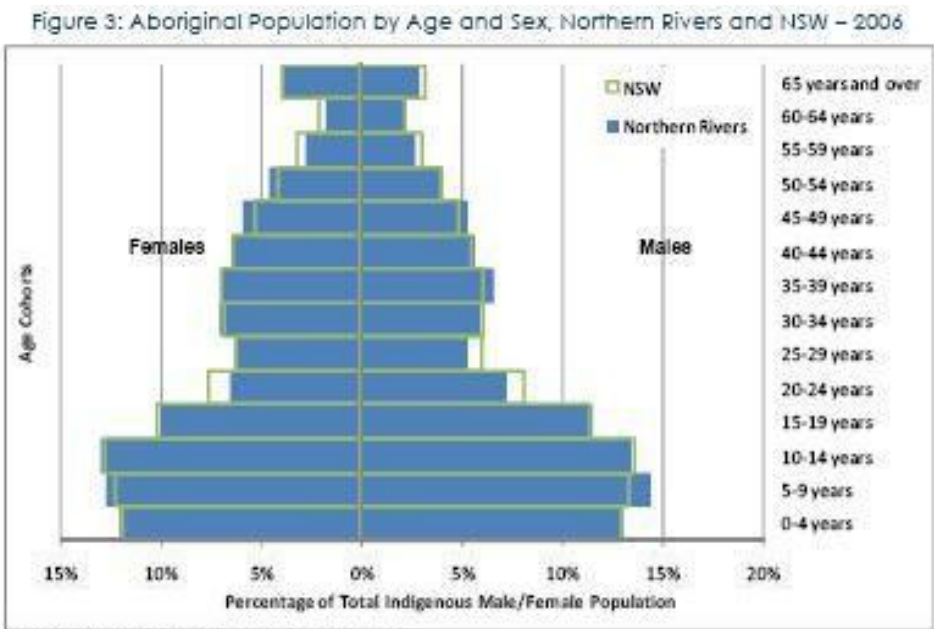
Source: ABS Census of Population and Housing 2011

Age Distribution Richmond Valley compared with NSW



Source: ABS Census of Population and Housing 2011

Aboriginal population

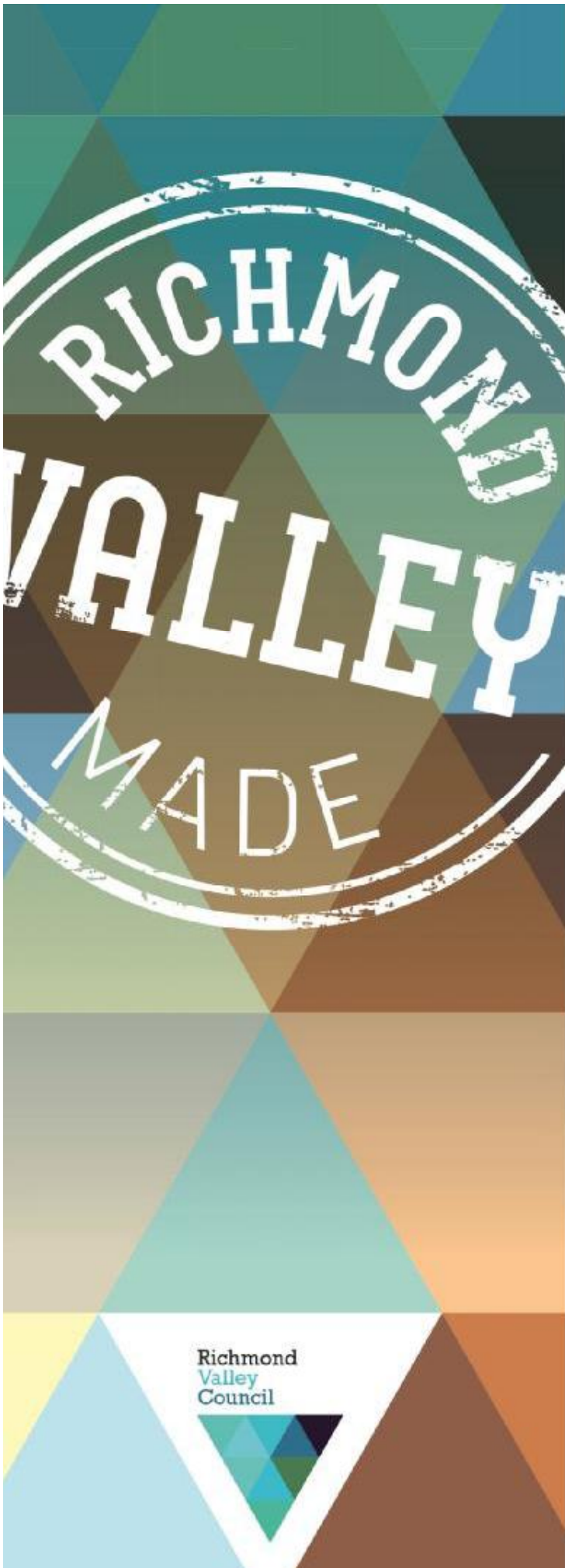


The graphs above shows the Aboriginal community shares population losses similar to the rest of the Northern Rivers, however, its numbers do not recover above age 30 years.

Appendix H

Long Term Financial Plan

2015-2025





Richmond Valley Council © 2015

Casino Office:

Cnr Walker Street and Graham Place
(Locked Bag 10)
Casino NSW 2470
Phone: (02) 6660 0300
Fax: (02) 6660 1300

Evans Head Office:

Cnr Woodburn Street and School Lane
Evans Head NSW 2473
Phone: (02) 6660 0365
Fax: (02) 6682 4252

Email: council@richmondvalley.nsw.gov.au

Web: www.richmondvalley.nsw.gov.au

Richmond Valley Council



Draft 10 Year Long Term Financial Plan for the Years Ending 30 June 2025

Key Assumptions

Comparison to Delivery Program and Operational Plan

Note: Council's Long Term Financial Plan is prepared on a consolidated basis, eliminating all internal transactions. The net operating result for the year is the same as the Delivery Program & Operational Plan when the net gain from the disposal of assets is excluded from the net operating result in the Long Term Financial Plan.

Income from Continuing Operations

Rates and Annual Charges

General Rates

Council has had a special variation approved from 2014/15 to 2018/19 under section 508A of the Local Government Act 1993. This included an increase of 12.3% (inclusive of rate peg) for 2014/15, followed by four successive annual variations of 5.5% (inclusive of rate peg). From 2019/20 onwards, a rate peg of 3.0% has been assumed, in line with TCorp benchmarks, with an additional 1.6% above rate peg assumed to further address asset renewals.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
General Rates	5.50%	5.50%	5.50%	5.50%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%
Waste Management Annual Charges	6.60%	4.00%	4.00%	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Sewerage Annual Charges	2.40%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Water Annual Charges	4.90%	5.00%	5.00%	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

User Charges and Fees

User Charges and Fees have generally been increased by 3.0%. Where a CPI increase is relevant, the 12 month CPI to 31 December 2014 is 1.7%.

Interest and Investment Revenue

Income from interest and investments is largely dependent on the level of interest rates, along with the level of cash Council has available to invest. Interest rate yields are expected to remain at low levels of between 3.0% and 5.0% for the 10 year period to 2024/25.

Other Revenues

Other revenue line items have been increased by 3.0%.

Grants & Contributions

The largest recurrent operating grant Council receives is the Commonwealth Government's Financial Assistance Grant. The Federal Government have ceased indexed on this grant, recommencing in 2017/18. From 2017/18 the grant has been assumed to increase at 2.5% for the remainder of the 10 year plan.

Other grants and contributions, where known to be recurrent, have been increased by 3.0%.

Expenses from Continuing Operations

Employee Benefits and Oncosts

Approved award increases have been applied for 2015/16 and 2016/17 and an assumed increase of 2.5% thereafter.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Salaries	2.70%	2.80%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Superannuation - Employer Contribution	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	10.00%	10.50%	11.00%	11.50%

Borrowing Costs

General fund loan borrowings total \$4.98 million from 2015/16 to 2018/19. Interest and principal repayments have been built into the LTFP, with interest rates of between 3.92% and 5.00% during this period.

There are no planned new borrowings for Water or Sewerage funds over the 10 year LTFP.

Materials and Contracts

Fixed contracts and budgets for non-controllable costs have been increased by 2.5% or calculation of known budget requirements. However, to realise a budget surplus in the vicinity of \$300,000, which is a pre-determined objective of Council, CPI increases have not been allowed on controllable expenditures for the 2015/16 financial year. This means that efficiency gains are required to be found. Future years controllable expenditures have been indexed by 2.5%.

Other Expenses

Other expenses include a number of expenditure items such as contributions and levies paid to other levels of government, advertising, Councillor expenses, donations to other organisations, electricity, insurance, street lighting costs, telephone costs, valuer general costs and other sundry expense items.

Specific indexes have been applied on the following:

Electricity	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Insurance	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Other expenses	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
INCOME STATEMENT - CONSOLIDATED
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income from Continuing Operations												
Revenue:												
Rates & Annual Charges	18,205,000	19,312,031	20,502,190	21,434,903	22,449,193	23,485,401	24,399,596	25,368,974	26,374,338	27,416,848	28,488,225	29,619,758
User Charges & Fees	14,129,000	13,398,238	13,179,893	14,071,600	14,765,927	15,679,288	16,150,411	16,632,568	17,131,195	17,638,363	18,168,515	18,710,935
Interest & Investment Revenue	1,142,000	1,281,501	1,013,286	1,143,684	1,190,899	1,228,941	1,267,811	1,308,545	1,350,576	1,394,344	1,439,783	1,486,435
Other Revenues	161,000	186,655	128,604	132,462	136,436	140,529	144,745	149,087	153,560	158,167	162,912	167,799
Grants & Contributions provided for Operating Purposes	6,539,000	9,226,715	8,799,528	8,868,775	9,046,013	9,294,695	9,525,787	9,773,766	10,028,131	10,289,444	10,557,974	10,833,591
Grants & Contributions provided for Capital Purposes	5,791,000	6,300,282	2,585,494	1,886,528	1,882,412	1,896,371	1,733,647	1,734,447	1,735,268	1,736,110	1,736,975	1,937,862
Other Income:												
Net gains from the disposal of assets	-	1,491,500	1,500,000	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Income from Continuing Operations	45,967,000	51,196,922	47,711,995	47,539,953	49,480,879	51,705,225	53,221,997	54,967,387	56,773,068	58,633,276	60,564,384	62,756,380
Expenses from Continuing Operations												
Employee Benefits & On-Costs	15,249,000	14,744,123	15,261,422	15,552,718	16,013,246	16,440,816	16,882,693	17,326,738	17,781,924	18,253,524	18,736,823	19,232,111
Borrowing Costs	1,676,000	1,770,257	1,811,950	1,762,349	1,715,500	1,639,305	1,508,065	1,366,382	1,231,456	1,068,290	910,685	741,742
Materials & Contracts	12,488,000	14,012,282	11,169,971	11,761,042	11,962,192	12,077,999	12,397,675	12,769,394	12,943,870	13,377,892	13,561,979	13,066,290
Depreciation & Amortisation	10,560,000	11,124,900	10,825,530	10,655,079	11,227,828	11,581,283	11,844,660	12,514,439	12,502,320	12,572,068	12,702,501	13,004,440
Impairment	-	-	-	-	-	-	-	-	-	-	-	-
Other Expenses	4,799,000	5,185,325	5,548,081	5,688,033	6,004,215	6,179,433	6,370,581	6,562,876	6,756,543	6,966,817	7,178,944	7,393,174
Interest & Investment Losses	-	-	-	-	-	-	-	-	-	-	-	-
Net Losses from the Disposal of Assets	-	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenses from Continuing Operations	46,043,000	46,836,887	44,616,954	45,419,220	46,922,981	47,918,835	49,003,674	50,539,830	51,216,113	52,238,591	53,090,932	53,437,757
Operating Result from Continuing Operations	(76,000)	4,360,035	3,095,041	2,120,734	2,557,898	3,786,389	4,218,323	4,427,557	5,556,955	6,394,685	7,473,452	9,318,623
Discontinued Operations - Profit/(Loss)	-	-	-	-	-	-	-	-	-	-	-	-
Net Profit/(Loss) from Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-	-
Net Operating Result for the Year	(76,000)	4,360,035	3,095,041	2,120,734	2,557,898	3,786,389	4,218,323	4,427,557	5,556,955	6,394,685	7,473,452	9,318,623
Net Operating Result before Grants and Contributions provided for Capital Purposes	(5,867,000)	(1,940,247)	505,547	232,205	665,486	1,890,018	2,484,676	2,693,110	3,821,887	4,658,575	5,736,477	7,380,761

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
INCOME STATEMENT - GENERAL FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income from Continuing Operations												
Revenue:												
Rates & Annual Charges	11,220,000	12,545,394	13,239,440	13,933,351	14,702,301	15,464,913	16,159,077	16,881,294	17,631,940	18,412,141	19,223,380	20,066,700
User Charges & Fees	8,847,000	8,362,063	8,111,201	8,767,789	9,217,734	9,875,121	10,172,090	10,473,928	10,768,825	11,105,722	11,439,895	11,780,457
Interest & Investment Revenue	1,001,000	874,551	672,350	792,520	829,200	856,391	884,084	913,307	943,481	975,035	1,007,896	1,041,590
Other Revenues	161,000	186,655	128,604	132,462	136,436	140,529	144,745	149,087	153,560	158,167	162,912	167,799
Grants & Contributions provided for Operating Purposes	6,351,000	9,056,765	8,617,128	8,682,175	8,851,913	9,090,195	9,317,787	9,559,466	9,807,431	10,062,244	10,323,874	10,592,491
Grants & Contributions provided for Capital Purposes	5,643,000	5,638,282	2,338,494	1,636,528	1,642,412	1,646,371	1,463,647	1,484,447	1,485,268	1,466,110	1,466,975	1,687,862
Other Income:												
Net gains from the disposal of assets	-	1,491,500	1,500,000	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Income from Continuing Operations	33,223,000	38,355,210	34,607,217	33,946,825	35,379,995	37,073,520	38,161,430	39,462,529	40,810,504	42,199,420	43,644,931	45,336,900
Expenses from Continuing Operations												
Employee Benefits & On-Costs	13,339,000	12,599,643	13,070,073	13,173,331	13,536,037	13,870,477	14,216,894	14,563,095	14,917,990	15,286,791	15,664,722	16,052,007
Borrowing Costs	66,000	436,557	548,050	569,349	597,300	600,005	549,865	497,382	442,356	386,090	327,585	262,542
Materials & Contracts	6,926,000	8,179,552	5,706,775	6,102,760	6,112,926	6,152,505	6,353,821	6,564,589	6,563,216	6,811,141	6,889,953	6,230,865
Depreciation & Amortisation	8,670,000	9,142,900	8,534,190	8,259,900	8,676,449	8,936,151	9,079,332	9,446,636	9,212,615	9,267,681	9,509,651	9,703,222
Impairment	-	-	-	-	-	-	-	-	-	-	-	-
Other Expenses	4,180,000	4,519,025	4,903,201	5,013,230	5,298,058	5,440,420	5,597,140	5,753,356	5,909,212	6,079,859	6,250,455	6,421,156
Interest & Investment Losses	-	-	-	-	-	-	-	-	-	-	-	-
Net Losses from the Disposal of Assets	-	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenses from Continuing Operations	33,678,000	34,877,677	32,762,289	33,118,570	34,220,770	34,999,558	35,797,053	36,825,058	37,045,389	37,831,562	38,642,365	38,669,793
Operating Result from Continuing Operations	(455,000)	3,477,533	1,844,927	828,255	1,159,225	2,073,962	2,364,377	2,637,472	3,765,115	4,367,858	5,002,566	6,667,107
Discontinued Operations - Profit/(Loss)	-	-	-	-	-	-	-	-	-	-	-	-
Net Profit/(Loss) from Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-	-
Net Operating Result for the Year	(455,000)	3,477,533	1,844,927	828,255	1,159,225	2,073,962	2,364,377	2,637,472	3,765,115	4,367,858	5,002,566	6,667,107
Net Operating Result before Grants and Contributions provided for Capital Purposes	(5,098,000)	(2,360,749)	(493,567)	(810,273)	(483,186)	427,591	880,730	1,153,025	2,279,847	2,881,747	3,515,591	4,979,245

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
INCOME STATEMENT - WATER FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income from Continuing Operations												
Revenue:												
Rates & Annual Charges	1,181,000	976,070	962,600	1,011,165	1,061,753	1,114,806	1,148,325	1,182,720	1,218,228	1,254,784	1,292,426	1,331,192
User Charges & Fees	4,013,000	3,984,854	4,156,583	4,362,691	4,578,838	4,805,732	4,949,933	5,098,400	5,251,353	5,408,893	5,571,160	5,738,295
Interest & Investment Revenue	34,000	115,750	72,500	74,675	76,915	79,223	81,599	84,047	86,569	89,166	91,841	94,596
Other Revenues	-	-	-	-	-	-	-	-	-	-	-	-
Grants & Contributions provided for Operating Purposes	92,000	84,975	93,000	96,000	100,800	107,150	109,000	112,300	115,700	119,100	122,700	126,400
Grants & Contributions provided for Capital Purposes	59,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Other Income:												
Net gains from the disposal of assets	-	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Income from Continuing Operations	5,379,000	5,311,649	5,434,683	5,694,531	5,968,306	6,256,911	6,438,858	6,627,468	6,821,850	7,021,943	7,228,127	7,440,483
Expenses from Continuing Operations												
Employee Benefits & On-Costs	889,000	958,875	932,321	1,001,416	1,029,456	1,055,192	1,081,572	1,108,611	1,136,326	1,164,735	1,193,853	1,223,699
Borrowing Costs	-	-	-	-	-	-	-	-	-	-	-	-
Materials & Contracts	3,146,000	3,088,526	3,042,918	3,184,711	3,258,055	3,340,355	3,390,327	3,476,292	3,579,428	3,677,414	3,743,984	3,836,903
Depreciation & Amortisation	794,000	826,000	869,674	937,971	1,057,741	1,114,153	1,196,074	1,459,319	1,641,008	1,614,472	1,460,688	1,525,752
Impairment	-	-	-	-	-	-	-	-	-	-	-	-
Other Expenses	318,000	331,600	323,360	338,444	354,252	370,820	388,184	406,383	425,459	445,455	466,414	488,385
Interest & Investment Losses	-	-	-	-	-	-	-	-	-	-	-	-
Net Losses from the Disposal of Assets	-	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenses from Continuing Operations	5,525,000	5,205,001	5,168,272	5,462,542	5,699,504	5,880,520	6,056,157	6,450,606	6,782,221	6,902,075	6,864,939	7,074,739
Operating Result from Continuing Operations	(146,000)	106,648	266,411	231,989	268,803	376,391	382,701	176,862	39,629	119,868	363,189	365,743
Discontinued Operations - Profit/(Loss)	-	-	-	-	-	-	-	-	-	-	-	-
Net Profit/(Loss) from Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-	-
Net Operating Result for the Year	(146,000)	106,648	266,411	231,989	268,803	376,391	382,701	176,862	39,629	119,868	363,189	365,743
Net Operating Result before Grants and Contributions provided for Capital Purposes	(205,000)	(43,352)	116,411	81,989	118,803	226,391	232,701	26,862	(110,371)	(30,132)	213,189	215,743

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
INCOME STATEMENT - SEWER FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income from Continuing Operations												
Revenue:												
Rates & Annual Charges	5,804,000	5,790,566	6,300,150	6,490,387	6,685,140	6,885,682	7,092,194	7,304,959	7,524,171	7,749,923	7,982,419	8,221,866
User Charges & Fees	1,269,000	1,051,322	912,109	941,120	969,354	998,434	1,028,388	1,059,239	1,091,017	1,123,747	1,157,460	1,192,183
Interest & Investment Revenue	107,000	291,200	268,436	276,489	284,784	293,327	302,127	311,191	320,527	330,142	340,047	350,248
Other Revenues	-	-	-	-	-	-	-	-	-	-	-	-
Grants & Contributions provided for Operating Purposes	96,000	84,975	89,400	90,600	93,300	97,350	99,000	102,000	105,000	108,100	111,400	114,700
Grants & Contributions provided for Capital Purposes	89,000	312,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Other Income:												
Net gains from the disposal of assets	-	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Income from Continuing Operations	7,365,000	7,530,063	7,670,095	7,898,597	8,132,578	8,374,794	8,621,709	8,877,389	9,140,714	9,411,913	9,691,325	9,978,997
Expenses from Continuing Operations												
Employee Benefits & On-Costs	1,021,000	1,185,605	1,259,028	1,377,971	1,447,754	1,515,148	1,584,226	1,655,032	1,727,608	1,801,998	1,878,248	1,956,404
Borrowing Costs	1,610,000	1,333,700	1,263,900	1,193,000	1,118,200	1,039,300	958,200	869,000	789,100	692,200	583,100	479,200
Materials & Contracts	2,386,000	2,744,205	2,420,278	2,473,570	2,591,211	2,585,139	2,653,527	2,728,512	2,801,227	2,889,337	2,928,042	2,998,521
Depreciation & Amortisation	1,096,000	1,156,000	1,421,666	1,457,208	1,493,638	1,530,979	1,569,253	1,608,485	1,648,697	1,689,914	1,732,162	1,775,466
Impairment	-	-	-	-	-	-	-	-	-	-	-	-
Other Expenses	301,000	334,700	321,520	336,359	351,905	368,192	385,257	403,137	421,872	441,504	462,075	483,633
Interest & Investment Losses	-	-	-	-	-	-	-	-	-	-	-	-
Net Losses from the Disposal of Assets	-	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenses from Continuing Operations	6,840,000	6,754,210	6,686,392	6,838,108	7,002,708	7,038,758	7,150,464	7,264,166	7,388,503	7,504,953	7,583,627	7,693,224
Operating Result from Continuing Operations	525,000	775,853	983,703	1,060,489	1,129,870	1,336,036	1,471,245	1,613,223	1,752,211	1,906,960	2,107,698	2,285,773
Discontinued Operations - Profit/(Loss)	-	-	-	-	-	-	-	-	-	-	-	-
Net Profit/(Loss) from Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-	-
Net Operating Result for the Year	525,000	775,853	983,703	1,060,489	1,129,870	1,336,036	1,471,245	1,613,223	1,752,211	1,906,960	2,107,698	2,285,773
Net Operating Result before Grants and Contributions provided for Capital Purposes	436,000	463,853	883,703	960,489	1,029,870	1,236,036	1,371,245	1,513,223	1,652,211	1,806,960	2,007,698	2,185,773

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
BALANCE SHEET - CONSOLIDATED
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
ASSETS												
Current Assets												
Cash & Cash Equivalents	21,798,000	26,389,687	28,403,155	26,155,020	24,181,230	26,547,809	25,923,673	26,430,329	29,457,463	33,815,223	34,185,393	39,487,458
Investments	1,457,000	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961
Receivables	9,996,000	8,919,780	7,598,124	7,452,004	7,724,695	8,074,714	8,310,777	8,549,468	8,814,588	9,107,224	9,416,661	9,752,852
Inventories	1,877,000	2,897,717	1,525,833	1,162,431	2,528,731	1,899,681	1,463,679	2,939,451	2,235,926	1,750,457	3,300,994	3,673,784
Other	1,213,000	818,894	606,338	635,410	746,745	661,887	682,056	804,761	710,859	734,599	858,032	783,180
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	36,341,000	39,733,039	36,840,411	36,111,826	35,888,362	37,891,052	37,087,146	39,430,970	41,925,798	46,114,464	48,468,041	54,404,234
Non-Current Assets												
Investments	481,000	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039
Receivables	2,437,000	2,536,910	2,315,965	2,413,564	2,517,195	2,622,740	2,713,825	2,808,116	2,905,696	3,006,675	3,111,191	3,220,657
Inventories	1,464,000	865,549	223,820	223,820	223,820	223,820	223,820	223,820	223,820	223,820	223,820	223,820
Infrastructure, Property, Plant & Equipment	618,919,000	626,190,454	643,763,417	657,515,861	672,754,186	686,296,895	702,421,588	716,164,847	730,740,441	744,943,087	762,415,313	778,653,351
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Assets	623,301,000	630,823,952	647,534,240	661,384,283	676,726,240	680,374,494	706,590,271	720,427,822	735,100,996	749,404,620	766,981,362	783,328,868
TOTAL ASSETS	659,642,000	670,556,991	684,374,651	697,496,109	712,614,602	728,265,547	743,677,417	759,858,792	777,026,794	795,519,084	815,449,404	837,733,102
LIABILITIES												
Current Liabilities												
Bank Overdraft	-	-	-	-	-	-	-	-	-	-	-	-
Payables	5,378,000	5,826,021	4,802,969	3,873,619	4,194,974	4,105,513	4,126,842	4,434,777	4,356,783	4,477,474	4,710,328	4,745,349
Borrowings	1,111,000	1,739,690	1,913,966	2,115,044	2,287,839	2,387,219	2,498,325	2,611,194	2,730,632	2,856,869	2,653,301	2,200,853
Provisions	4,610,000	4,703,193	4,705,133	4,707,121	4,709,159	4,711,248	4,713,389	4,715,583	4,717,833	4,720,138	4,722,502	4,724,924
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	11,099,000	12,268,904	11,422,067	10,695,784	11,191,972	11,203,980	11,338,556	11,761,554	11,805,248	12,054,482	12,086,131	11,671,126
Non-Current Liabilities												
Payables	434,000	452,991	482,674	493,603	521,257	534,248	549,644	565,103	580,509	597,489	613,750	630,504
Borrowings	20,881,000	26,217,654	25,543,688	24,688,644	23,882,740	22,495,521	19,997,196	17,386,002	14,655,370	11,798,501	9,145,200	6,944,347
Provisions	2,279,000	2,308,407	2,390,417	2,474,478	2,560,640	2,648,956	2,739,480	2,832,267	2,927,374	3,024,859	3,124,780	3,227,200
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Liabilities	23,594,000	28,979,052	28,416,780	27,656,725	26,964,637	25,678,726	23,286,320	20,783,373	18,163,253	15,420,849	12,883,731	10,802,051
TOTAL LIABILITIES	34,693,000	41,247,956	39,838,847	38,352,509	38,156,609	36,882,706	34,624,876	32,544,927	29,968,502	27,475,331	24,969,861	22,473,177
Net Assets	624,949,000	629,309,035	644,535,804	659,143,600	674,457,994	691,382,841	709,052,541	727,313,865	747,058,292	768,043,753	790,479,542	815,259,925
EQUITY												
Retained Earnings	324,934,000	329,294,035	332,389,077	334,509,810	337,067,708	340,854,097	345,072,421	349,499,978	355,056,933	361,451,618	368,925,070	376,243,693
Revaluation Reserves	300,015,000	300,015,000	312,146,728	324,633,790	337,390,285	350,528,744	363,980,120	377,813,887	392,001,359	406,592,135	421,554,472	437,016,232
Council Equity Interest	624,949,000	629,309,035	644,535,804	659,143,600	674,457,994	691,382,841	709,052,541	727,313,865	747,058,292	768,043,753	790,479,542	815,259,925
Minority Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	624,949,000	629,309,035	644,535,804	659,143,600	674,457,994	691,382,841	709,052,541	727,313,865	747,058,292	768,043,753	790,479,542	815,259,925

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
BALANCE SHEET - GENERAL FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
ASSETS	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Current Assets												
Cash & Cash Equivalents	8,446,000	11,023,470	13,756,652	14,249,770	13,993,837	15,699,839	17,298,578	17,345,767	19,701,042	22,371,186	23,878,109	27,620,091
Investments	1,457,000	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961	706,961
Receivables	6,702,000	6,007,318	4,966,615	4,713,869	4,876,793	5,111,031	5,260,064	5,407,167	5,578,084	5,773,468	5,983,154	6,216,127
Inventories	1,877,000	2,897,717	1,525,833	1,162,431	2,528,731	1,899,681	1,463,679	2,939,451	2,235,926	1,750,457	3,300,994	3,673,784
Other	1,213,000	817,674	605,173	634,198	745,494	660,611	680,752	803,421	709,478	733,175	856,580	781,688
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	19,695,000	21,453,140	21,561,235	21,467,229	22,851,817	24,078,123	25,410,035	27,202,767	28,931,491	31,335,247	34,725,799	38,998,651
Non-Current Assets												
Investments	481,000	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039	1,231,039
Receivables	1,197,000	1,496,423	1,318,621	1,374,550	1,435,529	1,496,569	1,553,864	1,613,361	1,675,098	1,739,159	1,805,649	1,875,950
Inventories	1,464,000	865,549	223,820	223,820	223,820	223,820	223,820	223,820	223,820	223,820	223,820	223,820
Infrastructure, Property, Plant & Equipment	446,154,000	451,817,254	461,377,426	469,315,288	477,493,778	485,886,592	493,617,774	501,512,443	510,273,245	519,220,579	527,947,453	537,697,686
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Assets	449,236,000	455,410,265	464,150,906	472,144,697	480,384,166	488,838,019	496,626,496	504,580,663	513,403,202	522,414,596	531,207,961	541,028,494
TOTAL ASSETS	468,991,000	476,863,405	485,712,141	493,611,927	503,235,983	512,916,142	522,036,531	531,783,430	542,334,692	553,749,843	565,933,760	580,027,145
LIABILITIES												
Current Liabilities												
Bank Overdraft	-	-	-	-	-	-	-	-	-	-	-	-
Payables	5,118,000	5,436,673	4,454,664	3,516,314	3,821,107	3,729,929	3,740,578	4,036,762	3,947,104	4,054,176	4,279,422	4,302,740
Borrowings	145,000	728,582	856,394	1,007,070	1,125,301	1,167,977	1,214,203	1,261,584	1,311,039	1,362,704	1,078,014	539,830
Provisions	4,610,000	4,703,193	4,705,133	4,707,121	4,709,159	4,711,248	4,713,389	4,715,583	4,717,833	4,720,138	4,722,502	4,724,924
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	9,873,000	10,868,447	10,016,191	9,230,504	9,655,567	9,609,154	9,668,170	10,013,929	9,975,975	10,137,019	10,079,938	9,567,485
Non-Current Liabilities												
Payables	434,000	407,609	442,261	452,185	477,876	490,717	504,853	518,944	533,002	548,394	563,781	579,178
Borrowings	2,702,000	6,098,408	6,482,014	6,734,944	7,091,578	6,923,601	5,709,398	4,447,814	3,136,775	1,774,071	696,057	156,227
Provisions	2,279,000	2,308,407	2,390,417	2,474,478	2,560,640	2,648,956	2,739,480	2,832,267	2,927,374	3,024,859	3,124,780	3,227,200
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Liabilities	5,415,000	8,814,424	9,314,692	9,661,607	10,130,094	10,063,274	8,953,731	7,799,025	6,597,151	5,347,323	4,384,618	3,962,605
TOTAL LIABILITIES	15,288,000	19,682,871	19,330,883	18,892,112	19,785,661	19,672,428	18,621,901	17,812,954	16,573,126	15,484,342	14,464,556	13,530,100
Net Assets	453,703,000	457,180,533	466,381,257	474,719,815	483,450,321	493,243,714	503,414,630	513,970,476	525,761,566	538,265,501	551,469,204	566,497,046
EQUITY												
Retained Earnings	263,724,000	267,201,533	269,046,461	269,874,716	271,033,941	273,107,903	275,472,280	278,109,752	281,874,867	286,242,725	291,245,291	297,912,398
Revaluation Reserves	189,979,000	189,979,000	197,334,797	204,845,099	212,416,380	220,135,811	227,942,350	235,860,724	243,886,699	252,022,776	260,223,913	268,584,648
Council Equity Interest	453,703,000	457,180,533	466,381,257	474,719,815	483,450,321	493,243,714	503,414,630	513,970,476	525,761,566	538,265,501	551,469,204	566,497,046
Minority Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	453,703,000	457,180,533	466,381,257	474,719,815	483,450,321	493,243,714	503,414,630	513,970,476	525,761,566	538,265,501	551,469,204	566,497,046

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
BALANCE SHEET - WATER FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
ASSETS												
Current Assets												
Cash & Cash Equivalents	2,425,000	1,664,680	1,396,962	1,111,008	422,871	933,121	1,531,133	1,587,036	2,277,398	3,019,373	2,648,511	3,326,140
Investments	-	-	-	-	-	-	-	-	-	-	-	-
Receivables	1,300,000	1,384,587	1,365,164	1,432,022	1,502,994	1,578,176	1,624,823	1,673,573	1,723,796	1,775,473	1,828,752	1,883,624
Inventories	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	844	831	870	892	916	933	959	989	1,018	1,040	1,068
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	3,725,000	3,050,111	2,762,958	2,543,900	1,926,757	2,512,214	3,156,889	3,261,568	4,002,183	4,795,864	4,478,302	5,110,832
Non-Current Assets												
Investments	-	-	-	-	-	-	-	-	-	-	-	-
Receivables	508,000	536,671	559,657	587,411	616,515	647,066	666,482	686,472	707,067	728,278	750,127	772,631
Inventories	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure, Property, Plant & Equipment	71,436,000	72,194,900	74,691,365	77,162,695	80,151,383	82,138,022	84,173,614	86,651,974	88,455,391	90,403,123	93,827,568	96,440,176
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Assets	71,944,000	72,731,571	75,251,022	77,750,106	80,767,898	82,785,068	84,840,036	87,338,446	89,162,457	91,131,401	94,577,695	97,212,807
TOTAL ASSETS	75,669,000	75,781,682	78,013,980	80,294,006	82,694,655	85,297,302	87,996,985	90,600,014	93,164,640	95,927,265	99,055,997	102,323,639
LIABILITIES												
Current Liabilities												
Bank Overdraft	-	-	-	-	-	-	-	-	-	-	-	-
Payables	10,000	16,034	15,781	16,517	16,935	17,398	17,714	18,202	18,775	19,328	19,739	20,277
Borrowings	-	-	-	-	-	-	-	-	-	-	-	-
Provisions	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	10,000	16,034	15,781	16,517	16,935	17,398	17,714	18,202	18,775	19,328	19,739	20,277
Non-Current Liabilities												
Payables	-	-	-	-	-	-	-	-	-	-	-	-
Borrowings	-	-	-	-	-	-	-	-	-	-	-	-
Provisions	-	-	-	-	-	-	-	-	-	-	-	-
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL LIABILITIES	10,000	16,034	15,781	16,517	16,935	17,398	17,714	18,202	18,775	19,328	19,739	20,277
Net Assets	75,659,000	75,765,648	77,998,199	80,277,489	82,677,720	85,279,904	87,979,271	90,581,812	93,145,865	95,907,937	99,036,258	102,303,362
EQUITY												
Retained Earnings	24,944,000	25,050,648	25,317,060	25,549,049	25,817,852	26,194,243	26,576,944	26,753,806	26,793,435	26,913,303	27,276,491	27,642,234
Revaluation Reserves	50,715,000	50,715,000	52,681,139	54,728,440	56,859,869	59,085,661	61,402,327	63,828,006	66,352,430	68,994,634	71,759,767	74,661,128
Council Equity Interest	75,659,000	75,765,648	77,998,199	80,277,489	82,677,720	85,279,904	87,979,271	90,581,812	93,145,865	95,907,937	99,036,258	102,303,362
Minority Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	75,659,000	75,765,648	77,998,199	80,277,489	82,677,720	85,279,904	87,979,271	90,581,812	93,145,865	95,907,937	99,036,258	102,303,362

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
BALANCE SHEET - SEWER FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
ASSETS												
Current Assets												
Cash & Cash Equivalents	10,927,000	13,701,538	11,249,541	10,794,241	9,764,522	9,914,848	7,089,982	7,497,526	7,479,024	8,424,665	7,658,773	8,641,226
Investments	-	-	-	-	-	-	-	-	-	-	-	-
Receivables	1,994,000	1,527,875	1,266,344	1,306,113	1,344,908	1,385,507	1,425,891	1,468,728	1,512,708	1,558,282	1,604,755	1,653,101
Inventories	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	375	334	342	359	360	370	382	393	406	413	424
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	12,921,000	15,229,788	12,516,219	12,100,696	11,109,789	11,300,715	8,520,223	8,966,636	8,992,124	9,983,352	9,263,941	10,294,751
Non-Current Assets												
Investments	-	-	-	-	-	-	-	-	-	-	-	-
Receivables	732,000	503,816	437,686	451,603	465,151	479,106	493,479	508,283	523,532	539,238	555,415	572,077
Inventories	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure, Property, Plant & Equipment	101,329,000	102,178,300	107,694,626	111,037,878	115,109,025	118,272,282	124,630,200	128,000,429	132,011,805	135,319,386	140,640,292	144,515,489
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Assets	102,061,000	102,682,116	108,132,312	111,489,481	115,574,176	118,751,367	125,123,679	128,508,712	132,535,337	135,858,623	141,195,706	145,087,566
TOTAL ASSETS	114,982,000	117,911,904	120,648,531	123,590,177	126,683,965	130,052,103	133,643,902	137,475,348	141,527,461	145,841,976	150,459,647	155,382,317
LIABILITIES												
Current Liabilities												
Bank Overdraft	-	-	-	-	-	-	-	-	-	-	-	-
Payables	250,000	373,314	332,523	340,789	356,932	358,186	368,550	379,813	390,905	403,970	411,167	422,331
Borrowings	966,000	1,011,108	1,057,572	1,107,974	1,162,538	1,219,242	1,284,122	1,349,610	1,419,593	1,494,165	1,575,287	1,661,023
Provisions	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	1,216,000	1,384,422	1,390,095	1,448,763	1,519,470	1,577,428	1,652,672	1,729,423	1,810,498	1,898,135	1,986,454	2,083,354
Non-Current Liabilities												
Payables	-	45,382	40,413	41,417	43,381	43,531	44,791	46,159	47,507	49,095	49,969	51,326
Borrowings	18,179,000	20,119,246	19,061,674	17,953,700	16,791,162	15,571,920	14,287,798	12,938,188	11,518,595	10,024,430	8,449,143	6,788,120
Provisions	-	-	-	-	-	-	-	-	-	-	-	-
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Liabilities	18,179,000	20,164,628	19,102,088	17,995,118	16,834,543	15,615,451	14,332,589	12,984,348	11,566,103	10,073,526	8,499,113	6,839,446
TOTAL LIABILITIES	19,395,000	21,549,051	20,492,183	19,443,881	18,354,013	17,192,879	15,985,261	14,713,771	13,376,600	11,971,661	10,485,566	8,922,801
Net Assets	95,587,000	96,362,853	100,156,348	104,146,296	108,329,952	112,859,223	117,658,640	122,761,577	128,150,861	133,870,315	139,974,081	146,459,517
EQUITY												
Retained Earnings	36,266,000	37,041,853	38,025,556	39,086,045	40,215,915	41,551,951	43,023,196	44,636,420	46,388,631	48,295,590	50,403,288	52,689,061
Revaluation Reserves	59,321,000	59,321,000	62,130,792	65,060,251	68,114,037	71,307,272	74,635,444	78,125,157	81,762,230	85,574,725	89,570,793	93,770,456
Council Equity Interest	95,587,000	96,362,853	100,156,348	104,146,296	108,329,952	112,859,223	117,658,640	122,761,577	128,150,861	133,870,315	139,974,081	146,459,517
Minority Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	95,587,000	96,362,853	100,156,348	104,146,296	108,329,952	112,859,223	117,658,640	122,761,577	128,150,861	133,870,315	139,974,081	146,459,517

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
CASH FLOW STATEMENT - CONSOLIDATED
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Cash Flows from Operating Activities												
Receipts:												
Rates & Annual Charges	18,288,000	19,299,093	20,450,590	21,383,327	22,392,068	23,408,728	24,348,052	25,315,351	26,318,608	27,358,926	28,438,002	29,557,158
User Charges & Fees	11,032,000	16,160,722	13,405,919	13,800,276	14,530,925	15,398,322	15,973,837	16,451,305	16,944,102	17,446,883	17,922,291	18,505,546
Interest & Investment Revenue Received	1,104,000	1,208,433	978,771	1,112,278	1,170,458	1,193,311	1,237,227	1,289,958	1,309,676	1,349,495	1,405,566	1,430,020
Grants & Contributions	10,166,000	15,824,086	12,062,153	10,816,196	10,914,131	11,157,277	11,250,193	11,476,226	11,730,590	11,991,885	12,260,295	12,711,482
Bonds & Deposits Received	18,000	-	-	-	-	-	-	-	-	-	-	-
Other	698,000	(1,255,467)	795,072	95,651	93,278	94,785	100,021	101,731	104,810	108,010	111,259	113,133
Payments:												
Employee Benefits & On-Costs	(15,337,000)	(14,707,342)	(15,231,783)	(16,056,138)	(16,013,246)	(16,440,816)	(16,882,693)	(17,326,738)	(17,781,924)	(18,253,524)	(18,736,823)	(19,232,111)
Materials & Contracts	(10,887,000)	(15,066,116)	(10,429,416)	(11,340,762)	(13,154,887)	(11,482,117)	(11,895,555)	(14,093,872)	(12,266,645)	(12,816,953)	(14,961,881)	(13,446,240)
Borrowing Costs	(1,711,000)	(1,647,657)	(1,729,000)	(1,676,300)	(1,627,300)	(1,548,900)	(1,415,400)	(1,271,400)	(1,134,100)	(968,500)	(808,400)	(636,900)
Bonds & Deposits Refunded	-	-	(5,548,081)	(5,688,033)	(6,004,215)	(6,179,433)	(6,370,581)	(6,562,876)	(6,756,543)	(6,966,817)	(7,178,944)	(7,393,174)
Other	(4,389,000)	(5,185,325)	-	-	-	-	-	-	-	-	-	-
Net Cash provided (or used in) Operating Activities	8,962,000	14,630,426	14,755,225	12,448,496	12,301,212	15,601,158	16,345,101	15,379,682	18,468,574	19,249,404	18,451,365	21,608,915
Cash Flows from Investing Activities												
Receipts:												
Sale of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Real Estate Assets	454,000	5,056,000	2,644,000	-	-	-	-	-	-	-	-	-
Sale of Infrastructure, Property, Plant & Equipment	830,000	830,861	3,005,859	1,076,379	605,805	579,149	715,718	696,171	628,077	768,090	588,838	609,358
Sale of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors Receipts	2,000	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Sale of Disposal Groups	-	-	-	-	-	-	-	-	-	-	-	-
Distributions Received from Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Purchase of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Infrastructure, Property, Plant & Equipment	(15,319,000)	(18,532,744)	(19,897,227)	(13,118,344)	(14,248,987)	(12,527,190)	(15,299,036)	(13,072,172)	(13,459,623)	(12,930,402)	(15,814,464)	(14,264,207)
Purchase of Real Estate Assets	(1,135,000)	(3,359,500)	-	-	-	-	-	-	-	-	-	-
Purchase of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors & Advances Made	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Contributions Paid to Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash provided (or used in) Investing Activities	(12,986,000)	(16,004,083)	(14,242,067)	(12,040,665)	(13,641,892)	(11,946,740)	(14,582,018)	(12,374,701)	(12,830,246)	(12,161,012)	(15,224,326)	(13,653,548)
Cash Flows from Financing Activities												
Receipts:												
Proceeds from Borrowings & Advances	-	5,620,000	1,240,000	1,260,000	1,481,935	1,000,000	-	-	-	-	-	-
Proceeds from Finance Leases	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Repayment of Borrowings & Advances	(1,218,000)	345,344	(1,739,690)	(1,913,966)	(2,115,044)	(2,287,839)	(2,387,219)	(2,498,325)	(2,611,194)	(2,730,632)	(2,856,869)	(2,653,301)
Repayment of Finance Lease Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
Distributions to Minority Interests	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow provided (used in) Financing Activities	(1,218,000)	5,965,344	(498,690)	(653,966)	(633,109)	(1,287,839)	(2,387,219)	(2,498,325)	(2,611,194)	(2,730,632)	(2,856,869)	(2,653,301)
Net Increase/(Decrease) in Cash & Cash Equivalents	(5,242,000)	4,591,687	13,468	(248,135)	(1,973,789)	2,366,579	(624,135)	506,656	3,027,134	4,357,760	370,170	5,302,065
plus: Cash, Cash Equivalents & Investments - beginning of year	27,040,000	21,798,000	26,389,687	26,403,155	26,155,020	24,181,230	26,547,809	25,923,673	26,430,329	29,457,463	33,815,223	34,185,393
Cash & Cash Equivalents - end of the year	21,798,000	26,389,687	26,403,155	26,155,020	24,181,230	26,547,809	25,923,673	26,430,329	29,457,463	33,815,223	34,185,393	39,487,458
Cash & Cash Equivalents - end of the year	21,798,000	26,389,687	26,403,155	26,155,020	24,181,230	26,547,809	25,923,673	26,430,329	29,457,463	33,815,223	34,185,393	39,487,458
Investments - end of the year	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000
Cash, Cash Equivalents & Investments - end of the year	23,736,000	28,327,687	28,341,155	28,093,020	26,119,230	28,485,809	27,861,673	28,368,329	31,395,463	35,753,223	36,123,393	41,425,458
Representing:												
- External Restrictions	18,386,000	19,293,828	13,733,162	13,751,310	12,859,149	14,510,011	13,400,616	15,081,250	17,100,894	20,565,419	21,428,358	25,076,100
- Internal Restrictions	5,351,000	5,348,410	9,403,403	9,368,355	7,912,603	8,145,805	8,266,191	6,745,890	7,155,900	6,892,166	7,619,344	7,935,210
- Unrestricted	(1,000)	3,685,449	5,204,590	4,973,355	5,347,478	5,829,992	6,194,866	6,541,189	7,138,669	7,568,459	7,802,869	8,414,148
23,736,000	28,327,687	28,341,155	28,093,020	26,119,230	28,485,809	27,861,673	28,368,329	31,395,463	35,753,223	36,123,393	41,425,458	41,425,458

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
CASH FLOW STATEMENT - GENERAL FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Cash Flows from Operating Activities												
Receipts:												
Rates & Annual Charges	-	12,531,749	13,188,231	13,882,151	14,645,565	15,405,644	16,107,859	16,828,006	17,576,554	18,354,575	19,163,524	20,004,477
User Charges & Fees	-	10,496,003	8,159,052	8,642,545	9,131,907	9,749,725	10,115,443	10,417,162	10,728,949	11,045,274	11,328,634	11,714,080
Interest & Investment Revenue Received	-	-	637,284	761,116	808,489	820,829	852,720	884,854	902,596	930,476	973,483	985,478
Grants & Contributions	-	15,236,104	11,484,009	10,381,435	10,473,155	10,707,023	10,793,540	11,014,342	11,262,358	11,517,177	11,778,837	12,223,076
Bonds & Deposits Received	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	(1,255,971)	795,045	95,635	93,262	94,768	100,003	101,713	104,791	107,990	111,239	113,112
Payments:												
Employee Benefits & On-Costs	-	(12,562,862)	(13,040,434)	(13,676,751)	(13,536,037)	(13,870,477)	(14,216,894)	(14,563,095)	(14,917,590)	(15,286,791)	(15,664,722)	(16,052,007)
Materials & Contracts	-	(9,406,363)	(4,920,235)	(5,692,423)	(7,324,090)	(5,558,449)	(5,863,597)	(7,902,132)	(5,898,543)	(6,265,347)	(6,298,288)	(6,623,815)
Borrowing Costs	-	(313,957)	(464,100)	(483,300)	(509,100)	(509,600)	(457,200)	(402,400)	(345,000)	(286,300)	(225,300)	(157,700)
Bonds & Deposits Refunded	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	(4,519,025)	(4,903,201)	(5,013,230)	(5,298,058)	(5,440,420)	(5,597,140)	(5,753,356)	(5,909,212)	(6,079,859)	(6,250,455)	(6,421,156)
Net Cash provided (or used in) Operating Activities	-	11,011,363	10,935,632	8,897,177	8,485,084	11,402,043	11,834,734	10,635,093	13,504,105	14,037,195	12,916,953	15,785,546
Cash Flows from Investing Activities												
Receipts:												
Sale of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Real Estate Assets	-	5,056,000	2,644,000	-	-	-	-	-	-	-	-	-
Sale of Infrastructure, Property, Plant & Equipment	-	830,861	3,005,859	1,076,379	605,805	579,149	715,718	696,171	628,077	768,090	588,838	609,358
Sale of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors Receipts	-	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Sale of Disposal Groups	-	-	-	-	-	-	-	-	-	-	-	-
Distributions Received from Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Purchase of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Infrastructure, Property, Plant & Equipment	-	(14,942,544)	(14,369,027)	(9,885,344)	(9,822,997)	(10,151,190)	(9,785,036)	(10,071,172)	(10,516,623)	(10,825,402)	(10,637,464)	(11,576,207)
Purchase of Real Estate Assets	-	(3,359,500)	-	-	-	-	-	-	-	-	-	-
Purchase of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors & Advances Made	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Contributions Paid to Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash provided (or used in) Investing Activities	-	(12,413,863)	(8,715,867)	(8,807,565)	(9,215,892)	(9,570,740)	(9,068,018)	(9,373,701)	(9,887,246)	(10,056,012)	(10,047,326)	(10,965,548)
Cash Flows from Financing Activities												
Receipts:												
Proceeds from Borrowings & Advances	-	5,620,000	1,240,000	1,260,000	1,481,935	1,000,000	-	-	-	-	-	-
Proceeds from Finance Leases	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Repayment of Borrowings & Advances	-	(1,640,010)	(728,582)	(856,394)	(1,007,070)	(1,125,301)	(1,167,977)	(1,214,203)	(1,261,584)	(1,311,039)	(1,362,704)	(1,078,014)
Repayment of Finance Lease Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
Distributions to Minority Interests	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow provided (used in) Financing Activities	-	3,979,990	511,418	403,606	474,865	(125,301)	(1,167,977)	(1,214,203)	(1,261,584)	(1,311,039)	(1,362,704)	(1,078,014)
Net Increase/(Decrease) in Cash & Cash Equivalents	-	2,577,470	2,733,182	493,118	(255,933)	1,706,002	1,598,739	47,189	2,355,274	2,670,144	1,506,923	3,741,983
plus: Cash, Cash Equivalents & Investments - beginning of year	-	8,446,000	11,023,470	13,756,652	14,249,770	13,993,837	15,699,839	17,298,578	17,345,767	19,701,042	22,371,186	23,878,109
Cash & Cash Equivalents - end of the year	-	11,023,470	13,756,652	14,249,770	13,993,837	15,699,839	17,298,578	17,345,767	19,701,042	22,371,186	23,878,109	27,620,091
Cash & Cash Equivalents - end of the year												
Cash & Cash Equivalents - end of the year	8,446,000	11,023,470	13,756,652	14,249,770	13,993,837	15,699,839	17,298,578	17,345,767	19,701,042	22,371,186	23,878,109	27,620,091
Investments - end of the year	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000	1,938,000
Cash, Cash Equivalents & Investments - end of the year	10,384,000	12,961,470	15,694,652	16,187,770	15,931,837	17,637,839	19,236,578	19,283,767	21,639,042	24,309,186	25,816,109	29,558,091
Representing:												
- External Restrictions	5,034,000	3,927,610	1,086,659	1,846,061	2,671,756	3,662,042	4,776,521	5,996,688	7,344,473	9,121,382	11,121,074	13,208,734
- Internal Restrictions	5,351,000	5,348,410	9,403,403	9,368,355	7,912,603	8,145,805	8,266,191	8,745,890	7,155,900	7,619,344	6,892,166	7,935,210
- Unrestricted	(1,000)	3,685,449	5,204,590	4,973,355	5,347,478	5,829,992	6,194,866	6,541,189	7,138,669	7,568,459	7,802,869	8,414,148
Net Cash Flow provided (used in) Investing Activities	10,384,000	12,961,470	15,694,652	16,187,770	15,931,837	17,637,839	19,236,578	19,283,767	21,639,042	24,309,186	25,816,109	29,558,091

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
CASH FLOW STATEMENT - WATER FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Cash Flows from Operating Activities												
Receipts:												
Rates & Annual Charges	-	976,877	962,658	1,010,956	1,061,535	1,114,578	1,148,181	1,182,573	1,218,075	1,254,627	1,292,264	1,331,025
User Charges & Fees	-	3,904,072	4,079,236	4,269,860	4,481,486	4,703,539	4,884,985	5,031,531	5,182,463	5,337,937	5,498,075	5,663,017
Interest & Investment Revenue Received	-	115,480	72,504	74,662	76,901	79,208	81,590	84,038	86,559	89,156	91,830	94,585
Grants & Contributions	-	201,962	316,722	244,442	248,308	253,853	258,039	260,586	263,935	267,335	270,831	274,479
Bonds & Deposits Received	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Employee Benefits & On-Costs	-	(968,875)	(932,321)	(1,001,416)	(1,029,456)	(1,055,192)	(1,081,572)	(1,108,611)	(1,136,326)	(1,164,735)	(1,193,853)	(1,223,699)
Materials & Contracts	-	(3,083,336)	(3,043,157)	(3,184,014)	(3,257,659)	(3,339,916)	(3,390,028)	(3,475,830)	(3,578,885)	(3,676,890)	(3,743,595)	(3,836,393)
Borrowing Costs	-	-	-	-	-	-	-	-	-	-	-	-
Bonds & Deposits Refunded	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	(331,600)	(323,360)	(338,444)	(354,252)	(370,820)	(388,184)	(406,383)	(425,459)	(445,455)	(466,414)	(488,385)
Net Cash provided (or used in) Operating Activities	-	824,580	1,132,282	1,076,046	1,228,863	1,385,250	1,513,012	1,567,903	1,610,361	1,661,975	1,749,138	1,814,829
Cash Flows from Investing Activities												
Receipts:												
Sale of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Real Estate Assets	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Infrastructure, Property, Plant & Equipment	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Disposal Groups	-	-	-	-	-	-	-	-	-	-	-	-
Distributions Received from Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Purchase of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Infrastructure, Property, Plant & Equipment	-	(1,584,900)	(1,400,000)	(1,362,000)	(1,915,000)	(875,000)	(915,000)	(1,512,000)	(920,000)	(920,000)	(2,120,000)	(1,237,000)
Purchase of Real Estate Assets	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors & Advances Made	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Contributions Paid to Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash provided (or used in) Investing Activities	-	(1,584,900)	(1,400,000)	(1,362,000)	(1,915,000)	(875,000)	(915,000)	(1,512,000)	(920,000)	(920,000)	(2,120,000)	(1,237,000)
Cash Flows from Financing Activities												
Receipts:												
Proceeds from Borrowings & Advances	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from Finance Leases	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Repayment of Borrowings & Advances	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of Finance Lease Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
Distributions to Minority Interests	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow provided (used in) Financing Activities	-	-	-	-	-	-	-	-	-	-	-	-
Net Increase/(Decrease) in Cash & Cash Equivalents	-	(760,320)	(267,718)	(285,954)	(688,137)	510,250	598,012	55,903	690,361	741,975	(370,862)	577,629
plus: Cash, Cash Equivalents & Investments - beginning of year	-	2,425,000	1,664,680	1,396,962	1,111,008	422,871	933,121	1,531,133	1,587,036	2,277,398	3,019,373	2,648,511
Cash & Cash Equivalents - end of the year	-	1,664,680	1,396,962	1,111,008	422,871	933,121	1,531,133	1,587,036	2,277,398	3,019,373	2,648,511	3,226,140
Cash & Cash Equivalents - end of the year	-	1,664,680	1,396,962	1,111,008	422,871	933,121	1,531,133	1,587,036	2,277,398	3,019,373	2,648,511	3,226,140
Representing:												
- External Restrictions	1,372,000	1,522,000	1,672,000	1,822,000	1,972,000	2,122,000	2,272,000	2,422,000	2,572,000	2,722,000	2,872,000	3,022,000
- Internal Restrictions	-	(674,621)	(937,585)	(1,121,611)	(1,694,007)	(2,553,952)	(1,860,810)	(1,702,215)	(902,018)	(288,633)	(288,690)	421,638
- Unrestricted	1,053,000	817,301	662,548	410,619	144,878	136,073	1,119,943	867,252	607,416	340,206	65,201	(217,497)
2,425,000	1,664,680	1,396,962	1,111,008	422,871	933,121	933,121	1,531,133	1,587,036	2,277,398	3,019,373	2,648,511	3,226,140

Richmond Valley Council
10 Year Financial Plan for the Years ending 30 June 2025
CASH FLOW STATEMENT - SEWER FUND
Scenario: Rates Special Variation Approved

	Actuals 2013/14	Current Year 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Cash Flows from Operating Activities												
Receipts:												
Rates & Annual Charges	-	5,790,467	6,299,701	6,490,219	6,684,968	6,885,505	7,092,012	7,304,772	7,523,978	7,749,724	7,982,214	8,221,655
User Charges & Fees	-	1,760,646	1,167,630	887,871	917,532	945,038	979,409	1,002,612	1,032,690	1,063,671	1,095,581	1,128,449
Interest & Investment Revenue Received	-	287,239	269,003	276,501	293,087	293,275	302,917	311,066	320,521	329,863	340,252	349,958
Grants & Contributions	-	386,020	261,421	190,319	192,668	196,402	198,614	201,298	204,398	207,374	210,627	213,927
Bonds & Deposits Received	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	504	27	16	16	17	17	18	18	19	20	20
Payments:												
Employee Benefits & On-Costs	-	(1,185,605)	(1,259,028)	(1,377,971)	(1,447,754)	(1,515,148)	(1,584,226)	(1,655,032)	(1,727,608)	(1,801,998)	(1,878,248)	(1,956,404)
Materials & Contracts	-	(2,576,387)	(2,466,025)	(2,464,325)	(2,573,137)	(2,583,753)	(2,641,931)	(2,715,910)	(2,788,817)	(2,874,716)	(2,919,998)	(2,966,032)
Borrowing Costs	-	(1,333,700)	(1,263,900)	(1,193,000)	(1,118,200)	(1,039,300)	(958,200)	(869,000)	(789,100)	(682,200)	(583,100)	(479,200)
Bonds & Deposits Refunded	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	(334,700)	(321,520)	(336,359)	(351,905)	(368,192)	(385,257)	(403,137)	(421,872)	(441,504)	(462,075)	(483,633)
Net Cash provided (or used in) Operating Activities	-	2,794,484	2,687,311	2,473,272	2,589,255	2,813,864	2,997,355	3,176,686	3,354,108	3,550,234	3,785,273	4,008,740
Cash Flows from Investing Activities												
Receipts:												
Sale of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Real Estate Assets	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Infrastructure, Property, Plant & Equipment	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Disposal Groups	-	-	-	-	-	-	-	-	-	-	-	-
Distributions Received from Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Purchase of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Infrastructure, Property, Plant & Equipment	-	(2,005,300)	(4,128,200)	(1,871,000)	(2,511,000)	(1,501,000)	(4,599,000)	(1,489,000)	(2,023,000)	(1,185,000)	(3,057,000)	(1,451,000)
Purchase of Real Estate Assets	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors & Advances Made	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Contributions Paid to Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash provided (or used in) Investing Activities	-	(2,005,300)	(4,128,200)	(1,871,000)	(2,511,000)	(1,501,000)	(4,599,000)	(1,489,000)	(2,023,000)	(1,185,000)	(3,057,000)	(1,451,000)
Cash Flows from Financing Activities												
Receipts:												
Proceeds from Borrowings & Advances	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from Finance Leases	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Payments:												
Repayment of Borrowings & Advances	-	1,985,354	(1,011,108)	(1,057,572)	(1,107,974)	(1,162,538)	(1,219,242)	(1,284,122)	(1,349,610)	(1,419,593)	(1,494,165)	(1,575,287)
Repayment of Finance Lease Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
Distributions to Minority Interests	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Payments	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow provided (used in) Financing Activities	-	1,985,354	(1,011,108)	(1,057,572)	(1,107,974)	(1,162,538)	(1,219,242)	(1,284,122)	(1,349,610)	(1,419,593)	(1,494,165)	(1,575,287)
Net Increase/(Decrease) in Cash & Cash Equivalents	-	2,774,538	(2,451,997)	(455,300)	(1,029,719)	150,326	(2,820,887)	403,564	(18,502)	945,641	(765,892)	982,453
plus: Cash, Cash Equivalents & Investments - beginning of year	-	10,927,000	13,701,538	11,249,541	10,794,241	9,764,522	9,914,848	7,093,962	7,497,526	7,479,024	8,424,665	7,658,773
Cash & Cash Equivalents - end of the year	-	13,701,538	11,249,541	10,794,241	9,764,522	9,914,848	7,093,962	7,497,526	7,479,024	8,424,665	7,658,773	8,641,226
Cash & Cash Equivalents - end of the year	-	13,701,538	11,249,541	10,794,241	9,764,522	9,914,848	7,093,962	7,497,526	7,479,024	8,424,665	7,658,773	8,641,226
Representing:												
- External Restrictions	2,592,000	4,505,828	4,505,828	4,593,005	4,593,005	4,593,005	4,593,005	5,549,304	6,088,216	7,194,081	7,294,081	8,448,808
- Internal Restrictions	-	(2,830,791)	(5,465,822)	(6,865,822)	(6,761,242)	(7,955,653)	(10,628,508)	(11,028,508)	(11,428,508)	(12,123,196)	(12,123,196)	(12,123,196)
- Unrestricted	8,335,000	12,026,501	12,209,535	12,067,058	11,932,759	13,277,497	13,126,464	12,976,315	12,819,315	12,659,091	12,487,888	12,315,614
10,927,000	13,701,538	11,249,541	10,794,241	9,764,522	9,914,848	9,914,848	7,093,962	7,497,526	7,479,024	8,424,665	7,658,773	8,641,226

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