





# Strategic Asset Management Plan



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## DOCUMENT VERSION HISTORY AND CONTROL

<b>Version Number</b>	<b>Date</b>	<b>Previous Plan or Policy</b>	<b>New Policy/Plan</b>	<b>Council Minute Number</b>
1.0	Sept. 2017	Asset Management Policy and Strategy 2012	Asset Management Policy 2017	
1.0	Sept. 2017	Asset Management Policy 2010	Asset Management Policy 2017	133/17
1.0	Feb. 2019	Asset Management Policy and Strategy 2012	Strategic Asset Management Plan (Buildings and Civil Infrastructure) 2019	
1.0	Feb. 2019	Individual Asset Management Plans (Buildings, Open Spaces, Roads, Sewerage, Water) 2012	Strategic Asset Management Plan (Buildings and Civil Infrastructure) and applicable Dashboards, 2019.	

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## 1. EXECUTIVE SUMMARY

### Context

Bellingen Shire Council is responsible for the acquisition, operation, maintenance, renewal and disposal of an extensive range of Building and Infrastructure assets with a total replacement value nearing \$532.2 million.

The Building and Infrastructure assets include:

- Transport
- Drainage
- Buildings
- Parks & Recreation
- Other Assets
- Water Supply
- Sewer Network

These assets contribute to provision of services essential to our community's quality of life.

Like many NSW councils, Bellingen experiences a funding infrastructure backlog due to aging infrastructure. Council has minimal revenue growth giving rise to persistent underlying operating deficits (Before grants and contributions) and constraints on renewal expenditure. Hence a funding gap between current and required capital expenditure. Therefore, long term Capital Plans and Long-Term Financial Planning is required to ensure that service delivery is sustainable

This Strategic Asset Management Plan (SAMP) takes the organisational objectives in our Strategic Plan, develops the asset management objectives, principles, framework and strategies required to achieve our organisational objectives. The plan summarises activities and expenditure projections from individual asset modelling to achieve the asset management objectives.

### Current situation

The objective of the SAMP is to describe how Council will meet its commitment to asset management as documented in the Asset Management Policy. It will achieve this by developing a structured set of Strategic Actions aimed at enabling Council to improve its asset management practices and service delivery needs.

Our aim is to achieve a 'core' maturity for asset management activities by and continue maturity improvement where the benefits exceed the costs. Improvement tasks and target dates have been

identified and documented in Table 7.2 Improvement plan.

### Strategic Asset Management Plan Methodology

This SAMP has been developed in line with Council's Community Strategic Plan. The SAMP contains modelling at Organisation, Fund and Major Asset Category levels.

The modelling compares council's required asset renewals, accumulated backlog and additional operations and maintenance to control high risk assets against council's Long-term Financial Plan. The modelling represents council's current funded position with respect to the management of physical assets.

The modelling is a reflection of the actual funding available. The difference or gap between projected and planned expenditure is "what we can't do". The discussion about this "gap" will lead us into a much better-informed community discussion about what are achievable and acceptable service levels, as well as giving a focus on managing risk.

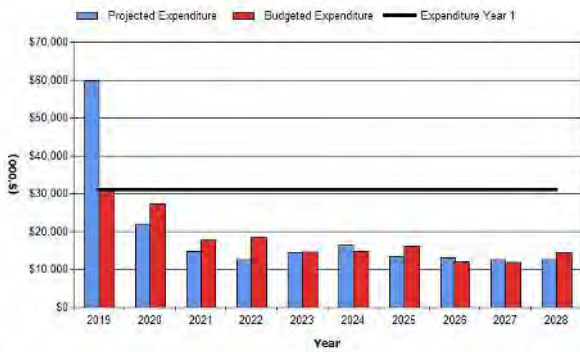
### What does it Cost?

The forecast of the projected outlays necessary to provide the services covered by this SAMP includes operations, maintenance, capital renewal and upgrade of all buildings and major infrastructure asset classes. Over the 10 year planning period the projected outlays for all council infrastructure is \$191.4M or \$19.1M on average per year.

Estimated available funding for this period is \$178.3M or \$17.8M on average per year which is 93% of the cost to provide the service. This is a funding shortfall of -\$1.3M on average per year. This modelling includes backlog which is projected to be \$28.8 M as at 30<sup>th</sup> June 2019.

Projected expenditure required to provide services in the SAMP compared with planned expenditure currently included in the Long-Term Financial Plan are shown in the following graph.

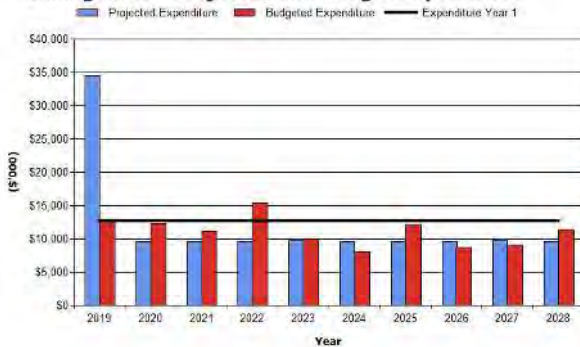
**Bellingen SC - Projected and Budget Expenditure for (Strategy)**



The following graphs and tables show projected vs planned expenditure requirements at General, Water and Sewer fund levels.

**General Fund**

**Bellingen SC - Projected and Budget Expenditure**

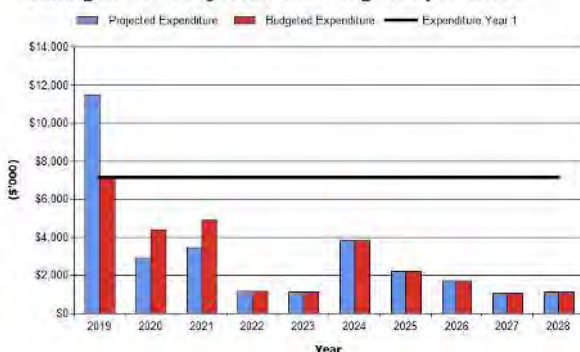


What does it Cost?	(\$,000)
10 Year Total Cost	\$121,433
10 Year Average Cost	\$12,143
10 Year Total LTFP Budget	\$111,085
10 Year average Total LTFP Budget	\$11,109
10 Year AM Financial Indicator	91%
10 Year average funding shortfall	-\$1,035

Detailed modelling results for General Fund asset classes including Buildings, Parks & Other Assets and Transport & Drainage is contained in Appendix B.

**Water Fund**

**Bellingen SC - Projected and Budget Expenditure**

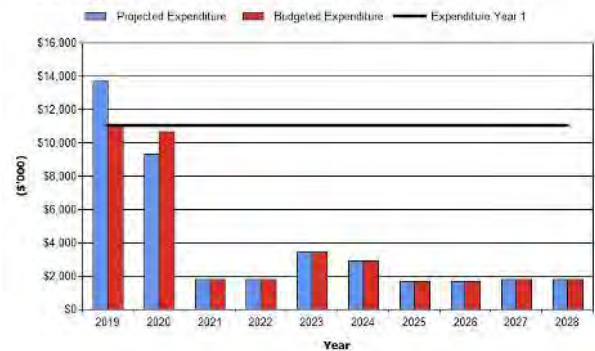


What does it Cost?	(\$,000)
10 Year Total Cost	\$30,075

10 Year Average Cost	\$3,008
10 Year Total LTFP Budget	\$28,621
10 Year average Total LTFP Budget	\$2,862
10 Year AM Financial Indicator	95%
10 Year average funding shortfall	-\$145

**Sewer Fund**

**Bellingen SC - Projected and Budget Expenditure**



What does it Cost?	(\$,000)
10 Year Total Cost	\$39,974
10 Year Average Cost	\$3,997
10 Year Total LTFP Budget	\$38,639
10 Year average Total LTFP Budget	\$3,864
10 Year AM Financial Indicator	97%
10 Year average funding shortfall	-\$133

**What we will do**

Council has previously been driven by funding availability and been reactive to customer requests. A shift towards a strategic approach to effective asset management provides better accountability, sustainability, risk management, service management and financial efficiency.

Our aim is to provide the services needed by the community in a financial sustainable manner. Achieving financial sustainability requires balancing service levels and performance with cost and risk.

Over the next 10 years council plans to continue its strong focus in the high-risk areas of Roads and Bridges under its SRV program. Major initiatives include:

- Continued acceleration of the road resealing program to prevent water penetration into the underlying pavement.
- A program to complete all high priority Bridge works identified from the recent level 2 and level 3 bridge audits.
- Renewal of poor condition footpaths and kerb & gutter sections.

There is also major capital investment occurring the Water & Sewer business area with major initiatives including:

- For Bellinghen and the Seaboard water pump stations funding has been allocated to replace aging pumps, install a new bore when required and carry out all maintenance and major overhauls.
- Control panels will be replaced at Bellinghen Water Treatment plant.
- Online monitoring for turbidity levels will be implemented.
- Continued implementation of the rolling program to replace or upgrade electronic control panels at sewer pump stations.
- Replacement of Pilot St pump station to rectify failing civil infrastructure and increase capacity.
- Urunga and Bellinghen STP's have had their automatic control upgraded and are currently being converted to SCADA control.
- Capacity upgrade at Urunga and Bellinghen Sewer treatment plants.
- Construction of reservoirs at South Urunga and North & South Bellinghen.
- Sewer system for Mylestom, parts of Repton and Raleigh and Raleigh Industrial Estate.
- Replication of water mains from Marx Hill to Raleigh reservoir.
- Telemetry System upgrade.
- Construction of main under the Kalang River to service Urunga South reservoirs.

### **What we have deferred**

Whilst it's not possible to meet all expectations for services within current financial resources. We will continue to work with the community to ensure that needed services are provided at appropriate levels of service and at an affordable cost while managing risks.

There are major initiatives and projects that are deferred for the next 10 years under present funding levels. These include:

- Renewal or replacement of buildings or major building components.
- Renewal or upgrade of parks and other recreational assets including the council's swimming pools.

In both cases there is higher community satisfaction with these services and the risk consequences for deferring work are considered more manageable when compared to roads and bridges at this time.

### **Managing the Risks**

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

- Highly variable and unpredictable extreme weather events, and the impact this will have on transport assets. What seemingly is a manageable position can change very quickly.
- Council's dependency on grants from other tiers of government particularly in regard to disaster recovery.
- Vehicle Mass Limits VML – restricted access for Higher Mass Limit (HML) and High Productivity Vehicles (HPV), with projected increase in demand for HML and HPV vehicles leading to increased loading on bridges and road pavements impacting pavement and bridge useful life.
- Modelling shows that building renewal forecasts are to significantly increase beyond current budget allocations in the next 5 to 15 years.
- A large portion of council's water & sewer mains are in the same age bracket and will require a significant investment in a short time span when due for replacement.

We will endeavour to manage these risks within available funding by Implementation of asset management systems, to provide a sound platform for understanding the condition, maintenance and replacement schedule for all our assets, which will in turn inform our ongoing budgeting process.

### **Confidence Levels**

This AM Plan is based on a mix of confidence levels as data and information varies greatly across different asset areas.

### **The Next Steps**

The actions resulting from this asset management plan are:

- We need to regularly engage with our community to understand the level of service they expect and to help them understand the level of service we can deliver. This information is important in setting priorities and determining resource allocation.
- Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
- Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,

- Identifying and managing risks associated with providing services from assets,
- Making trade-offs between service levels and costs to ensure that the community receives the best return from assets,
- Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
- Consulting with the community to ensure that services and costs meet community needs and are affordable,
- Developing partnership with other bodies, where available to provide services,
- Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to asset intensive services.

## **2. ASSET MANAGEMENT STRATEGY**

### **2.1 Asset Management System**

Asset management enables an organisation to realise value from assets in the achievement of organisational objectives, while balancing financial, environmental and social costs, risk, quality of service and performance related to assets.<sup>1</sup>

An asset management system is a set of interrelated and interacting elements of an organisation to establish the asset management policy and asset management objectives, and the processes, needed to achieve those objectives. An asset management system is more than a 'management information system'. The asset management system provides a means for coordinating contributions from and interactions between functional units within an organisation.<sup>2</sup>

The asset management system includes:

- The asset management policy
- The asset management objectives
- The asset management plan
- The asset management plans, which are implemented in
  - Operational planning and control
  - Supporting activities
  - Control activities
  - Other relevant processes.<sup>3</sup>

#### **2.1.1 Asset Management Policy**

The asset management policy sets out the principles by which the organisation intends applying asset management to achieve its organisational objectives.<sup>4</sup> Organisational objectives are the results the organisation plans to achieve, as documented in its Strategic Plan. Our adopted asset management policy is attached as Appendix A.

#### **2.1.2 Asset Management Objectives**

The asset management objectives, developed in this asset management plan provide the essential link between the organisational objectives and the asset management plan(s) that describe how those objectives are going to be achieved. The asset management objectives transform the required outcomes (product or service) to be provided by the assets, into activities typically described in the asset management plans. Asset management objectives should be specific, measurable, achievable, realistic and time bound (i.e. SMART objectives).<sup>5</sup>

#### **2.1.3 Asset Management Plan**

This strategic asset management plan combines our 3 major engineering asset categories. It includes analysis at sub-category asset level. The purpose is to document the relationship between the organisational objectives set out in the Community Strategic Plan, Resourcing Strategy, Delivery Program,

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<sup>1</sup> ISO, 2014, ISO 55000, Sec 2.2, p 2

<sup>2</sup> ISO, 2014, ISO 55000, Sec 2.5.1, p 5

<sup>3</sup> ISO, 2014, ISO 55002, Sec 4.1.1, p 2.

<sup>4</sup> ISO, 2014, ISO 55002, Sec 5.2, p 7.

<sup>5</sup> ISO, 2014, ISO 55002, Sec 6.2.1, p 9.

and the asset management (or service) objectives and define the strategic framework required to achieve the asset management objectives.<sup>6</sup>

This asset management plan encompasses the following services:

- Transport including sealed and unsealed roads
- Bridges including Major Culverts
- Footpaths
- Stormwater Drainage

The asset management framework incorporates strategies to achieve the asset management objectives. The strategies are developed in 4 steps:

- What assets do we have?
- Our assets and their management
- Where do we want to be?
- How will we get there?<sup>7</sup>

## 2.2 What Assets do we have?

We manage a lot of assets to provide services to our community. The assets provide the foundation for the community to carry out its everyday activities, while contributing to overall quality of life.

**Table 2.2: Assets covered by this Plan**

Asset Class	Description	Services Provided
Transport	70km State Roads 43km Regional Roads 427km Sealed Local Roads 114km Unsealed Local Roads 24km Footpaths 71km Kerb & Gutter 4 Public Car Parks 4.5km Cycleways & Shared Paths 39km Stormwater Drainage	The Transport assets provided by Bellinghen Council are used to support transportation and are an important to the community and economic activities of the region.
Drainage	39km Stormwater Drainage Drainage Pits Headwalls	Stormwater drainage assets provide protection from flooding and minimise the impacts of stormwater runoff. Reduce impacts of pollutants carried by stormwater runoff on the receiving waters.
Buildings	1 Administration 4 depots 3 Libraries 53 Sport / Recreation Buildings 3 Swimming Pools 9 Halls 24 Emergency 3 Commercial 2 Surf clubs	Council owns and maintains a wide variety of buildings. These buildings provide services for all members of our community – providing places to hold events, meet up with friends, attend a playgroup or borrow a book. Council also owns buildings that provide us with a source of income as well as providing a service, such as our child care centres and pools.

<sup>6</sup> ISO, 2014, ISO 55002, Sec 4.1.1, p 2.

<sup>7</sup> LGPMC, 2009, Framework 2, Sec 4.2, p 4.

Asset Class	Description	Services Provided
Parks & Recreation	Parks & Playgrounds, Sports Fields, Skate Parks, BMX Track, Beaches, Natural Areas, Tennis Courts, BBQ facilities	Our natural areas, parks and sports fields give our residents and those in surrounding areas the chance to be active in many ways, participate in organised sport or just relax and enjoy being outside.
Other Assets	Bus Shelter & Street Furniture Memorials / Lookouts / Platforms	Bellingen Shire Council provides a mix of assets to enhance the overall amenity of area for both residents and visitors to the area.
Water Supply	175km of Mains 2 Treatment Plants 3 Bores 1 Well 2 River Pump Stations 1 Reticulated Pump Station 9 Reservoirs 1,105 Hydrants 1,019 Valves	Bellingen Shire has two water supply schemes, the Dorrigo Scheme, and the Lower Bellinger Scheme serving the towns of Bellingen, Urunga, Repton, Newry Island, Raleigh, and Mylestom. Upgrading of the Dorrigo Scheme completed in 1994. The Lower Bellinger Scheme extracts water from 3 bores and one well adjacent to the Bellinger River. The Dorrigo Scheme extracts water from the Bielsdown River and Rocky Creek during low flows.
Sewer Network	75.4km of gravity sewer mains 25.6km of rising mains 3 Treatment Plants 28 Pump Stations 1483 manholes	Bellingen Shire Council provides the three rural townships in the shire with sewerage networks. Bellingen, Dorrigo and Urunga are all provided with a sewerage network to enable the collection, treatment and disposal of waste water. Each individual sewerage network comprises a treatment works, storage ponds and transfer systems with pumping stations, rising mains and reticulation mains and associated infrastructure.

## 2.3 Our Assets and their management

### 2.3.1 Asset Values

This physical assets covered by this asset management plan are shown in Table 2.3.1. These assets are used to provide services to the community.

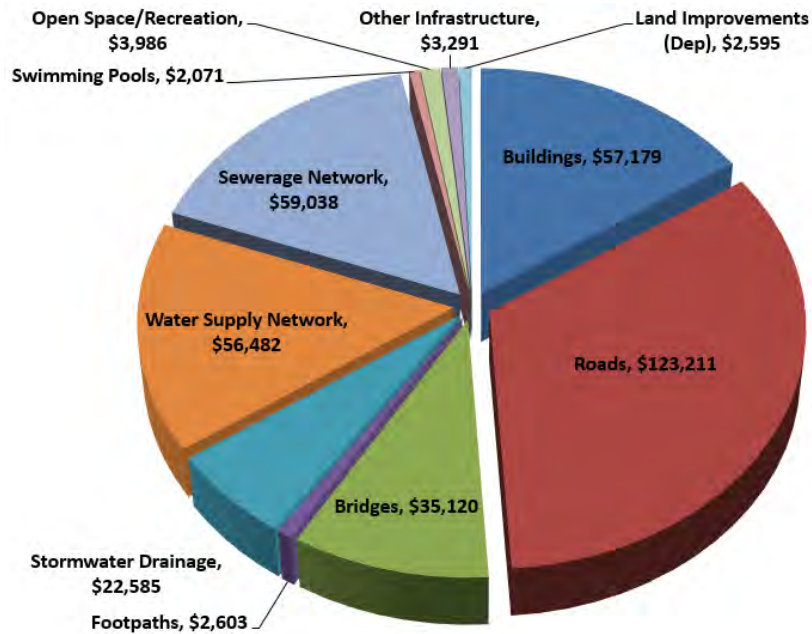
**Table 2.3.1: Assets covered by this Plan**

Bellingin LGA - Note 9a \$'000	As at 30/6/2018		
	Current Replacement Cost	Carrying Value	Depreciation Expense
Buildings	\$57,178.70	\$33,856.17	\$803.77
Infrastructure Roads	\$123,211.28	\$75,009.63	\$2,329.88
Infrastructure Bridges	\$35,119.94	\$21,678.96	\$683.53
Infrastructure Footpaths	\$2,603.39	\$1,944.83	\$31.82
Infrastructure Stormwater Drainage	\$22,584.87	\$13,701.58	\$225.85
Infrastructure Water Supply Network	\$56,482.46	\$33,869.71	\$689.03
Infrastructure Sewerage Network	\$59,037.73	\$37,025.01	\$1,058.50
Infrastructure Swimming Pools	\$2,070.52	\$966.23	\$63.66
Infrastructure Open Space/Recreation	\$3,985.53	\$2,487.17	\$175.58
Infrastructure Other Infrastructure	\$3,291.27	\$2,216.20	\$76.10
Land Improvements (Dep)	\$2,595.04	\$1,287.41	\$89.16
<b>TOTAL</b>	<b>\$368,160.75</b>	<b>\$144,117.84</b>	<b>\$6,226.88</b>

Figures exclude Earthworks (\$163,967,104) as it is non-depreciable.

Figure 1 shows the replacement value of our assets.

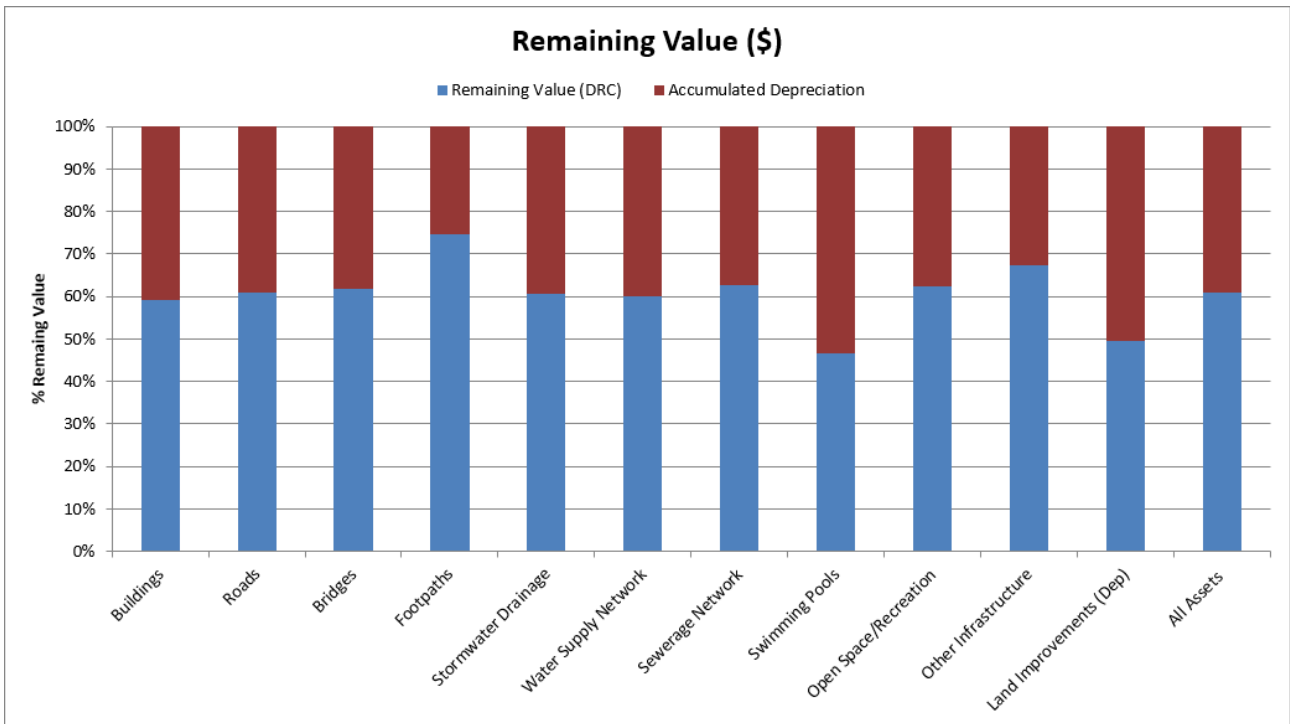
**Figure 1: Asset Replacement Values (\$000's)**



The asset consumption ratios of Council's assets (average proportion of 'as new' condition left in assets) are shown in Figure 2.



**Figure 2: Asset Remaining Value**



**2.3.2 Asset Condition**

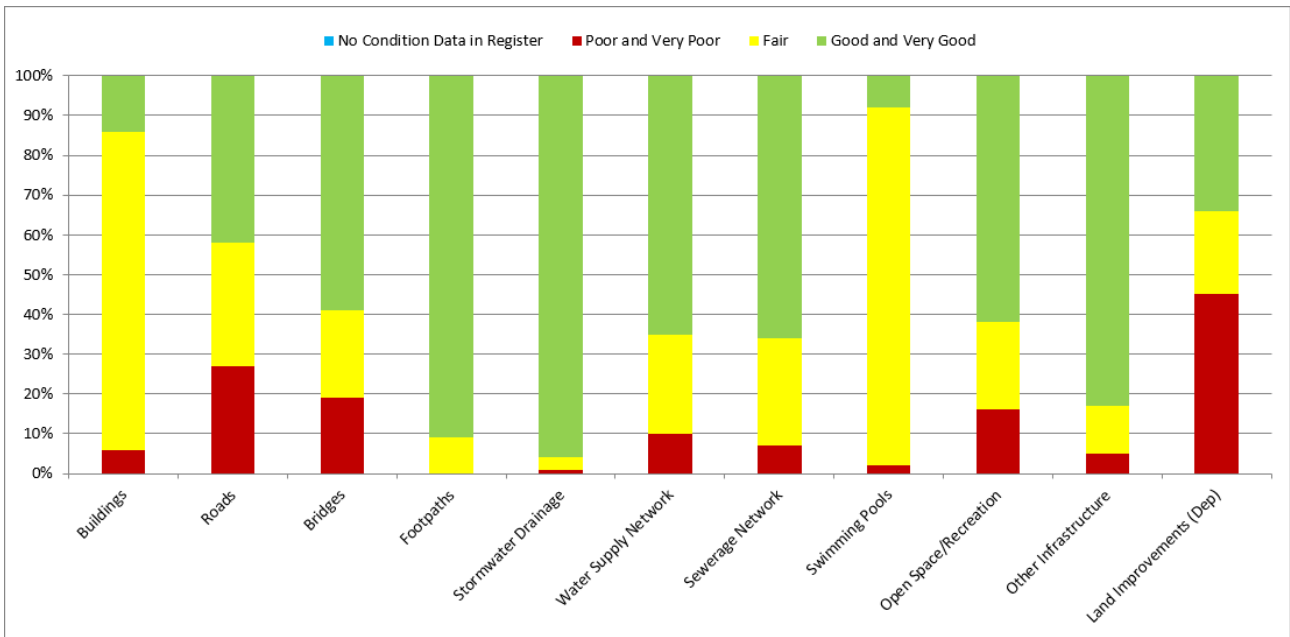
Condition is measured using a 1 – 5 grading system<sup>8</sup> as detailed in Table 2.3.2 and presented in summary format.

Table 2.3.2: Simple Condition Grading Model

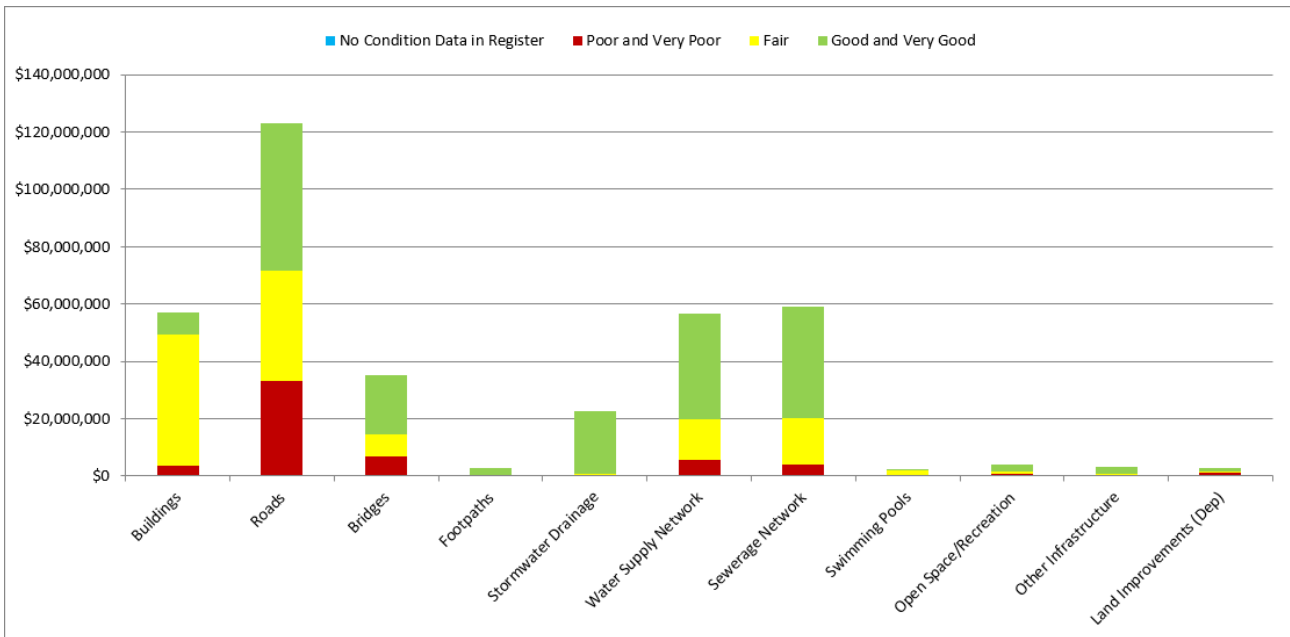
Condition Grading	Description of Condition
1	<b>Very Good:</b> New condition only planned maintenance required
2	<b>Good:</b> Minor defects only requiring minimal maintenance plus planned maintenance
3	<b>Fair:</b> Programmed maintenance required to return to accepted level of service (Low Risk & acceptable level of service to community)
4	<b>Poor:</b> Consider rehabilitation/renewal (Moderate Risk & low level of service to community)
5	<b>Very Poor:</b> Approaching unserviceable requires renewal (High Risk & unacceptable level of service to community)

<sup>8</sup> IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

**Figure 3.1: Condition of Assets (%)**



**Figure 3.2: Condition of Assets (\$)**



### 2.3.3 Lifecycle Costs

Lifecycle costs (or whole of life costs) are the average annual costs that are required to sustain the service levels over the longest asset life. Lifecycle costs include operations and maintenance expenditures plus asset consumption (depreciation). Life cycle costs can be compared to lifecycle expenditure to give an indication of sustainability in service provision.

Lifecycle expenditures include operations and maintenance expenditures (excluding depreciation) plus capital renewal expenditure. The capital renewal component of lifecycle expenditure can vary depending on the timing of asset renewals.

#### All Buildings & Infrastructure

The life cycle cost is \$14,225,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

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 \$17,835,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle surplus for services covered by this asset management plan is \$3,610,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 125% of life cycle costs. This result is indicative of the major investment being undertaken by council in Roads, Water and Sewer service areas to address current issues and improve overall services.

#### Lifecycle Costs by Fund

Table 2.3.3 summarises the lifecycle costs for each of council's funds.

**Table 2.3.3: Asset Lifecycle Costs by Fund – Bellinghen Shire Council**

Life Cycle Cost (long term)(\$000)	General Fund	Water Fund	Sewer Fund
Life Cycle Cost (depreciation + ops. and maintenance expenditures – 10 year average)	\$10,418	\$1,366	\$2,441
Life Cycle Exp. (Capital renewal. + operations + maintenance expenditure 10 year average)	\$11,109	\$2,862	\$3,864
Life Cycle Gap [life cycle expenditure - life cycle cost [-ve = gap]	\$690	\$1,496	\$1,423
Life Cycle Sustainability Indicator [life cycle expenditure / LCC]	107%	210%	158%

### 2.3.4 Asset Management Indicators

An asset management objective is to provide the services that the community needs at the optimum lifecycle cost in a financially sustainable manner. Figure 4.1 shows the projected operations, maintenance, capital renewal, capital upgrade/new expenditure compared with financial outlays in the long-term financial plan.

**Figure 4.1: Projected Operating and Capital Expenditure (Buildings & Infrastructure)**

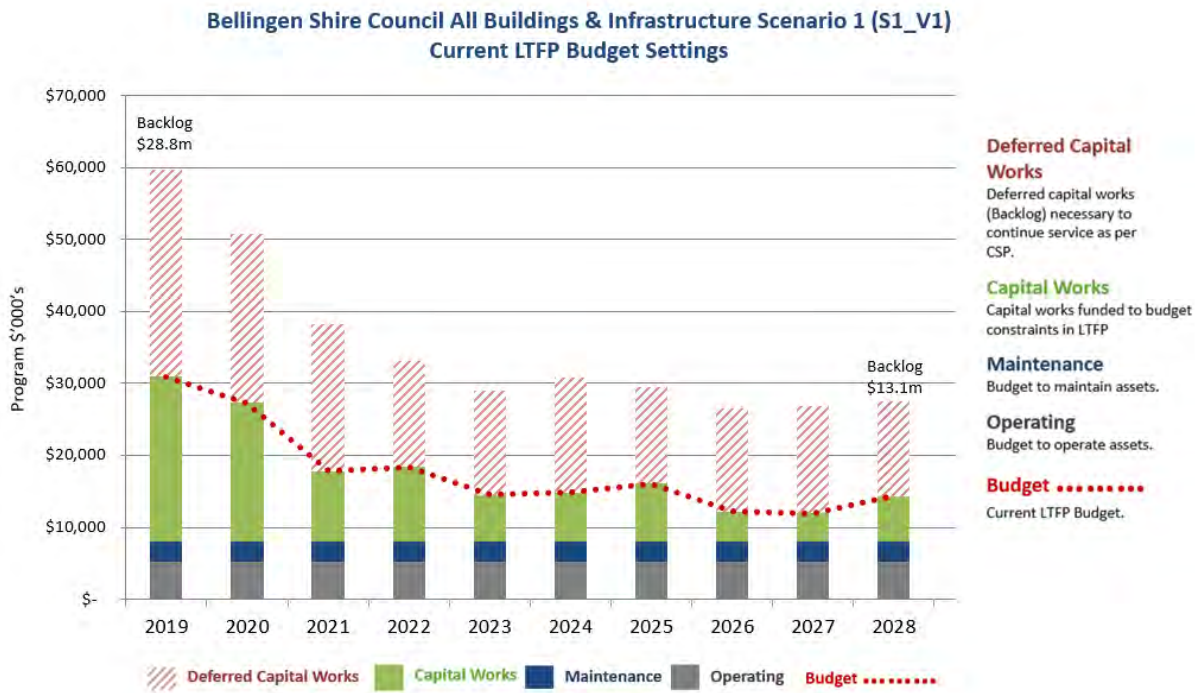
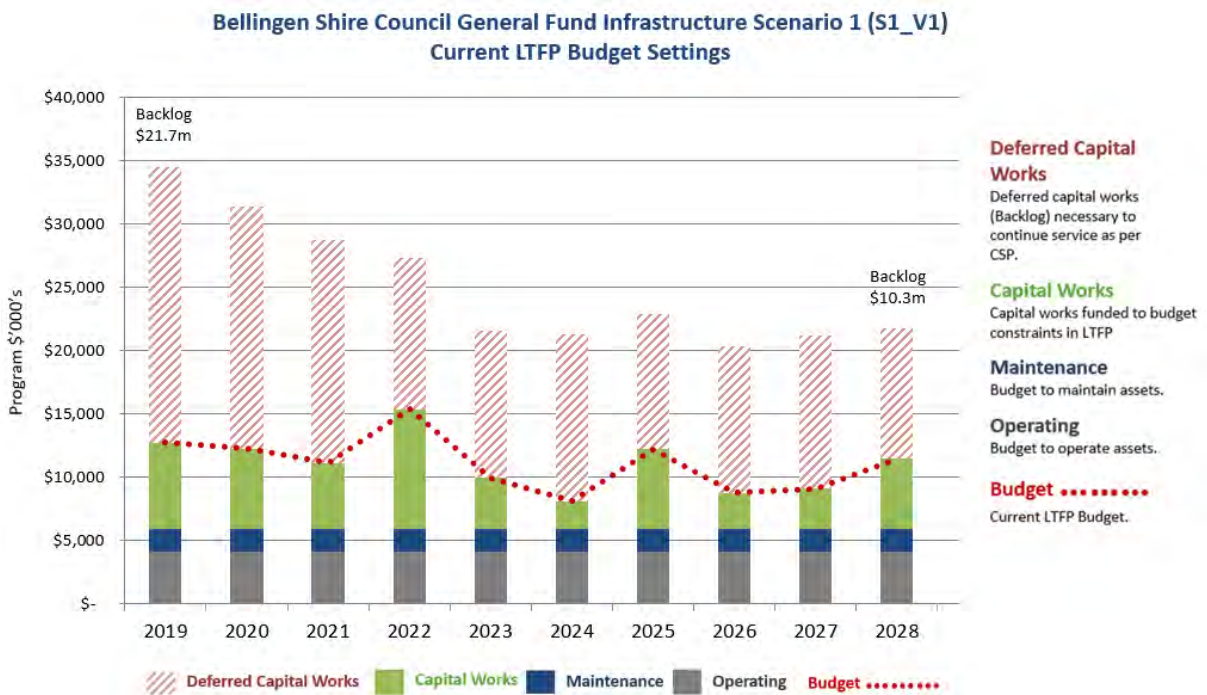


Figure 4.1 shows projected expenditure requirements, including current backlog, exceed current budget allocations. Subsequently, whilst current levels of service will be improving over the life of the plan the gap or backlog is still expected to be in excess \$13M in 2028.

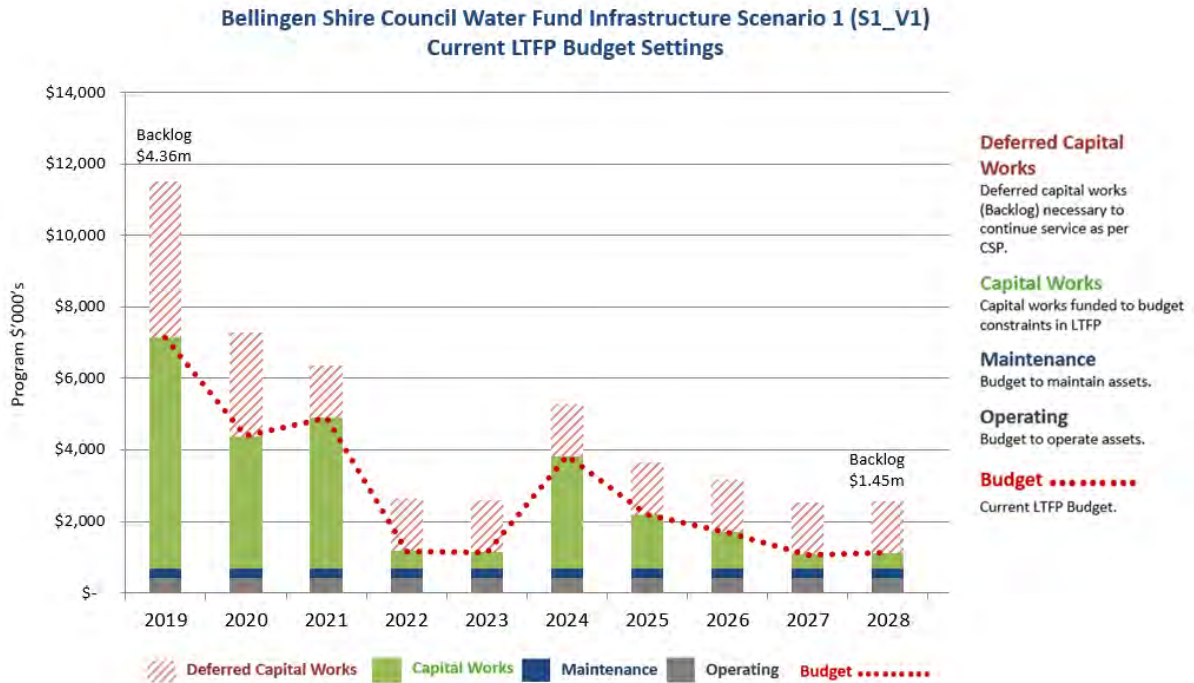
**Projected Operating & Capital Expenditure by Fund**

**Figure 4.2: Projected Operating and Capital Expenditure (General Fund)**



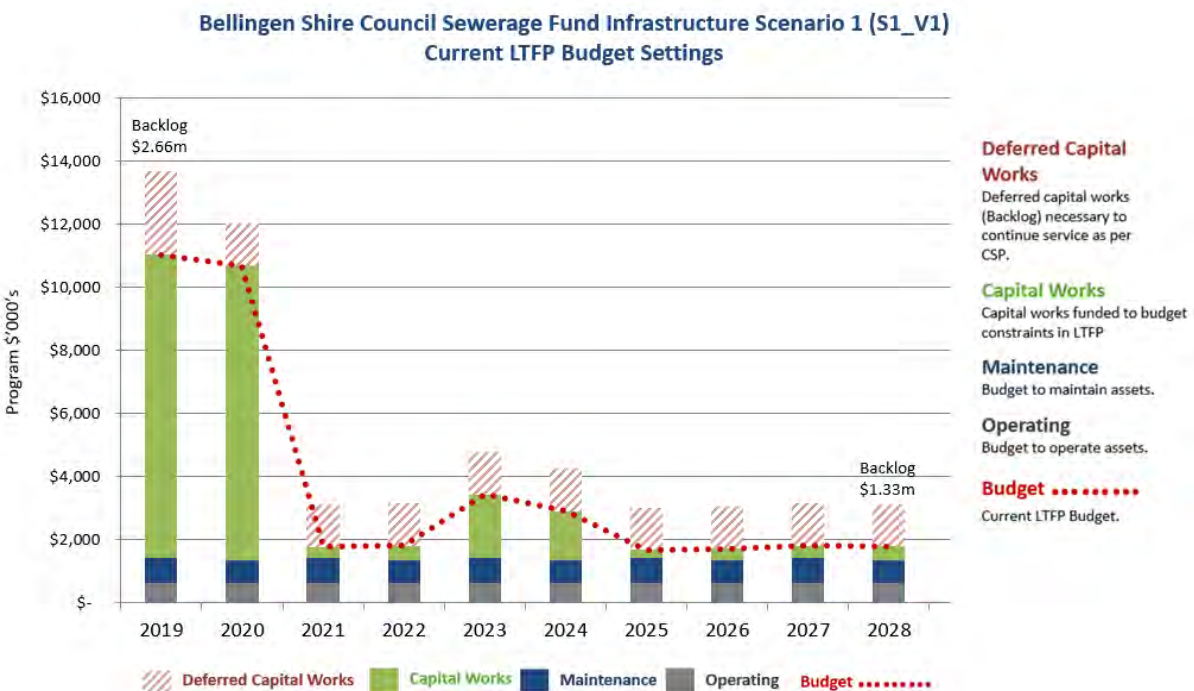
For the General Fund whilst there will be a significant reduction in the backlog for Roads and Drainage from \$19m to just under \$1m this is somewhat offset by an increase in Buildings, Parks and Other assets (\$2.6m > \$9.4m).

**Figure 4.3: Projected Operating and Capital Expenditure (Water Fund)**



Projected levels of expenditure for Water will see an overall improvement in levels of service and a reduction in backlog from \$4.3M to \$1.45m over the planning period.

**Figure 4.4: Projected Operating and Capital Expenditure (Sewer Fund)**



The significant levels of investment in Sewer in the early years of the plan to address current issues will see a significant improvement in levels of service and overall network performance. It will also halve the current backlog from \$2.6M to \$1.3 in 2028.

The purpose of this asset management plan is to develop the strategies to achieve the asset management objectives through balancing of asset service performance, cost and risk.

### 2.3.5 Opportunities

We have identified opportunities relevant to the services included in this asset management plan including:

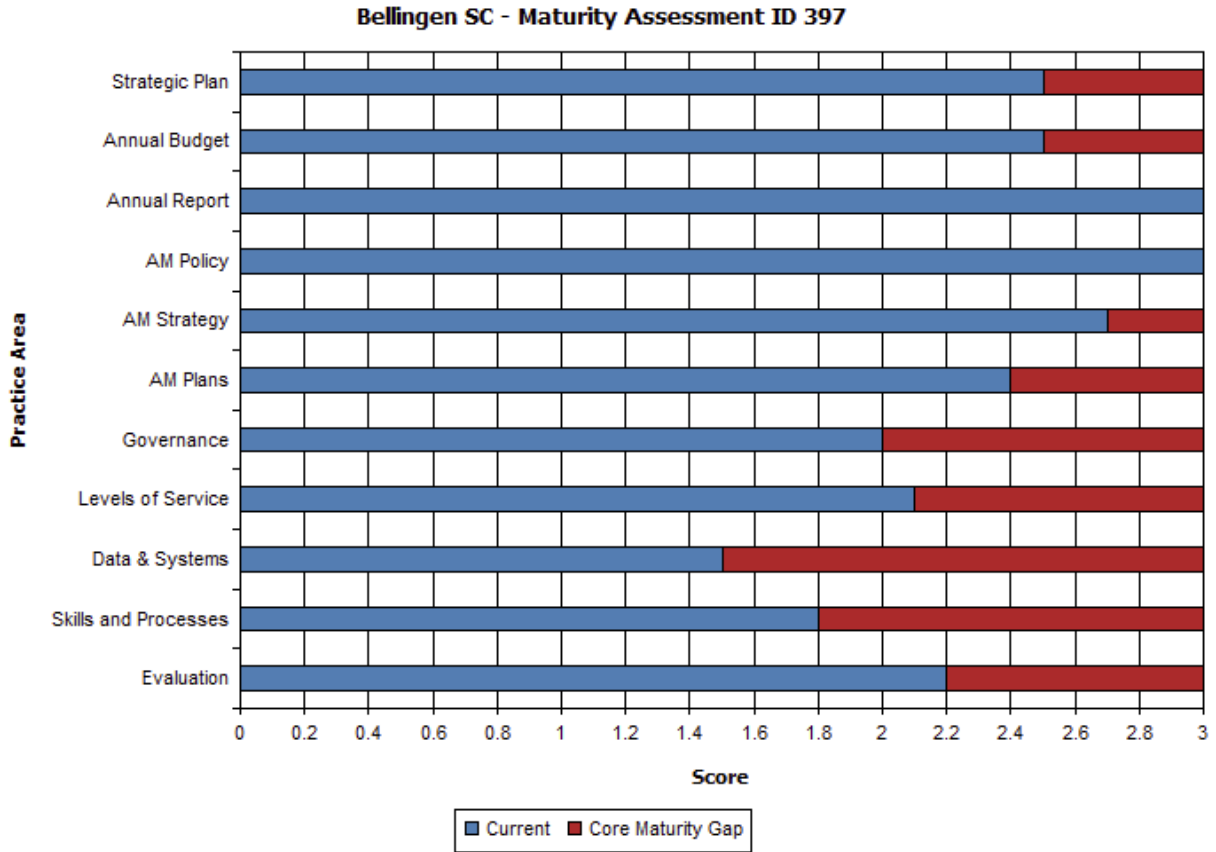
- We need to regularly engage with our community to understand the level of service they expect and to help them understand the level of service we can deliver. This information is important in setting priorities and determining resource allocation.
- Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
- Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
- Identifying and managing risks associated with providing services from assets,
- Making trade-offs between service levels and costs to ensure that the community receives the best return from assets,
- Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
- Consulting with the community to ensure that services and costs meet community needs and are affordable,
- Developing partnership with other bodies, where available to provide services,
- Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to asset intensive services.

### 2.3.6 Asset and Financial Management Maturity

We have taken steps to improve our asset and financial management performance including assessing our asset management maturity against the 3 Frameworks of the Local Government Financial Sustainability National Consistent Frameworks. The National Frameworks on Asset Planning and Management and Financial Planning and Reporting define 10 elements. 11 core competencies have been developed from these elements<sup>9</sup> to assess 'core' competency under the National Frameworks. Council's maturity assessment for the core competencies is summarised in Figure 5. The current maturity level is shown by the blue bars. The maturity gap to be overcome for Council to achieve a core financial and asset management competency is shown by the red bars.

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<sup>9</sup> Asset Planning and Management Element 2 *Asset Management Strategy and Plans* divided into Asset Management Strategy and Asset Management Plans competencies.



**Figure 5: Maturity Assessment**

Following work over the last 3 years a core level of maturity is now achievable within the next 18-24 months. Council has an improvement plan in place for all areas of practice and a future maturity audit will be scheduled to validate that core maturity has been achieved.

## 2.4 Where do we want to be?

### 2.4.1 Community Expectations

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets.

We have identified community expectations for service levels to be generally consistent with current levels of service

We have acquired physical assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our goal in managing these 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. Community engagement is necessary to ensure that informed decisions are made on future levels of service and costs and that service and risk consequences are known and accepted by stakeholders.

### 2.4.2 Organisational Objectives

The community and Councillors set priorities for the services we deliver, and the level to which we deliver them. How we operate as an organisation also influences how we deliver services, and our four key organisational goals, with specific actions to address areas for improvement.<sup>10</sup>

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

#### **Our Vision is:**

“ Our vision for the future must encompass all aspects of living and working in our shire, as well as ways in which we are connected beyond our borders - regionally, nationally and globally. Our vision is about protecting the pristine natural beauty of our environment and enhancing our prosperous and safe community where inclusiveness and sustainable living are embraced, so that creativity and cultural activity can flourish. **Connected, Sustainable, Creative**”

**Connected** - We are a community that is inclusive, connected to each other in our shire, and with connections beyond - regionally, nationally, and globally.

**Sustainable** - We strive to live sustainably to ensure that we have enough for all, forever.

**Creative** - We are a community that is creatively and culturally dynamic. We are ingenious and inventive in finding innovative solutions to problems and challenges.

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<sup>10</sup>Resourcing Strategy – Bellingen Shire Council



The organisation objectives developed for priority areas are shown in Table 2.4.2.

**Table 2.4.2: Strategic Priority Areas and Organisational Objectives<sup>11</sup>**

Aspirations for our Future	Outcome	Strategic Direction
Resilient Economy	We have meaningful work and vibrant businesses within our community.	<ul style="list-style-type: none"> <li>• We have the public infrastructure to appropriately support business activity.</li> <li>• We are a disaster resilient community</li> </ul>
Places for People	We are connected and able to move around in a safe, accessible, affordable, healthy and environmentally friendly way.	<ul style="list-style-type: none"> <li>• We have effective public and community transport linking townships in the Shire and linking to regional centres.</li> <li>• We have a network of cycleways, Footpaths and walking trails, supported by maps and signage which encourage active transport and reduce car dependency.</li> <li>• Our local infrastructure supports electric vehicles and non-motorised forms of transport.</li> <li>• We have a system of safe, well-Maintained roads including car calming infrastructure.</li> </ul>
Community Wellbeing	<p>We are connected, safe and healthy with a strong sense of community.</p> <p>We have the facilities and services needed to be a healthy and active community.</p> <p>We have a diversity of beautiful spaces that foster community happiness and wellbeing</p>	<ul style="list-style-type: none"> <li>• We have the programs, services and infrastructure to ensure a safe and healthy community.</li> <li>• We have a variety of passive recreation spaces including riversides, parks and reserves</li> <li>• We have a variety of active recreation spaces including playgrounds, sporting fields and multipurpose centres.</li> <li>• We have a variety of active recreation spaces including playgrounds, sporting fields and multipurpose centres.</li> <li>• There is active participation in a range of sporting and recreational pursuits</li> </ul>
Living Environment	We have clean water which is protected and used sustainably.	<ul style="list-style-type: none"> <li>• Our waterways and wetlands are valued, protected and enhanced.</li> <li>• We minimise our use of water.</li> <li>• We use our water and wastewater using best management practices.</li> </ul>

## 2.5 Asset Management Vision

To ensure the long-term financial sustainability of the organisation, it is essential to balance the community's expectations for services with their ability to pay for the assets used to provide the services.

<sup>11</sup> CSP/Resourcing Strategy – Bellingen Shire Council

Maintenance of service levels for physical assets requires appropriate investment over the whole of the asset life cycle. To assist in achieving this balance, we aspire to:

Develop and maintain asset management governance, skills, process, systems and data in order to provide the level of service the community need at present and in the futures, in the most cost-effective and fit for purpose manner.

In line with the vision, the objectives of the asset management plan are to:

- ensure that our services are provided in an economically optimal way, with the appropriate level of service to residents, visitors and the environment determined by reference to our financial sustainability
- safeguard our assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets
- adopt the long-term financial plan as the basis for all service and budget funding decisions
- meet legislative requirements for all our operations
- ensure resources and operational capabilities are identified and responsibility for asset management is allocated
- provide high level oversight of financial and asset management responsibilities through Audit Committee/CEO reporting to council/board on development and implementation of the Asset management plan, Asset Management Plan and Long-Term Financial Plan.

Strategies to achieve this position are outlined in Section 2.6.

## 2.6. How will we get there?

The asset management plan proposes strategies to enable the organisational objectives and asset management policies to be achieved.

**Table 2.6: Asset Management Strategies**

No	Strategy	Desired Outcome
1	Move from annual budgeting to long term financial planning.	The long-term implications of all services are considered in annual budget deliberations.
2	Develop and annually review strategic asset management plans that covering at least 10 years for all major asset classes (80% of asset value).	Identification of services needed by the community and required funding to optimise 'whole of life' costs.
3	Develop and maintain a long-term financial plan covering 10 years incorporating asset management plan expenditure projections with a sustainable funding position outcome.	Sustainable funding model to provide our services.
4	Incorporate Year 1 of long-term financial plan revenue and expenditure projections into annual budgets.	Long term financial planning drives budget deliberations.
5	Review and update strategic asset management plans and long-term financial plans after adoption of annual budgets. Communicate any consequence of funding decisions on service levels and service risks.	We and the community are aware of changes to service levels and costs arising from budget decisions.
6	Report our financial position at Fair Value in accordance with Australian Accounting Standards, financial sustainability and performance against organisational objectives in Annual Reports.	Financial sustainability information is available for Council and the community.
7	Ensure council/board decisions are made from accurate and current information in asset registers, on service level performance and costs and 'whole of life' costs.	Improved decision making and greater value for money.

8	Report on our resources and operational capability to deliver the services needed by the community in the annual report.	Services delivery is matched to available resources and operational capabilities.
9	Ensure responsibilities for asset management are identified and incorporated into staff position descriptions.	Responsibility for asset management is defined.
10	Implement an improvement plan to realise 'core' maturity for the financial and asset management competencies within 2 years.	Improved financial and asset management capacity within the organisation.
11	Report six monthly to Council/Board by Audit Committee/CEO on development and implementation of AM Plans and long-term financial plans.	Oversight of resource allocation and performance.

## **2.7 Asset Management Improvement Plan**

The tasks required achieving a 'core' financial and asset management maturity are shown in the asset management improvement plan in Section 7.2

### **2.8. Consequences if actions are not completed**

There are consequences for the Council if the improvement actions are not completed. These include:

- Inability to achieve strategic and organisational objectives
- Inability to achieve financial sustainability for the organisation's operations
- Current risks to service delivery are likely to eventuate and response actions may not be appropriately managed
- We may not be able to accommodate and/or manage changes in demand for asset intensive services.

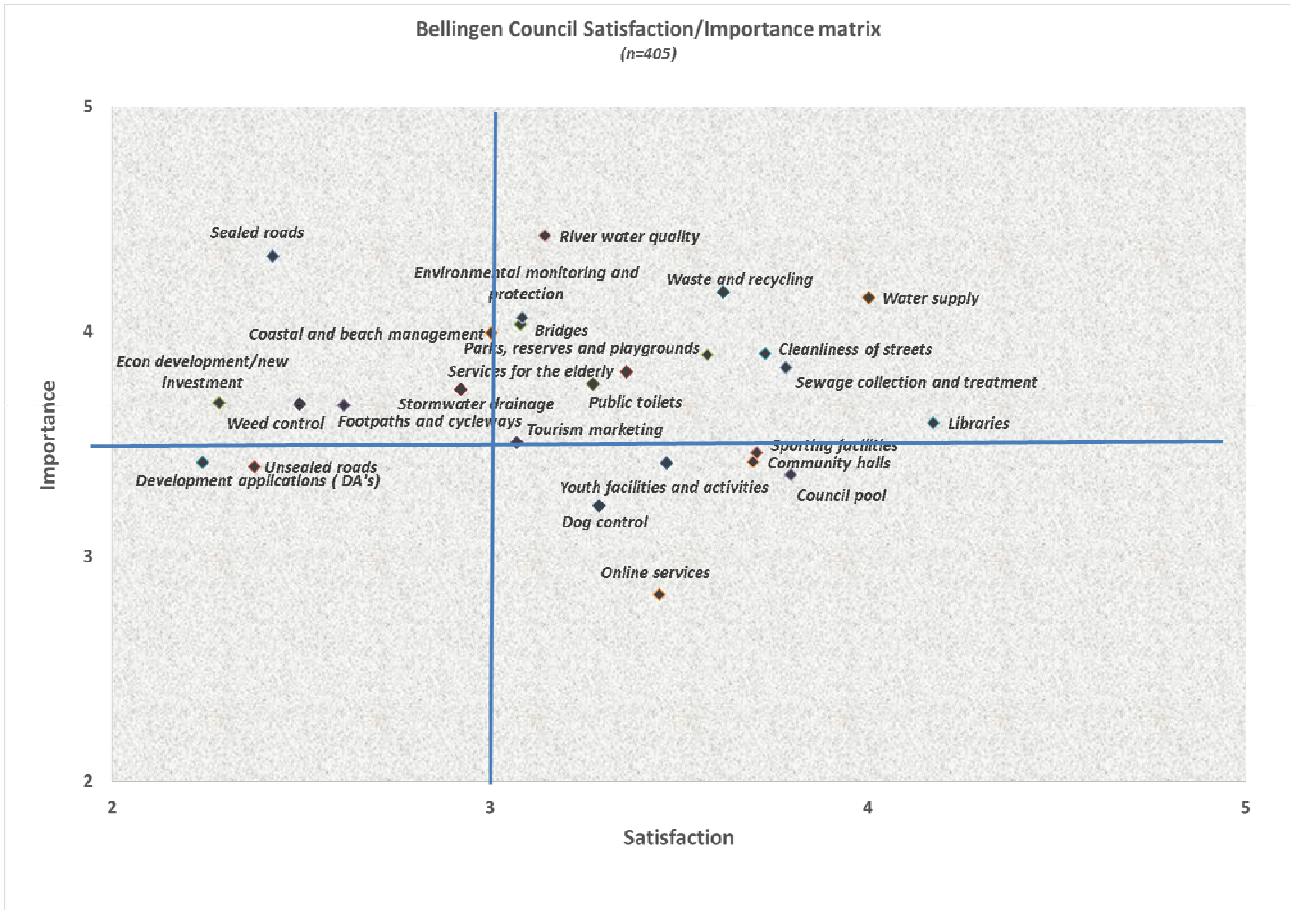
### 3. LEVELS OF SERVICE

#### 3.1 Consumer Research and Expectations

The expectations and requirements of various stakeholders were considered in the preparation of asset management plans summarised in this asset management plan. The following results have been extracted from Bellingen Shire Council’s Resident Satisfaction Report from June 2016.

Quadrant analysis is a useful tool for planning future directions. It combines the stated needs of the community and assesses Bellingen Shire Council performance in relation to these needs. Road maintenance remains a strongly articulated priority area as shown below.

Higher Importance, Lower Satisfaction	Higher Importance, Higher Satisfaction
Sealed roads Econ development/new investment Stormwater drainage Footpaths and cycleways Weed control	Water supply Cleanliness of streets Waste and recycling Parks, reserves and playgrounds River water quality Bridges Coastal and beach management Libraries Services for the elderly Sewage collection and treatment Public toilets Environmental monitoring and protection
Lower Importance, Lower Satisfaction	Lower Importance, Higher Satisfaction
Unsealed roads Development applications ( DA's)	Tourism marketing Youth facilities and activities Online services Dog control Council pool Sporting facilities Community Halls



### 3.2 Organisational Objectives

Sections 2.4.2 and 2.5 of this strategic asset management plan reported the organisational objectives from the Strategic Plan and asset management objectives developed from the organisational objectives.

The organisational and asset management objectives provide focus for the community and technical level of service tables in Section 3.4.

### 3.3 Legislative Requirements

We have to meet many legislative requirements including Australian and State legislation and State regulations. These include:

**Table 3.3: Legislative Requirements**

Legislation	Requirement
Local Government Act 1993	<p>Sets out role, purpose, responsibilities and powers of local governments. 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"> <li>• 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</li> <li>• the responsibility for administering some regulatory systems under this Act</li> <li>• a role in the management, improvement and development of the resources of their areas,</li> </ul> <p>(e) to require councils, councillors and council employees to have regard to the principles of ecologically sustainable development in carrying out their responsibilities.</p> <p>The land management provisions of the Act require that Council prepare plans of management for all community land. The plan of management identifies the management objectives for the land category, performance indicators and performance measures to meet the objectives identified.</p>
Local Government Amendment (Planning and Reporting) Act 2009	Local Government Amendment (Planning and Reporting) Act 2009 includes the preparation of a long-term financial plan supported by asset management plans for sustainable service delivery.
Disability Discriminations Act, 1992	<p>The Federal <i>Disability Discrimination Act 1992</i> (D.D.A.) provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.</p> <p>(a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of:</p> <p>(i) work, accommodation, education, access to premises, clubs and sport; and</p> <p>(ii) the provision of goods, facilities, services and land; and</p> <p>(iii) existing laws; and</p> <p>(iv) the administration of Commonwealth laws and programs; and</p> <p>(b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.</p>
Work Health & Safety Act 2011	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.

Legislation	Requirement
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.
Plant Protection Act 1989	This act sets out requirements in respect to Flora Protection
Environmental Protection Act 1994	This act sets out requirements in respect to environmental protection
Threatened Species Conservation Act, 1995	<p>An Act to conserve threatened species, populations and ecological communities of animals and plants.</p> <p>Under the terms of this Act Council is required to ensure the long-term survival of the species identified.</p>
Rivers and Foreshores Improvements Act, 1948	An Act to provide for the carrying out of works for the removal of obstructions from and the improvement of rivers and foreshores and the prevention of erosion of lands by tidal and non-tidal waters
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.
National Parks and Wildlife Act (1974)	An Act relating to the establishment, preservation and management of national parks, historic sites and certain other areas and the protection of certain fauna, native plants and Aboriginal objects
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.
Public Works Act 1912	Sets out the role of Council in the planning and construction of new assets.
Road Transport (General) Act 2005	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.
Road Transport (Safety and Traffic Management) Act 1999	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.

Legislation	Requirement
Roads Act 1993	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.
Local Government (Highways) Act 1982	An Act to consolidate with amendments certain enactments concerning the functions of the corporations of municipalities with respect to highways and certain other ways and places open to the public.
NSW Road Rules 2008	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.
Valuation of Land Act 1916	This act sets out requirements in respect Land Valuation
Crown Lands Act, 1989	An Act to provide for the administration and management of Crown land in the Eastern and Central Division of the State of NSW Council has large holdings of Crown land under its care, control and management.
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.
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.
Electrical Safety Act 2002	This act sets out the installation, reporting and safe use with electricity
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
Rural Fires Act, 1997	An Act to establish the NSW Rural Fire Service and define its functions; to make provision for the prevention, mitigation and suppression of rural fires. Under the terms of this Act Council is required to mitigate any fire that emanate from bushland.
Dangerous Goods Safety Management Act 2001	This act sets out the safe use, storage and disposal of dangerous goods
Fire and Rescue Service Act 1990	This act sets out requirements in respect to Emergency Services for Fire and Rescue
Public Records Act 2002	This act sets out requirements in respect maintaining Public Records
Surveillance Devices Act	This act sets out requirements in respect use of Surveillance Devices
Civil Liability Act, 2002	An Act to make provision in relation to the recovery of damages for death or personal injury caused by the fault of a person



Legislation	Requirement
Companion Animals Act, 1998	An Act to provide for the identification and registration of companion animals and for the duties and responsibilities of their owners. Under the terms of the Act Council is required to provide and maintain at least one off leash area. It currently has eleven areas identified as off leash.
Rural Fires Act, 1997	An Act to establish the NSW Rural Fire Service and define its functions; to make provision for the prevention, mitigation and suppression of rural fires. Under the terms of this Act Council is required to mitigate any fire that emanate from bushland.

### 3.4 Levels of Service

We have defined service levels in two terms.

**Community Levels of Service** 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 usage appropriate to capacity?

**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:

- Operations – the regular activities to provide services such as availability, cleansing, mowing, etc.
- Maintenance – the activities necessary to retain an assets as near as practicable to an appropriate service condition (e.g. road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide an 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).

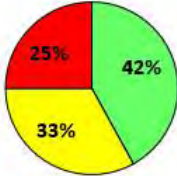
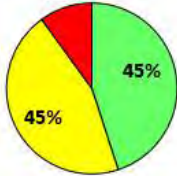
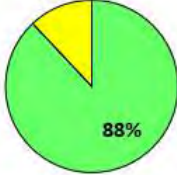
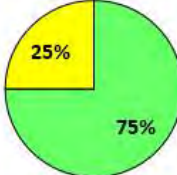
Service managers plan, implement and control technical service levels to influence the customer service levels.<sup>12</sup>

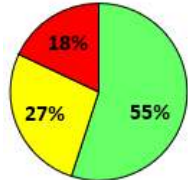
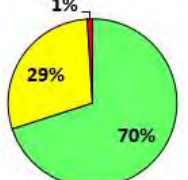
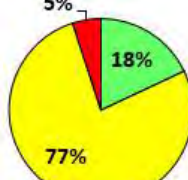
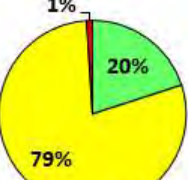
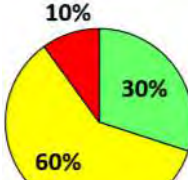
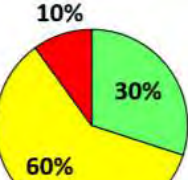
Together the community and technical levels of service provide detail on service performance, cost and whether service levels are likely to stay the same, get better or worse.

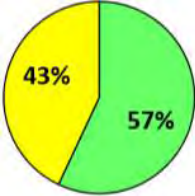
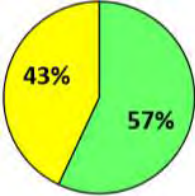
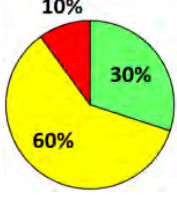
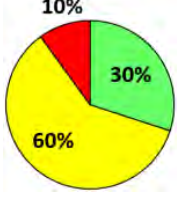
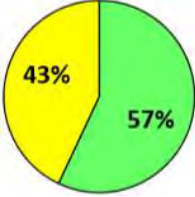
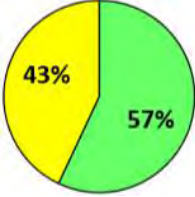
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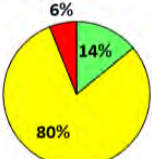
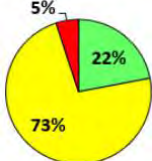
<sup>12</sup> IPWEA, 2011, IIMM, p 2.22

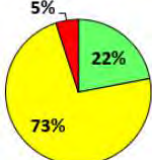
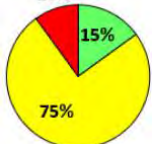
**Table 3.4: Community Levels of Service**

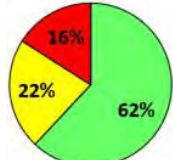
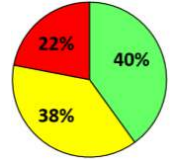
Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
<b>Community Levels of Service – Transport &amp; Drainage</b>				
<b>Quality</b>	Well maintained roads, Bridges and footpaths  Do not pond water  Look well maintained  Transport infrastructure condition meets hierarchy requirements for condition measures	Customer surveys    Customer requests	Footpaths & Cycleways 2.61 Lower Satisfaction Maintenance of sealed Roads 2.43 Lower Satisfaction Maintenance Unsealed Roads 2.38 Lower Satisfaction Maintenance of Bridges 2.92 Lower Satisfaction  Has not been fully assessed at this time	It is anticipated that customer requests and community dissatisfaction would remain the same if not improve over the next 10 years
		Roads State of the Assets Report  Condition Profiles	 <p>Confidence Level: High</p>	 <p>Confidence Level: Medium</p>
		Footpaths State of the Assets Report.  Condition Profiles	 <p>Confidence Level: Medium</p>	 <p>Confidence Level: Medium</p>

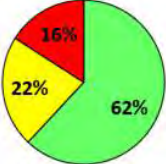
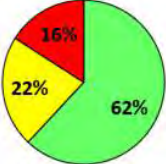
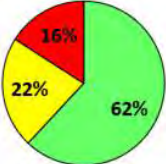
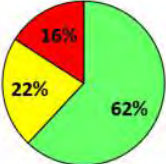
Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
		Bridges State of the Assets Report. Condition Profiles	 <p>Confidence Level: High</p>	 <p>Confidence Level: Medium</p>
	Provide efficient method of collection and disposal stormwater.  Stormwater Drainage condition meets hierarchy requirements for condition measures	Customer surveys Customer requests	Maintenance of Stormwater 2.92 Lower Satisfaction Has not been fully assessed at this time	It is anticipated that customer requests and community dissatisfaction would remain the same over the next 10 years
		State of the Assets Report. Condition Profile	 <p>Confidence Level: Low</p>	 <p>Confidence Level: Low</p>
<b>Function</b>	Ensure access to facilities and services is provided that is suited to the use  Transport Infrastructure meets hierarchy requirements for traffic volumes, design speed, width, alignment, access etc.	Customer requests  Function Profile	Has not been fully assessed at this time   <p>Confidence Level: Low</p>	Requests received should not increase annually.   <p>Confidence Level: Low</p>

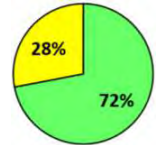
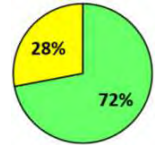
Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
	Ensure stormwater system meets community expectations  Removal of Gross Pollutants	Customer requests  Function Profile	Has not been fully assessed at this time   Confidence Level: Low	Requests received should not increase annually.   Confidence Level: Low
Capacity/ Utilisation	Transport network meets the capacity requirements appropriate to hierarchy	Customer requests  Capacity Profile	Has not been fully assessed at this time   Confidence Level: Low	Requests received should not increase annually.   Confidence Level: Low
	Stormwater network meets the capacity requirements appropriate to hierarchy	Customer requests  Capacity Profile	Has not been fully assessed at this time   Confidence Level: Low	Requests received should not increase annually.   Confidence Level: Low

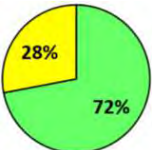
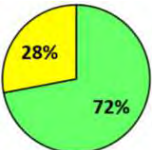
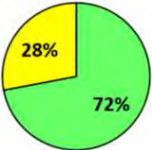
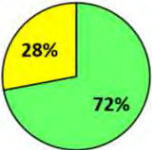
Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
<b>Community Levels of Service – Buildings</b>				
<b>Quality</b>	Service the needs of the community and Council to an appropriate standard  Buildings and facilities to be safe and suitable to users  At a quality or standard suitable for their use	Customer surveys	Community Halls 3.70 Higher Satisfaction  Sporting Facilities 3.71 Higher Satisfaction  Public Toilets 3.27 Higher Satisfaction  Has not been fully assessed at this time	It is anticipated that customer requests will increase and community dissatisfaction would decline over the next 10 years
		Buildings State of the Assets Report  Condition Profiles	 <p>Confidence Level: High</p>	
<b>Function</b>	Buildings and facilities to be suitable for customer activities  Easy to access  Fit for their purpose  Create a pleasant experience	Customer requests	Has not been fully assessed at this time	Requests are likely to increase slowly annually.
		Function Profile	 <p>Confidence Level: Low</p>	
<b>Capacity/ Utilisation</b>	Building facilities meet program delivery needs  Available  Sufficient facilities for the number of users	Customer requests  Capacity Profile	Has not been fully assessed at this time	Requests are likely to increase slowly annually.

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
	Not overused		 <p>Confidence Level: Low</p>	 <p>Confidence Level: Low</p>

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
<b>Community Levels of Service – Parks &amp; Other Assets</b>				
<b>Quality</b>	Look well maintained and clean	Customer surveys	Parks, Reserves and Playgrounds 3.58 Higher Satisfaction	It is anticipated that customer requests will increase and community dissatisfaction would decline over the next 10 years
	Fields have playable surface	Customer requests	Sporting Facilities 3.71 Higher Satisfaction	
	At a quality or standard suitable for their purpose	Parks & Other Assets State of the Assets Report	Has not been fully assessed at this time	
		Condition Profiles	 <p>Confidence Level: Low</p>	 <p>Confidence Level: Low</p>
<b>Function</b>	Easy to access	Customer requests	Has not been fully assessed at this time	Requests received should not increase annually.
	Fit for their use	Function Profile		
	Create a pleasant experience			

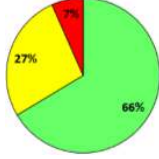
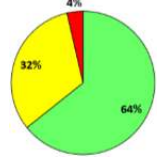
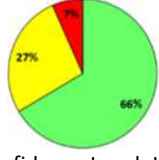
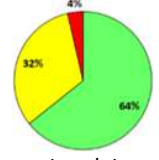
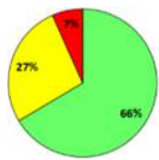
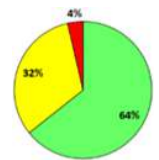
Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
			 <p>Confidence Level: Low</p>	 <p>Confidence Level: Low</p>
<b>Capacity/ Utilisation</b>	Available Sufficient facilities for the number of users Not overused	Customer requests Capacity Profile	Has not been fully assessed at this time  <p>Confidence Level: Low</p>	Requests received should not increase annually.  <p>Confidence Level: Low</p>

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
<b>Community Levels of Service – Water Supply</b>				
<b>Quality</b>	Safe and reliable water supply system that meets customer satisfaction Water is clean and pleasant to drink Residents are satisfied with our drinking water services.	Customer surveys	Water Supply 4.00 Higher Satisfaction Has not been fully assessed at this time	It is anticipated that customer requests and community dissatisfaction would remain the same over the next 10 years
		Customer requests Water Supply State of the Assets Report Condition Profiles	 <p>Confidence Level: Medium</p>	 <p>Confidence Level: Low</p>

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
<b>Function</b>	Reliable water supply system operated and maintained with minimal interruptions Water supply System free from hazards and adverse incidents.	Customer requests  Function Profile	Has not been fully assessed at this time   Confidence Level: Low	Requests received should not increase annually.   Confidence Level: Low
<b>Capacity/ Utilisation</b>	Available  Our customers are able to access water for other purposes when required.	Customer requests  Capacity Profile	Has not been fully assessed at this time   Confidence Level: Low	Requests received should not increase annually.   Confidence Level: Low

Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
<b>Community Levels of Service – Sewer Network</b>				
<b>Quality</b>	Provide an effective method of collection and disposal of wastewater  Low level of risk to health in the disposal and reuse of treated wastewater	Customer surveys	Sewerage Collection & Treatment 3.78 Higher Satisfaction	It is anticipated that customer requests and community dissatisfaction would remain the same over the next 10 years
		Customer requests	Has not been fully assessed at this time	
		Sewer Network State of the Assets Report  Condition Profiles		



Key Performance Measure	Level of Service Objective	Performance Measure Process	Current Level of Service	10 Year Projection Current LTFP Funding
			 <p>Confidence Level: Medium</p>	 <p>Confidence Level: Low</p>
<b>Function</b>	Availability of sewerage reticulation in designated areas  Reliable sewer system operated and maintained with minimal interruptions  Water supply System free from hazards and adverse incidents.	Customer requests  Function Profile	Has not been fully assessed at this time   <p>Confidence Level: Low</p>	Requests received should not increase annually.   <p>Confidence Level: Low</p>
<b>Capacity/ Utilisation</b>	Provide adequate population capacity	Customer requests  Capacity Profile	Has not been fully assessed at this time   <p>Confidence Level: Low</p>	Requests received should not increase annually.   <p>Confidence Level: Low</p>

Technical levels of service for each asset category are detailed in Appendix C.

## 4. FUTURE DEMAND

### 4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, climate change, vehicle ownership rates, consumer preferences and expectations, government decisions, technological changes, economic factors, agricultural practices, environmental awareness, etc.

### 4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

### 4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

**Table 4.3: Demand Drivers, Projections and Impact on Services**

Demand drivers	Present position	Projection	Impact on services
Development	Population increase and higher density development	Steady growth anticipated to continue	Increase in demand for services supported by infrastructure due to development and population growth
Community Expectations	There is a strong desire from the community for a high standard of services	Expectations will continue to increase	Existing networks may not be fully suitable for the purpose
Increasing Costs	The cost to construct, maintain and renew infrastructure is increasing at a rate greater than council's revenue	Cost of renewing infrastructure systems is increasing. Cost increases are anticipated to continue and will likely be at a higher rate than CPI.	The need to carefully target and plan infrastructure is increasing in importance as maximising the service that can be delivered within the funding limitations will be under pressure.
Environment and Climate Change  Sea level change	It is widely accepted that climate is changing	Future is uncertain but is likely that climate change will impact on the delivery of the services provided by infrastructure. Weather extremes and rising sea levels will have significant impact on infrastructure	Some services such as the Transport networks and Seawalls/Marine Structures may be impacted directly by climate/rainfall and severe events. Higher frequency and larger flood events. Additional costs will be imposed to fund environmental initiatives e.g. carbon trading and retrofitting of water quality infrastructure

### 4.4 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service

(allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures<sup>13</sup>. Examples of non-asset solutions include providing joint services from existing assets such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified for demand management are shown in Table 4.4.

**Table 4.4: Demand Management Plan Summary**

Service Impact	Demand Management Plan
Communicate options and capacity to fund infrastructure works with the community	Monitor community expectations and communicate service levels and financial capacity with the community to balance priorities for infrastructure with what the community is prepared to pay for.
Funding priority works	Link asset management plans to long term financial plans and community strategic plans. Continue to seek grant funding for projects identified in the Greater Bellinghen's Community and Strategic Asset Management Plans.
Improve understanding of costs and capacity to maintain current service levels.	Continue to analyse the cost of providing service and the capacity to fund at the current level of service.
Climate Change	Increased understanding of climate change effects and required management techniques.

#### **4.5 Asset Programs to meet Demand**

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the organisation. New assets constructed/acquired by the organisation are discussed in Section 5.5.

Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

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<sup>13</sup> IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

## 5. LIFECYCLE MANAGEMENT PLAN

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

### 5.1 Background Data

#### 5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Tables 2.2 and 2.3.1.

#### 5.1.2 Asset capacity and performance

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

### 5.2 Infrastructure Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets conducted for each relevant asset management plan identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' – requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan(s) and the adopted treatment plan are summarised in Table 5.2. These risks are regularly reported to management and Council/Board.

**Table 5.2: Critical Risks and Treatment Plans**

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
<b>Roads</b>			
Increasing financial pressure to adequately maintain the roads portfolio	The long-term renewal of road seals is not adequate	Very High	Accelerated Roads resealing program funded by SRV focusing on high priority areas determined by road hierarchy, condition data, and priorities identified in the Community Strategic Plan
Road Maintenance	Increasing maintenance requirements	High	Continue to improve data Documented service level risks and utilisation for establishing future maintenance priorities
Road Damage	Damage to roads as a result of major storm events	Very High	At present cannot be managed within councils resourcing. Council is extremely reliant on assistance funding from other levels of government to manage these events. Any lose of funding would represent a major challenge to council.
<b>Bridges</b>			
Timber Bridges	Failure. Structural or functional.	High	Implementing works as identified from audit as per SRV program.
<b>Stormwater Drainage</b>			
Stormwater Network	General deterioration of the network resulting in structural and capacity failures	High	Assess adequacy of inspections, particularly in aged network areas.  Keep data up to date so that renewals can be planned
Stormwater Network	Flooding due to blockages	High	Assess adequacy of programs and monitor frequency of problems due to inadequate cleaning

			or maintenance.
Stormwater Network	Flooding caused by inadequate or lack of stormwater systems	High	Review stormwater management program
<b>Footpaths</b>			
Footpaths	Path user trips and injure themselves on damaged path surface.	High	Regular inspection of path condition and defects in accordance with footpath policy. Inspections by Council personnel for any hazards reported by public. Use of materials in new path construction to increase life of footpath.
<b>Box Culverts</b>			
Box Culverts	Failure. Structural or functional.	High	Inspect frequently
<b>Buildings</b>			
Building Renewal	Buildings deteriorate to a lesser service standard and higher risk situation	Medium - High	Future planning improvements can be made by further documented service level risks and utilisation of these in establishing future renewal priorities.
Utilisation	Buildings not suiting the needs of service providers	Medium	Continue to monitor not only the condition of buildings, but how well they suit the needs of users
<b>Park &amp; Other Assets</b>			
Parks and Open Spaces asset renewals	Inadequate funding for renewal and maintenance resulting in deterioration of structures and decrease in levels of service.	Medium	Develop 10 year renewal and maintenance plans for parks assets.
Playgrounds	Incident or injury for the Community using facilities		Regular renewal of softfall, prevention of usages if broken, repair faulty or broken equipment through regular inspection and maintenance.
<b>Water Supply</b>			
Failure of a water treatment plant	Unexpected failure of major assets or components	Medium	Constant preventative maintenance. Replace aging assets.
Failure of chemical dosing and disinfection plant.	Unexpected failure of major assets or components	High	Constant preventative maintenance. Replace pumps before use by date. Install online monitoring and alarms.
Failure of water storages	Unexpected failure of major assets or components	High	Constant observation of assets, repairs as needed and replacement of aging assets. Bypass plans in place.
<b>Sewer Network</b>			
Failure of a sewerage treatment plant	Unexpected failure of major assets or components	Medium	Ensure all maintenance carried out. Have a backup contingency plans in place.
Failure of a sewer pump station.	Unexpected failure of major assets or components	Medium	Preventative maintenance. Pump replacement at max 25 years. Regular cleaning. Update of switch boards and telemetry.
Major environmental contamination.	Major environmental contamination caused by natural disasters	High	Plans in place to quickly respond to major Failures.
Power failure to assets.	External power supply disruption or failure.	Medium	Generators installed at treatment plants and mobile generators for pump stations.

### 5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, eg cleansing, utility services, street sweeping, grass mowing and street lighting.

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

#### 5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function, such as cleanliness, appearance, etc., through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in the respective AM Plan and service risks considered in the Infrastructure Risk Management Plan.

#### 5.3.2 Operations and Maintenance Strategies

We will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

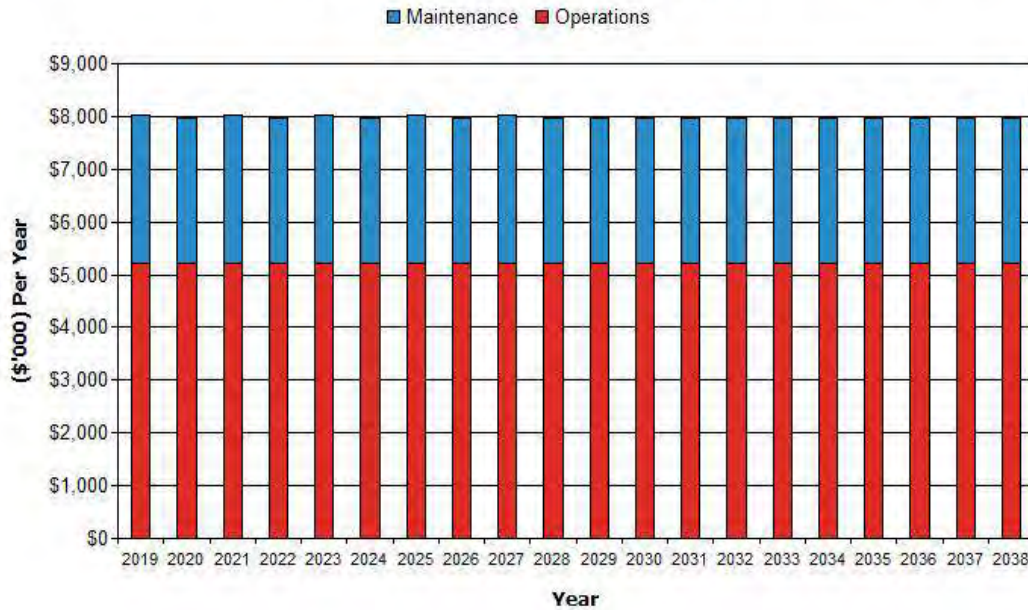
- Scheduling operations activities to deliver the defined level of service in the most efficient manner
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost)
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options
- Maintain a current hierarchy of critical assets and required operations and maintenance activities
- Develop and regularly review appropriate emergency response capability
- Review management of operations and maintenance activities to ensure we are obtaining best value for resources used.

#### 5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 6.1 with estimated available operating budget funding. Note that all costs are shown in current dollar values (i.e. real values).

**Figure 6.1: Projected Operations and Maintenance Expenditure and Budget (Scenario 1 LTFP)**

## Bellingen SC - Projected Operations & Maintenance Expenditure (Strategy)



### 5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

#### 5.4.1 Renewal and Replacement Strategies

We will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner
- Undertaking project scoping for all capital renewal and replacement projects to identify
  - the service delivery 'deficiency', present risk and optimum time for renewal/replacement
  - the project objectives to rectify the deficiency
  - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency
  - and evaluate the options against evaluation criteria adopted by Council/Board, and
  - select the best option to be included in capital renewal programs,
- Using *optimal* renewal methods (cost of renewal is less than replacement) wherever possible
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required
- Review management of capital renewal and replacement activities to ensure we are obtaining best value for resources used.

### Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replace a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (eg roughness of a road).<sup>14</sup>

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure
- Have a high utilisation and subsequent impact on users would be greatest
- The total value represents the greatest net value to the organisation
- Have the highest average age relative to their expected lives
- Are identified in the AM Plan as key cost factors
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.<sup>15</sup>

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in the respective asset management plans.

#### 5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The projected expenditure and estimated available capital renewal budget funding is summarised in Fig 7. Note that all amounts are shown in real values.

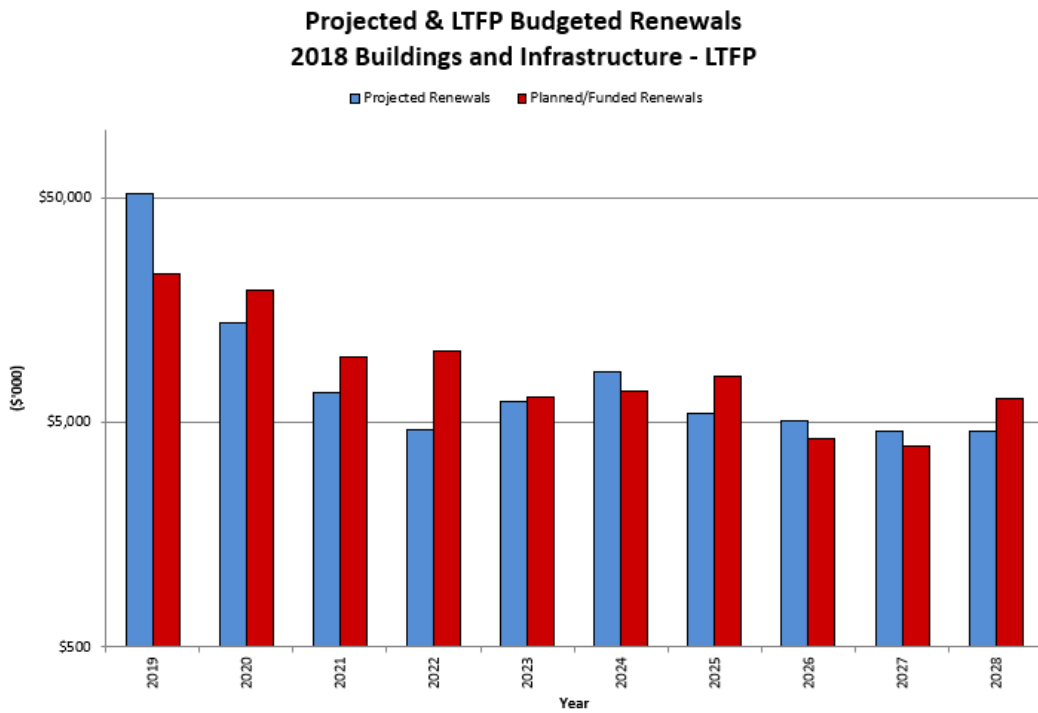
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<sup>14</sup> IPWEA, 2011, IIMM, Sec 3.4.4, p 3 | 60.

<sup>15</sup> Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3 | 66.

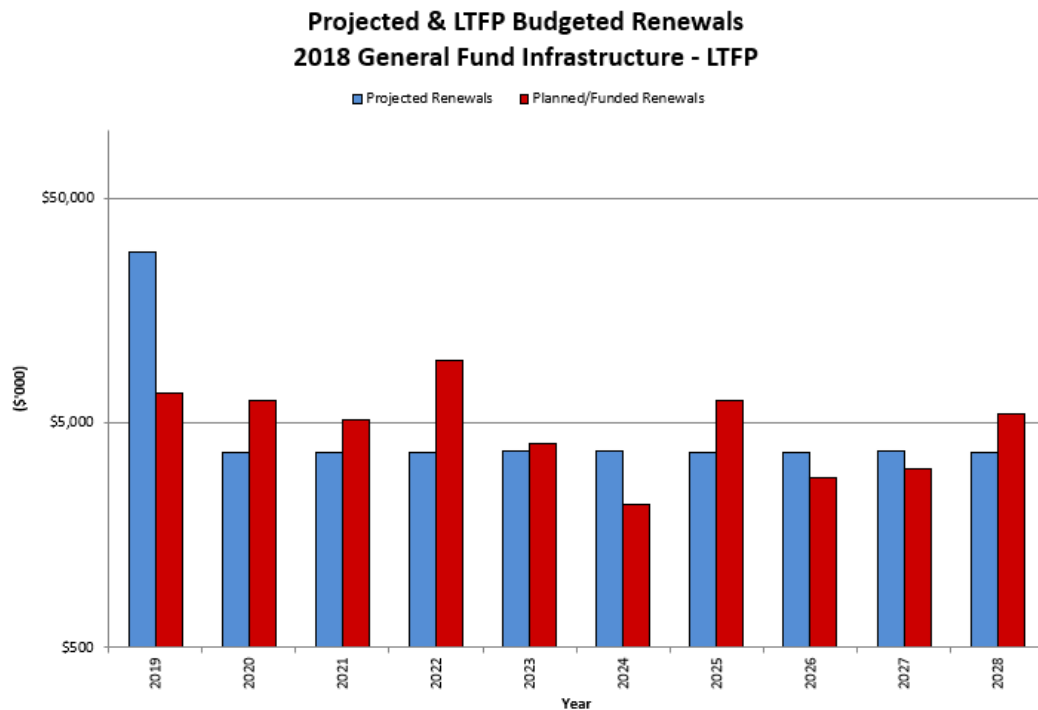


**Fig 7: Projected Capital Renewal and Replacement Expenditure (Buildings and Infrastructure)**

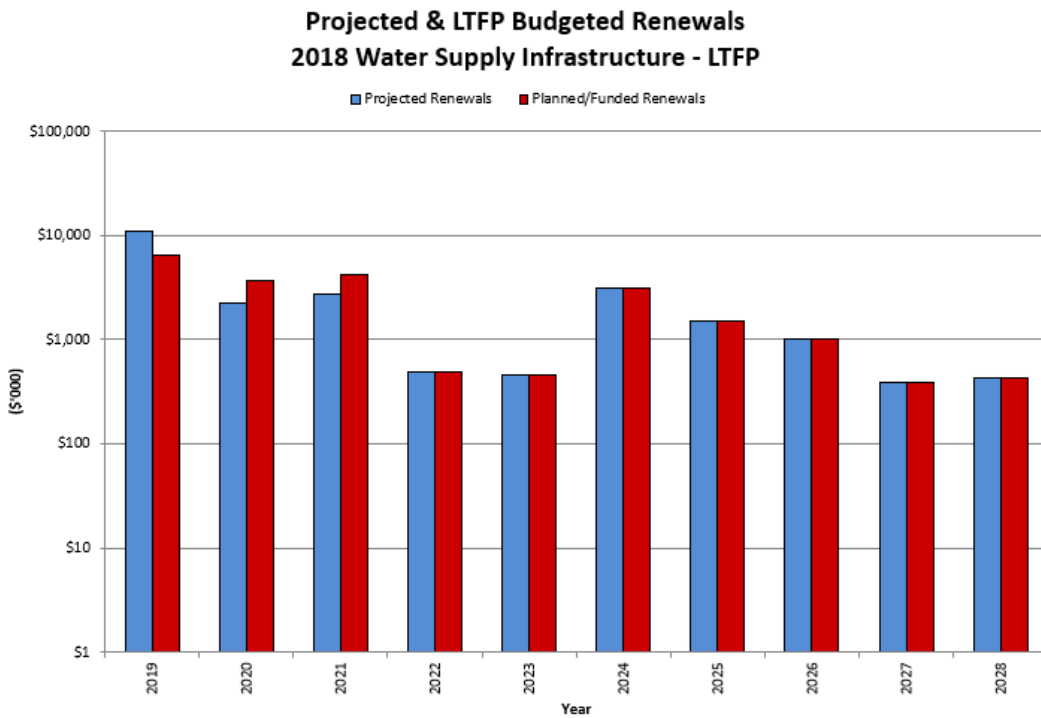


**Projected Capital Renewal and Replacement Expenditure**

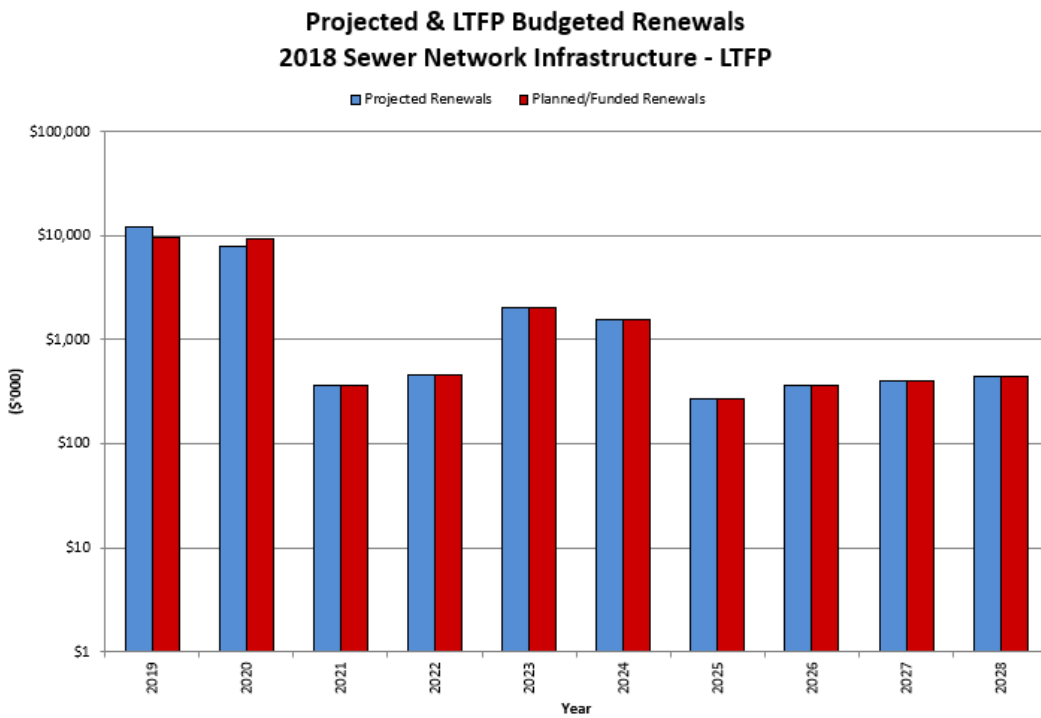
**Fig 7: Projected Capital Renewal and Replacement Expenditure (General Fund)**



**Fig 7: Projected Capital Renewal and Replacement Expenditure (Water Fund)**



**Fig 7: Projected Capital Renewal and Replacement Expenditure (Sewer Fund)**



### 5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or

environmental needs. Assets may also be acquired at no cost to the organisation from land development. These assets from growth are discussed in Section 4.5.

#### 5.5.1 Selection criteria

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

#### 5.5.2 Capital Investment Strategies

We will plan capital upgrade and new projects to meet level of service objectives by:

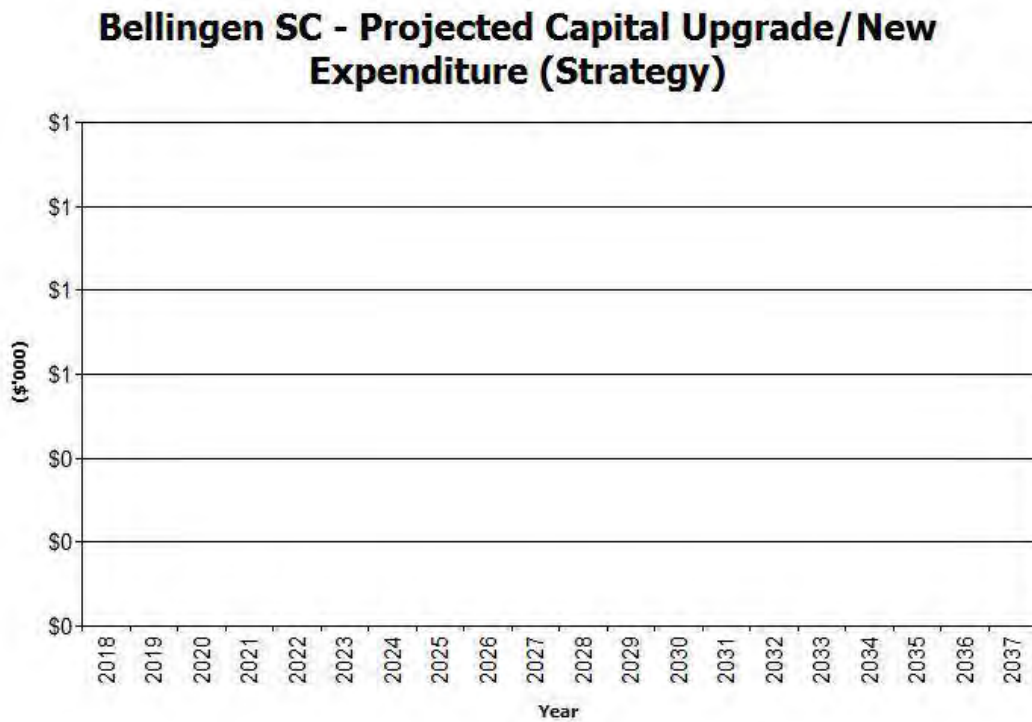
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner
- Undertake project scoping for all capital upgrade/new projects to identify
  - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset
  - the project objectives to rectify the deficiency including value management for major projects
  - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency
  - management of risks associated with alternative options
  - and evaluate the options against evaluation criteria adopted by Council/Board, and
  - select the best option to be included in capital upgrade/new programs
- Review current and required skills base and implement training and development to meet required construction and project management needs
- Review management of capital project management activities to ensure we are obtaining best value for resources used.

Standards and specifications for maintenance of existing assets and construction of new assets and upgrade/expansion of existing assets are detailed in relevant asset management plans.

#### 5.5.3 Summary of future upgrade/new assets expenditure

No Projected upgrade/new works have been identified as part of this plan largely due to the focus on renewals over upgrade and new infrastructure.

**Fig 8: Projected Capital Upgrade/New Asset Expenditure (Scenario 1 LTFP)**



## 5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. No assets have been identified for possible decommissioning or disposal in this plan.

## 6. FINANCIAL SUMMARY

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

### 6.1 Financial Indicators and Projections

#### Sustainability of service delivery

In addition to long term life cycle costs/expenditures there are 3 key indicators for service delivery sustainability that have been considered within this plan, these being the asset renewal funding ratio and the medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

The Asset Renewal Funding Ratio is the most important indicator and reveals whether projected capital renewal and replacement expenditure can be financed in the long-term financial plan. It is calculated by dividing the projected capital renewal expenditure shown in the AM Plan by the estimated capital renewal budget provided in the long-term financial plan.

Tables 6.1.1 shows sustainability of service calculations for Buildings & Infrastructure and each of council's major funds.

**Table 6.1.1: Sustainability of Service Delivery (Including Current Backlog)**

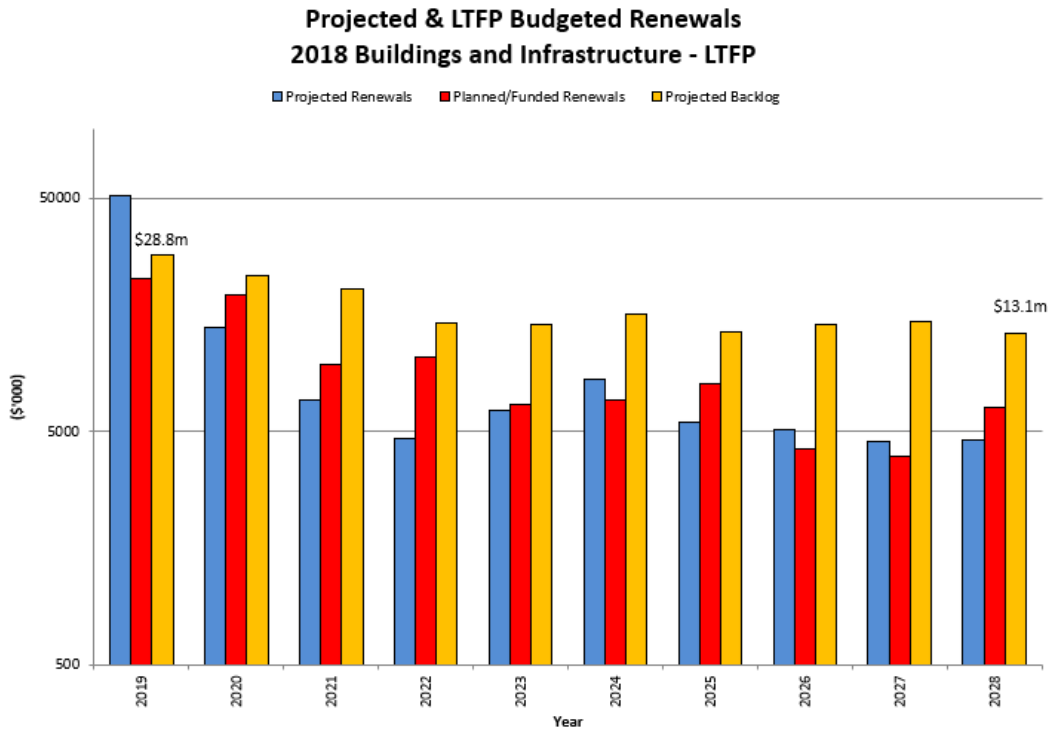
Sustainability of service delivery (Including Backlog)	Buildings & Infrastructure (\$,000)	General Fund (\$,000)	Water Fund (\$,000)	Sewer Fund (\$000's)
<b>Asset Renewal Funding Ratio</b>				
Asset Renewal Funding Ratio	86%	79%	93%	94%
<b>Medium Term (10 yrs) Sustainability</b>				
10 year Operations, Maintenance & Renewal Projected Expenditure	\$19,148	\$12,143	3,008	\$3,997
10 year Operations, Maintenance & Renewal Planned (Budget) Expenditures	\$17,835	\$11,109	\$2,862	\$3,864
10 year Funding Shortfall (10 year projected. expenditures. - Planned (Budget) Expenditures)	<b>-\$1,314</b>	<b>-\$1,035</b>	<b>-\$146</b>	<b>-\$133</b>
10 year Sustainability Indicator (10 year planned exp. / projected. Expenditure)	93%	91%	95%	97%
<b>Short Term (5 years) Sustainability</b>				
5 year Operations, Maintenance & Renewal Projected Expenditure	\$24,671	\$14,622	\$4,037	\$6,012
5 year Operations, Maintenance & Renewal Planned (Budget) Expenditure	\$21,784	\$12,293	\$3,746	\$5,745
5 year Funding Shortfall (5 year projected expenditures. - planned (budget) expenditures)	<b>-\$2,886</b>	<b>-\$2,329</b>	<b>-\$291</b>	<b>-\$267</b>
5 year Sustainability Indicator (5 year planned expenditures. / projected expenditures)	88%	84%	93%	96%

Table 6.1.1 shows that under the current LTFP council can fund 86% of the projected asset renewals in the next 10 years. Whilst not at 100% Council is gradually addressing its backlog within its budget constraints.

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 asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

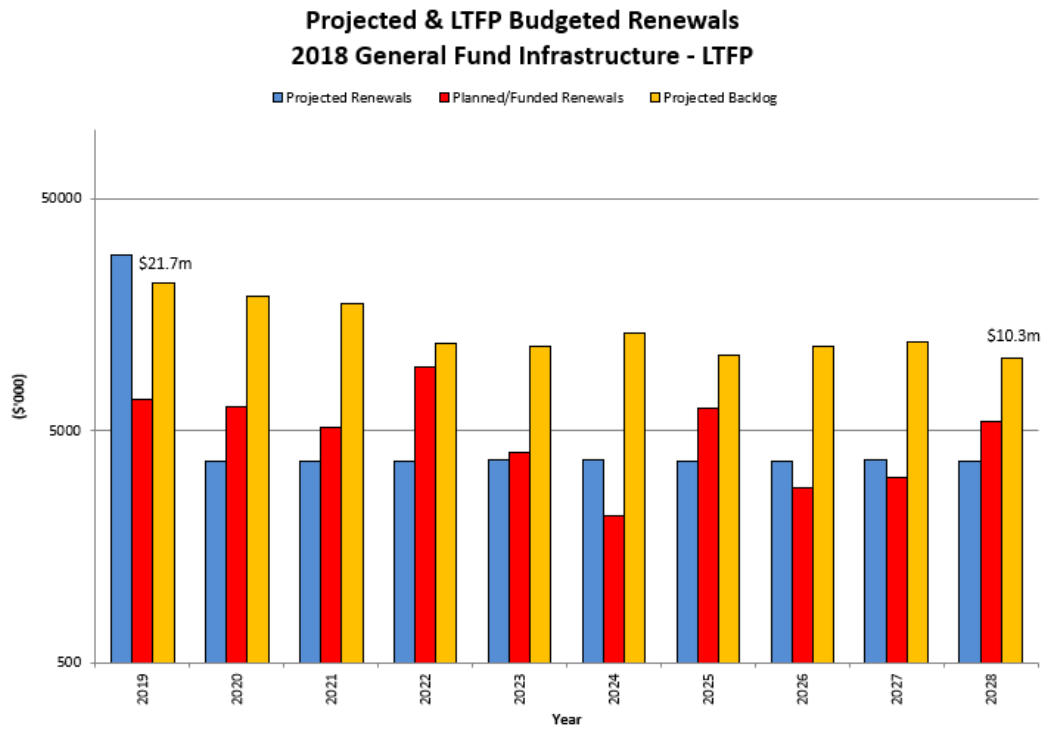
Figures 9.1- 9.4 show the projected asset renewal and replacement expenditure over the 10 years of the SAMP for Buildings & Infrastructure and each of council’s major funds. The graph also importantly shows the accumulated impact that present funding levels are having on council’s reported backlog.

**Figure 9.1 Projected and LTFP Budgeted Renewal Expenditure including backlog (Buildings & Infrastructure)**



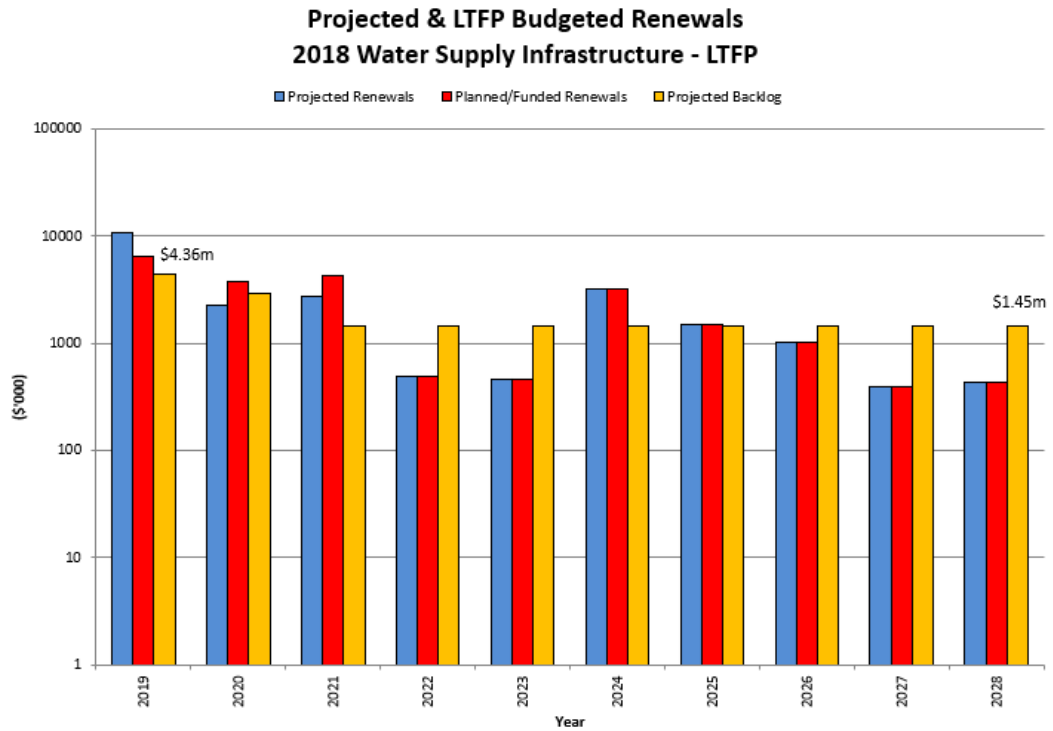
Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$51,690	\$22,881	-\$28,810	-\$28,810
2020	\$13,948	\$19,359	\$5,411	-\$23,399
2021	\$6,814	\$9,765	\$2,951	-\$20,448
2022	\$4,661	\$10,390	\$5,729	-\$14,719
2023	\$6,221	\$6,508	\$287	-\$14,432
2024	\$8,444	\$6,861	-\$1,583	-\$16,015
2025	\$5,496	\$8,061	\$2,565	-\$13,450
2026	\$5,099	\$4,215	-\$884	-\$14,333
2027	\$4,536	\$3,933	-\$603	-\$14,936
2028	\$4,594	\$6,394	\$1,800	-\$13,136

**Figure 9.2 Projected and LTFP Budgeted Renewal Expenditure including backlog (General Fund)**



Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$28,587	\$6,808	-\$21,779	-\$21,779
2020	\$3,694	\$6,316	\$2,622	-\$19,156
2021	\$3,684	\$5,181	\$1,497	-\$17,659
2022	\$3,711	\$9,440	\$5,729	-\$11,930
2023	\$3,741	\$4,028	\$287	-\$11,643
2024	\$3,736	\$2,153	-\$1,583	-\$13,226
2025	\$3,716	\$6,281	\$2,565	-\$10,661
2026	\$3,716	\$2,832	-\$884	-\$11,545
2027	\$3,746	\$3,143	-\$603	-\$12,148
2028	\$3,714	\$5,514	\$1,800	-\$10,347

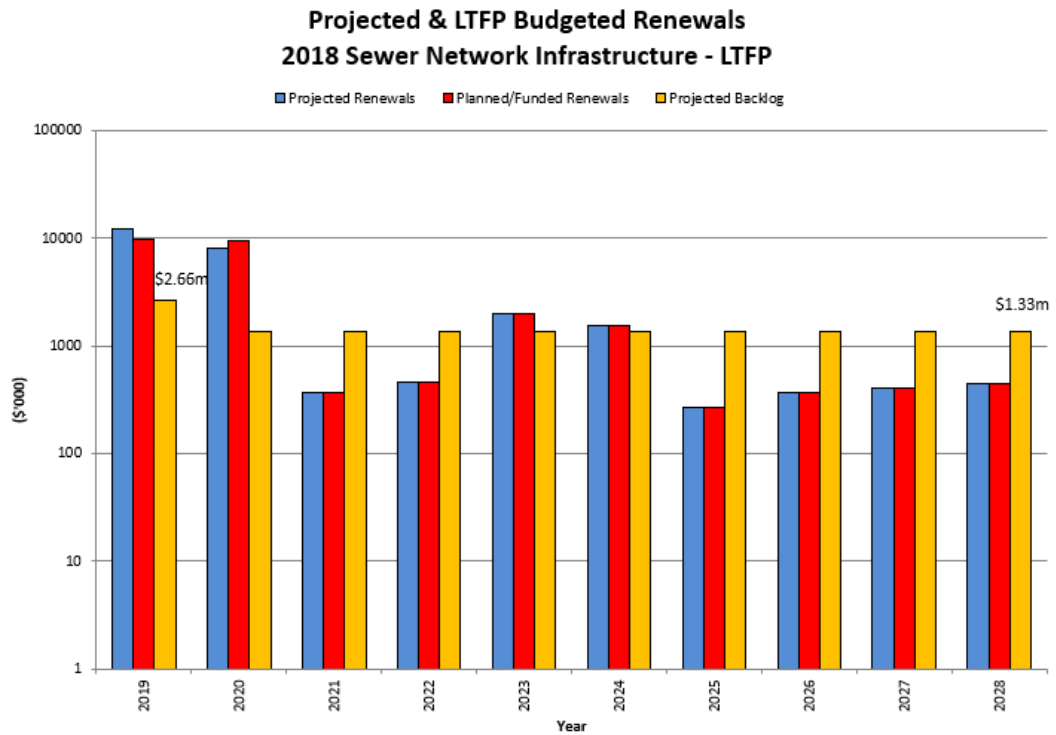
**Figure 9.3 Projected and LTFP Budgeted Renewal Expenditure including backlog (Water Fund)**



Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$10,823	\$6,461	-\$4,362	-\$4,362
2020	\$2,257	\$3,711	\$1,454	-\$2,908
2021	\$2,765	\$4,219	\$1,454	-\$1,454
2022	\$490	\$490	\$0	-\$1,454
2023	\$465	\$465	\$0	-\$1,454
2024	\$3,150	\$3,150	\$0	-\$1,454
2025	\$1,510	\$1,510	\$0	-\$1,454
2026	\$1,020	\$1,020	\$0	-\$1,454
2027	\$390	\$390	\$0	-\$1,454
2028	\$435	\$435	\$0	-\$1,454



**Figure 9.3 Projected and LTFP Budgeted Renewal Expenditure including backlog (Sewer Fund)**



Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$12,281	\$9,612	-\$2,669	-\$2,669
2020	\$7,997	\$9,332	\$1,335	-\$1,335
2021	\$365	\$365	\$0	-\$1,335
2022	\$460	\$460	\$0	-\$1,335
2023	\$2,015	\$2,015	\$0	-\$1,335
2024	\$1,558	\$1,558	\$0	-\$1,335
2025	\$270	\$270	\$0	-\$1,335
2026	\$363	\$363	\$0	-\$1,335
2027	\$400	\$400	\$0	-\$1,335
2028	\$445	\$445	\$0	-\$1,335

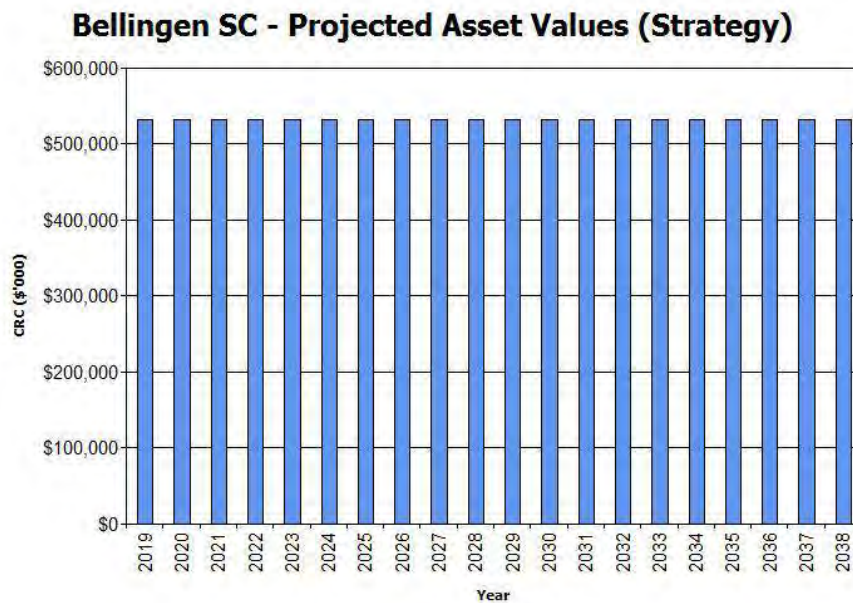
## 6.2 Funding Strategy

The funding strategy to provide the services covered by this asset management plan is contained within the organisation's 10 year long term financial plan.

## 6.3 Valuation Forecasts

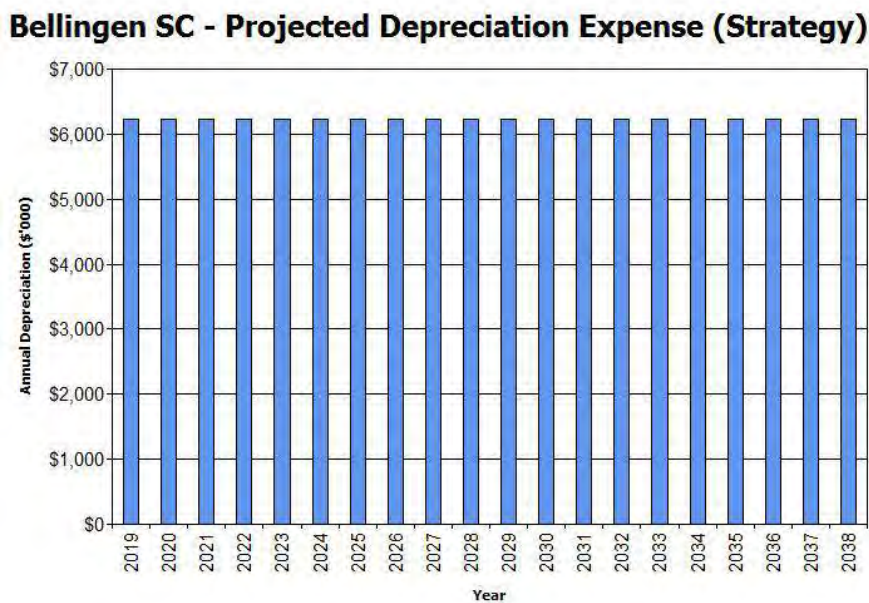
Asset values are forecasted to remain pretty steady as no major additional assets are added to the asset stock from construction and acquisition by the organisation. Figure 10 shows the projected replacement cost asset values over the planning period in real values.

**Figure 10: Projected Asset Values (Scenario 1 LTFP)**



Depreciation expense values are forecast in line with asset values as shown in Figure 11.

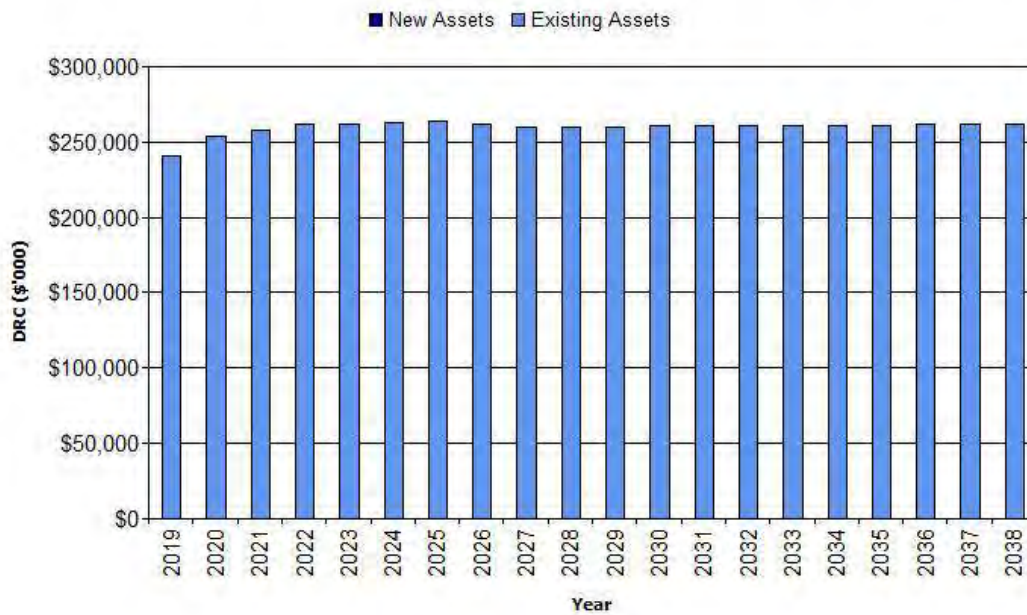
**Figure 11: Projected Depreciation Expense (Scenario 1 LTFP)**



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 12.1 below.

**Figure 12.1: Projected Depreciated Replacement Cost (Buildings & Infrastructure)**

**Bellingen SC - Projected Depreciated Replacement Cost (Strategy)**



**6.4 Key Assumptions made in Financial Forecasts**

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

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

**Table 6.4: Key Assumptions made in AM Plan and Risks of Change**

Key Assumptions	Risks of Change to Assumptions
Projected renewal data including average annual asset consumption which is used for the Long Term sustainability assessments	Buildings - Medium Infrastructure Roads - Low Infrastructure Bridges - Low Infrastructure Footpaths - Medium Infrastructure Stormwater Drainage - Medium Infrastructure Water Supply Network - Low Infrastructure Sewerage Network - Low Infrastructure Swimming Pools - Medium Infrastructure Open Space/Recreation - High Infrastructure Other Infrastructure - High Land Improvements (Dep) - High
Use of existing valuations, useful lives and remaining lives determined from the condition rating	Buildings - Medium Infrastructure Roads - Low Infrastructure Bridges - Low

Key Assumptions	Risks of Change to Assumptions
	Infrastructure Footpaths - Medium Infrastructure Stormwater Drainage - Medium Infrastructure Water Supply Network - Low Infrastructure Sewerage Network - Low Infrastructure Swimming Pools - Medium Infrastructure Open Space/Recreation - High Infrastructure Other Infrastructure - High Land Improvements (Dep) - High
Use of current expenditure information as best as this can be determined	Capital Forecasts – Low Operations & Maintenance Forecasts – Medium

### 6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this strategic AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.

**Table 6.5: Data Confidence Assessment for AM Plans summarised in Strategic AM Plan**

Data	Confidence Assessment	Comment
Demand drivers	C Uncertain	Estimated, further substantiation required for next revision of the SAMP
Growth projections	B Reliable	Estimated, further substantiation required for next revision of the SAMP
Operations expenditures	B Reliable	From budget however, additional analysis required. Breakdown into operations and maintenance is estimated and requires further development.
Maintenance expenditures	B Reliable	From budget however, additional analysis required. Breakdown into operations and maintenance is estimated and requires further development.
Projected Renewal expenditures. - Asset values	B Reliable	From 2017-18 Financial Report
- Asset useful lives	B Reliable	Ongoing substantiation required for next revision of the SAMP
- Condition modelling	B Reliable	Buildings – High confidence Infrastructure Roads - High confidence Infrastructure Bridges - High confidence Infrastructure Footpaths - Medium confidence Infrastructure Stormwater Drainage - Low confidence Infrastructure Water Supply Network – Medium>High confidence Infrastructure Sewerage Network – Medium>High confidence Infrastructure Swimming Pools - Low confidence Infrastructure Open Space/Recreation - Low confidence Infrastructure Other Infrastructure - Low confidence Land Improvements (Dep) - Low confidence

- Network renewals	B Reliable	Buildings – Medium confidence Infrastructure Roads - High confidence Infrastructure Bridges - High confidence Infrastructure Footpaths - Medium confidence Infrastructure Stormwater Drainage - Low confidence Infrastructure Water Supply Network - High confidence Infrastructure Sewerage Network - High confidence Infrastructure Swimming Pools - Low confidence Infrastructure Open Space/Recreation - Low confidence Infrastructure Other Infrastructure - Low confidence Land Improvements (Dep) - Low confidence
Upgrade/New expenditures	B Reliable	Could be identified or slip from total capital works budget budget.
Disposal expenditures	B Reliable	None Identified

Over all data sources, the data confidence is assessed as medium confidence level for data used in the preparation of this strategic AM Plan.

Actions to mitigate the adverse effects of data quality are included within Table 7.2 Improvement Plan,

## 7. PLAN IMPROVEMENT AND MONITORING

### 7.2 Improvement Program

The asset management improvement tasks identified from an external Asset Management Maturity Audit and preparation of this strategic asset management plan are shown in Table 7.2 and 7.3.

**Table 7.2: AM Maturity Key Strategies**

National Framework	National Framework Element	Core Element	Key Strategy Number	Task/Action	Responsibility	Resources Required	Timeline	Current Status Comments
AM Planning	AM Policy	Y	KS-1	<p>Ensure that the AM Policy is implemented and communicated to key stakeholders.</p> <p>Annual review of policy implementation by the Project Management Working Party and Audit Committee.</p> <p>Ensure Council is briefed on their roles and governance responsibilities under the reviewed AM policy.</p>				
AM Planning	Governance & Management	Y	KS-2	<p>Implement this asset management development program to improve Councils asset management maturity, particularly in the area of measurement and reporting of trends in service levels and risk that result from the available funding scenarios in the long term financial plan.</p>				
AM Planning	AM Plans	Y	KS-3	<p>Continue to develop and update Strategic Asset Management Plans for the major asset groups.</p>				

National Framework	National Framework Element	Core Element	Key Strategy Number	Task/Action	Responsibility	Resources Required	Timeline	Current Status Comments
Financial Planning	Annual Budget	Y	KS-4	Identify infrastructure expenditure by both: - Expenditure Category i.e. the Asset Group it is associated with; for example, road pavement - Expenditure Type – operating, maintenance, capital renewal, capital upgrade or capital expansion				
AM Planning	Governance & Management	Y	KS-5	Consider the ongoing ownership costs of new capital works proposals in budget deliberations. This is achieved by identifying the renewal and capital upgrade/expansion components of all capital works projects, and providing for the ongoing operational and maintenance requirements.				
AM Planning	Skills & Processes	Y	KS-6	Develop Risk Delivery Programs for all major asset classes.				
AM Planning	Data & Systems	Y	KS-7	Review the completeness and accuracy of the data for all major infrastructure classes.				
AM Planning	Data & Systems		KS-8	Use a knowledge management strategy to ensure that appropriate and optimal decision support information is available to clearly communicate the cumulative consequences of decisions.				
AM Planning	Data & Systems	Y	KS-9	Develop a corporate asset register meeting both technical and financial reporting requirements.				
Financial Planning	Annual Report	Y	KS-10	Develop and adopt an Asset Accounting and Capitalisation Policy that assists in meeting the intention of Fair Value Reporting (AASB116).				

National Framework	National Framework Element	Core Element	Key Strategy Number	Task/Action	Responsibility	Resources Required	Timeline	Current Status Comments
AM Planning	AM Plans	Y	KS-11	Develops a funding model which addresses the need for sustainable renewal of infrastructure and which identifies all asset life cycle costs.				
Financial Planning	Strategic Longer Term Plan	Y	KS-12	The 10 year financial sustainability plan for all Council functions will consider both the future anticipated income projections, and the future expenditure requirements to sustain services. This plan will consider the expenditures identified in the Asset Management Plans and will provide input into the annual Council budget.				
AM Planning	Levels of Service	Y	KS-13	Continue to improve the information on the relationship between the service level and cost so that future community consultation will be well informed of the options and costs.				
AM Planning	Evaluation	Y	KS-14	Undertake a detailed assessment of the resources required to implement this Asset Management Improvement Plan so that a program of improvement and milestones can be implemented and monitored.				



**Table 7.3: AM Maturity Improvement Tasks**

National Framework	National Framework Element	Source	Service Area	Task No.	Key Strategy Link	Task/Action	Responsibility	Resourcing	Timeline	Current Status Comments
AM Planning	AM Plan	Maturity Audit	All Areas	1	KS-3  KS-5	Continue to develop and Updated Asset Management Plans in consultation with the community, councillors and senior management.  All plans to include long term Capital Works Programs with whole of life cost estimate and key performance indicators linked to Council's CSP and annual reporting.				
AM Planning	Data & Systems	Maturity Audit	All Areas	2	KS-7	Design, implement and resource staff to maintain Asset Registers				
AM Planning	Data & Systems	Maturity Audit	All Areas	3	KS-9	Resource Asset Systems Officer to ensure capacity to maintain and improve existing asset register in line with the LG Asset Management requirements				
AM Planning	Data & Systems	Maturity Audit	All Areas	4	KS-8	Condition Inspection of high risk critical assets - Create a "CONDITION DATA STRATEGY" to sample and cycle inspections.				
AM Planning	AM Plan	Maturity Audit	All Areas	5	KS-3	SAMP - Asset Lifecycle Strategy to deal with the ongoing demands of assets. Capital Works Long Term Plan 10 years for all critical assets required (HIGH)				
AM Planning	Governance & Management	Maturity Audit	All Areas	6	KS-5	All new Assets must have a Project Scope with Whole of Life Costs (Design, Survey, Capital Construction , Maintenance, Capital Renewal, Disposal costs)				

National Framework	National Framework Element	Source	Service Area	Task No.	Key Strategy Link	Task/Action	Responsibility	Resourcing	Timeline	Current Status Comments
AM Planning	Data & Systems	Maturity Audit	All Areas	7	KS-9	Capital Valuation processes to be designed, implemented and managed by finance department				
AM Planning	AM Plan	Maturity Audit	All Areas	8	KS-3	Resource development of rolling Capital Works Plans (10 Years) for all critical infrastructure assets				
AM Planning	Data & Systems	Maturity Audi	Bridges	11	KS-8	Design electronic forms for asset inspection. This data can then be imported into existing systems or provide integration linkages later				
AM Planning	Levels of Service	Maturity Audi	All Areas	12	KS-13	Asset Performance measures - Customer requests must all be recorded in CRM using the appropriate classifications for KPI Reporting				
Financial Planning	Annual Budget	Maturity Audi	All Areas	15	KS-4	Ensure that staff are educated on the different definitions of MAINTENANCE and CAPTIAL reporting requirements for LG. Budgets to reflect this and link to new finance system				
AM Planning	Skills & Processes	Maturity Audi	All Areas	16	KS-6	Risk Register to be completed and risk mitigation measures documented				

### 7.3 Monitoring and Review Procedures

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within one year of each Council election.

### 7.4 Performance Measures

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

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into the organisation's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the summarised asset management plans,
- 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 organisation's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 100%.**

## 8. REFERENCES

ISO, 2014, ISO 55000, *Asset management – Overview, principles and terminology*, International Organization for Standardization, Geneva.

ISO, 2014, ISO 55001, *Asset management – Management systems - Requirements*, International Organization for Standardization, Geneva.

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IPWEA, 2014, 'NAMS.PLUS3 Asset Management', Institute of Public Works Engineering Australia, Sydney, [www.ipwea.org/namsplus](http://www.ipwea.org/namsplus).

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

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, [www.ipwea.org/IIMM](http://www.ipwea.org/IIMM)

## **9. APPENDICES**

Appendix A Bellingin Shire Council Asset Management Policy

Appendix B General Fund Asset Class Modelling

Appendix C Technical Levels of Service

Appendix D Abbreviations

Appendix E Glossary

# Bellingen Shire Council POLICY



## Asset Management

Business Unit: Asset Management & Design Policy Number: PO - 00013  
Responsible Position: Manager - Asset Management & Design Version Number: Version 2  
Contact Position: P Buchan

Date Approved by General Manager: Review Timeframe: 4 Years  
Date Confirmed by SCC: Date of Next Review: June 2021  
Date Adopted: Expiry Timeframe: 4 years  
Minute No: Date of Expiry: July 2021

### DOCUMENT VERSION HISTORY AND CONTROL

Version Number	Date	Brief Description	Council Minute Number
1.0	22/09/2010	Version 1	09.031/10
1.1	28/06/2017	Draft Version 2	077/17
2.0	27/09/2017	Version 2	133/17

### 1 - PURPOSE

To set guidelines for implementing consistent asset management processes throughout Bellingen Shire

### 2 - Objective

To ensure adequate provision is made for the long-term replacement of major assets by:

- Ensuring that Council's services and infrastructure are provided in a sustainable manner, with the appropriate levels of service to residents, visitors and the environment.
- Safeguarding Council assets including physical assets and employees by implementing appropriate asset management strategies and appropriate financial resources for those assets.
- Creating an environment where all Council employees take an integral part in overall management of Council assets by creating and sustaining an awareness of asset management throughout the organisation by training and development.
- Meeting legislative requirements for asset management.

- Ensuring resources and operational capabilities are identified and responsibility for asset management is allocated.
- Demonstrating transparent and responsible asset management processes that align with demonstrated best practice.

### 3 - SCOPE

This policy applies to all Council activities.

### 4 - DEFINITIONS

- **Asset** – A physical component of a facility which has value, enables services to be provided and has an economic life of greater than 12 months.
- **Asset Management** - The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.
- **Asset Management Strategy** – A strategy for asset management covering the development and implementation of plans and programmes for asset creation, operation, maintenance, rehabilitation/replacement, disposal and performance monitoring to ensure the desired levels of service and other operational objectives are achieved at optimum cost.
- **Asset Management Plan** – A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost effective manner to provide a specified level of service.
- **Lifecycle** – The cycle of activities that an asset goes through while it retains an identity as a particular asset (i.e. from planning/design to decommissioning/disposal).

### 5 - POLICY STATEMENT

#### 5.1 - Background

- 5.1.1 Council is committed to implementing a systematic asset management methodology in order to apply appropriate asset management best practices across all areas of the organisation. This includes ensuring that assets are planned, created, operated, maintained, renewed and disposed of in accordance with Council's priorities for service delivery
- 5.1.2 Council owns and uses approximately \$546 million of non-current assets to support its core business of delivery of service to the community
- 5.1.3 Asset management practices impact directly on the core business of the organisation and appropriate asset management is required to achieve our strategic service delivery objectives
- 5.1.4 Adopting asset management principles will assist Council in achieving its Strategic Longer-Term Plan and Long Term Financial objectives

5.1.5 A strategic approach to asset management will ensure that the Council delivers the highest appropriate level of service through its assets. This will provide positive impact on;

- Members of the public and staff;
- Council's financial position;
- The ability of Council to deliver the expected level of service and infrastructure;
- The political environment in which Council operates; and
- The legal liabilities of Council

## 5.2 Principles

- 5..1 A consistent Asset Management Strategy must exist for implementing systematic asset management and appropriate asset management best-practice throughout all Departments of Council
- 5..2 All relevant legislative requirements together with political, social and economic environments are to be taken into account in asset management
- 5..3 Asset management principles will be integrated within existing planning and operational processes
- 5..4 Asset Management Plans will be developed for major service/asset categories. The plans will be informed by community consultation and financial planning and reporting
- 5..5 An inspection regime will be used as part of asset management to ensure agreed service levels are maintained and to identify asset renewal priorities
- 5..6 Asset renewals required to meet agreed service levels and identified in adopted asset management plans and long term financial plans will form the basis of annual budget estimates with the service and risk consequences of variations in defined asset renewals and budget resources documented in budget documentation
- 5..7 Service levels defined in adopted asset management plans will form the basis of annual budget estimates with the service and risk consequences of variations in defined services levels and budget resources documented in budget documentation
- 5..8 Asset renewal plans will be prioritised and implemented progressively based on agreed service levels and the effectiveness of the current assets to provide that level of service
- 5..9 Systematic and cyclic reviews will be applied to all asset classes and are to ensure that the assets are managed, valued and depreciated in accordance with appropriate best practice and applicable Australian Standards
- 5..10 Future life cycle costs will be reported and considered in all decisions relating to new services and assets and upgrading of existing services and assets
- 5..11 Future service levels will be determined in consultation with the community
- 5..12 Training in asset and financial management will be provided for councillors and relevant staff

## 6 - ROLES AND RESPONSIBILITIES

**Councillors** are responsible for adopting the policy, allocation of resources, providing high level oversight of the delivery of the organisation's asset management strategy and plan



and maintaining accountability mechanisms to ensure that organisational resources are appropriately utilized to address the organisation's strategic plans and priorities.

The **General Manager** has overall responsibility for developing an asset management strategy, plans and procedures and reporting on the status and effectiveness of asset management within Council.

## **7 RELATED DOCUMENTS**

Asset Management Strategy and associated Asset Management Plans

## **8 - LEGISLATION**

- Local Government Act 1993
- Local Government (Integrated Planning & Reporting) Act 2009

## **9 - ASSOCIATED DOCUMENTS**

- IPWEA International Infrastructure Management Manual (IIMM)
- IPWEA Australian Infrastructure Financial Management Manual (AIFMM)

## **10 - POLICY DETAIL**

Council is committed to undertake the management of assets in accordance with current global best practice and Asset Lifecycle Management. Asset Lifecycle Management is the term used to describe the management of an asset during its life.

Asset Lifecycle Management is comprised of processes or planning documents that outlines what is required to effectively undertake the lifecycle management of an asset.

These processes form the basis of an Asset Management Plan.

- Background Data of the Asset
- Planning
- Creation/Acquisition/Augmentation Plan
- Financial/Risk Management Plan
- Operations and Maintenance Plan
- Condition and Performance Monitoring
- Rehabilitation/Renewal/Replacement Plan
- Consolidation/Rationalisation Plan
- Audit Plan/Review

Key elements that drive the above asset lifecycle management processes include;

- Levels of Service
- Future Demand
- Lifecycle Management Plan
- Financial Summary
- Asset Management Practices

- Plan Improvement and Monitoring

Council will maintain and regularly review the Strategic Asset Management Plan

**Appendix B General Fund Asset Class Modelling**

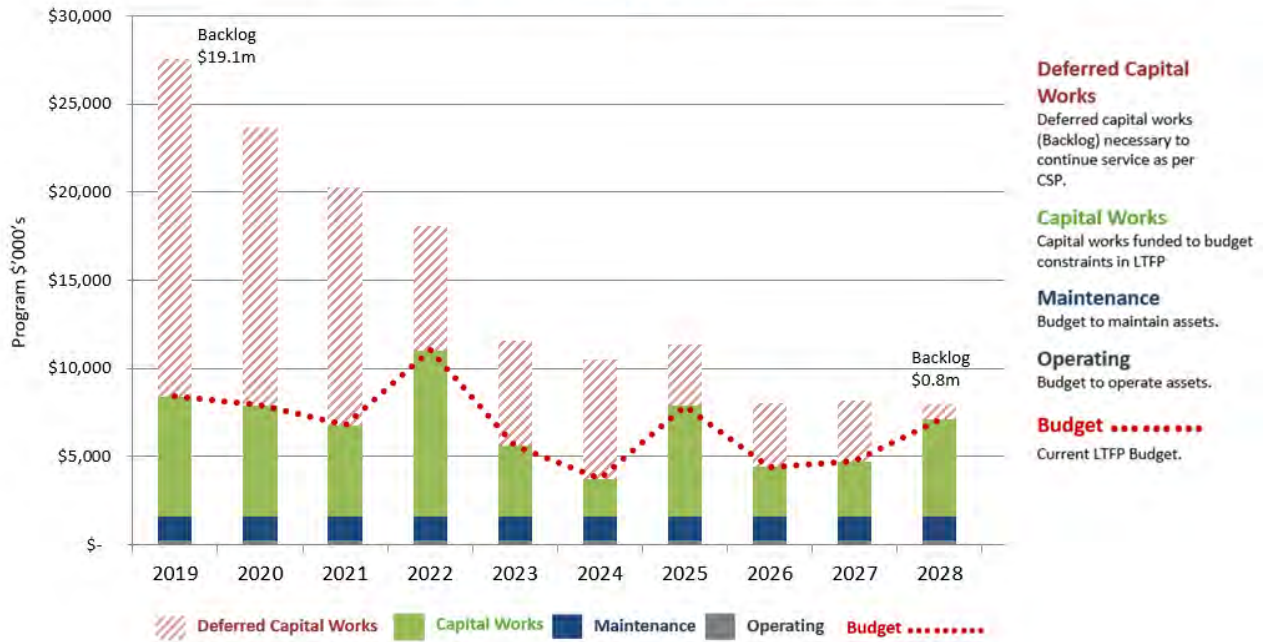
**Transport & Drainage**

**Assets:**

- Infrastructure - Roads \$123,211,283.60
- Infrastructure – Bridges \$35,119,936.71
- Infrastructure – Footpaths \$2,603,392.23
- Infrastructure - Stormwater Drainage \$22,584,867.67

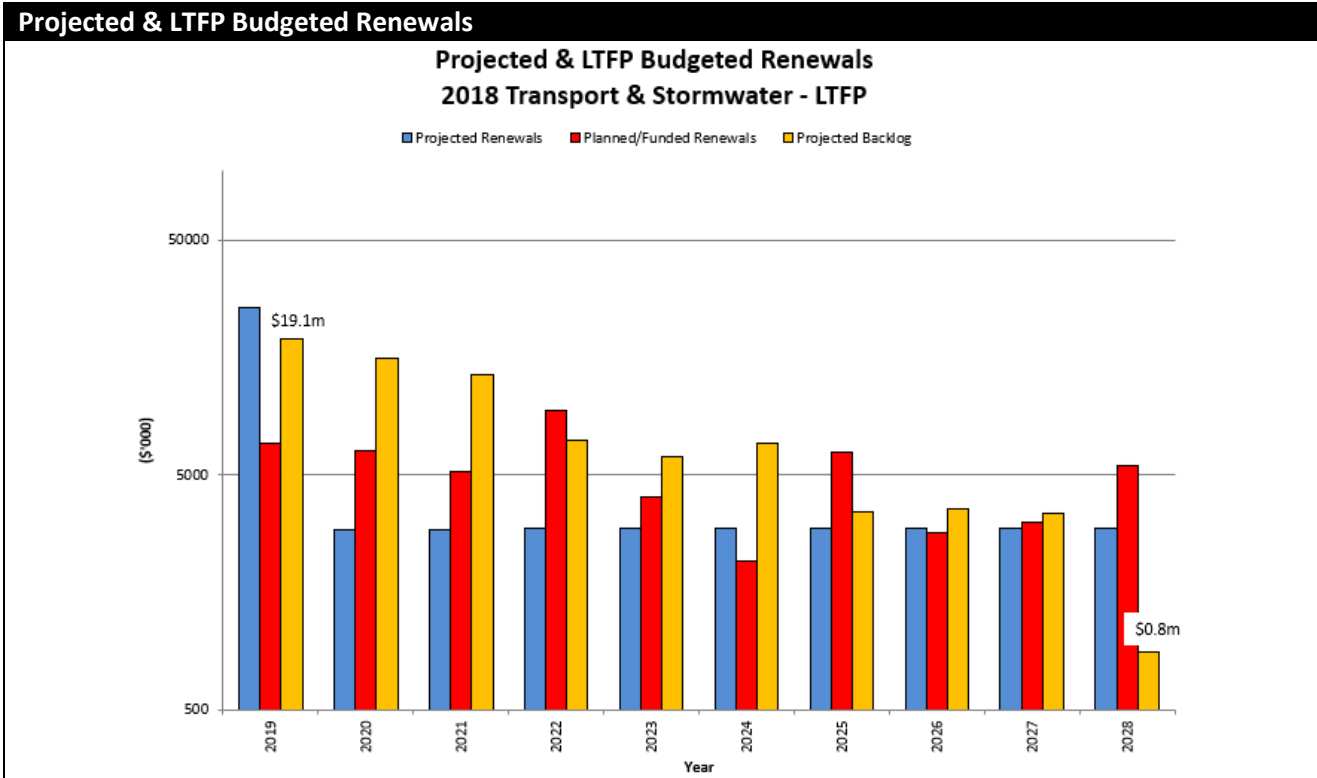
**Projected Operating & Capital Expenditure**

**Bellinghen Shire Council Transport & Drainage Scenario 1 (S1\_V1)  
Current LTFP Budget Settings**



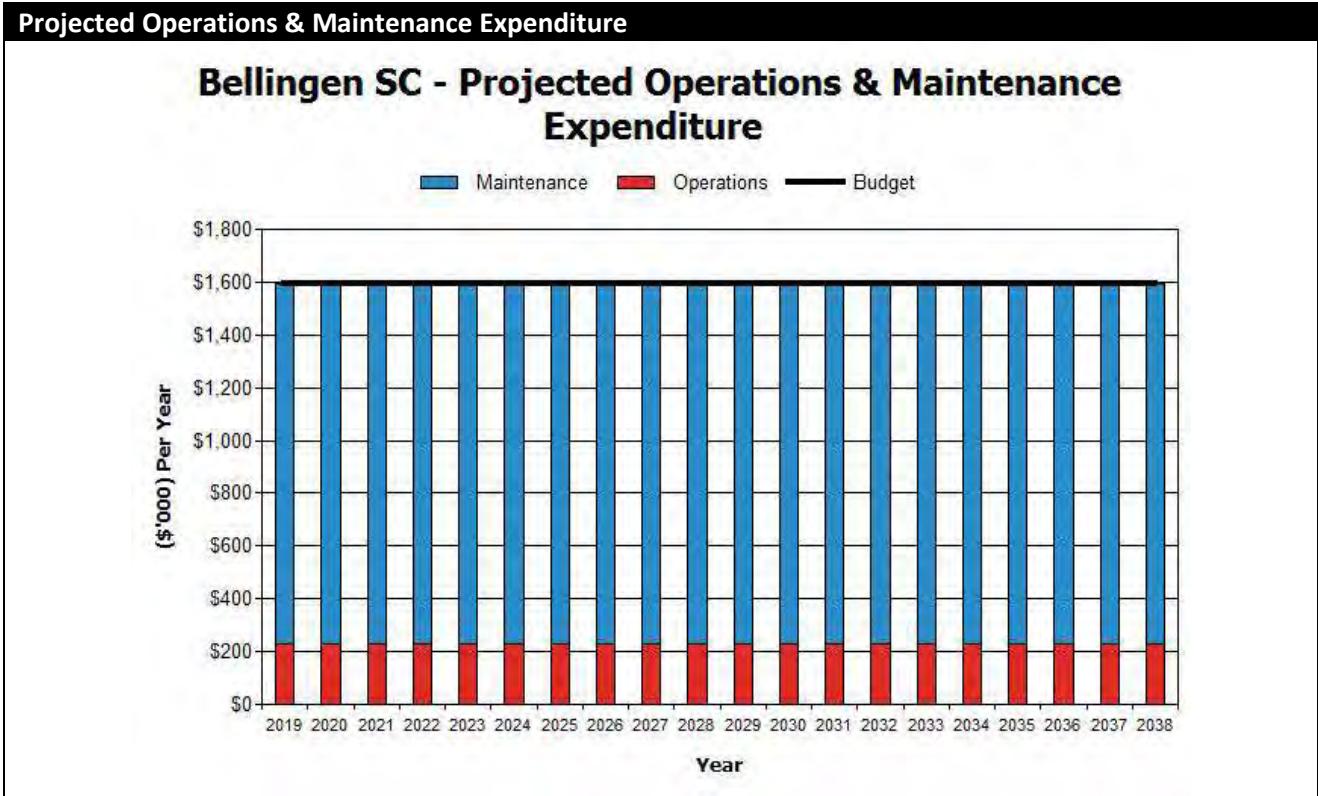
**Sustainability of service delivery (Including Backlog) (\$,000)**

<b>Asset Renewal Funding Ratio</b>	
Asset Renewal Funding Ratio	93%
<b>Medium Term (10 yrs) Sustainability</b>	
10 year Operations, Maintenance & Renewal Projected Expenditure	\$6,852
10 year Operations, Maintenance & Renewal Planned (Budget) Expenditures	\$6,765
10 year Funding Shortfall (10 year projected. expenditures. - Planned (Budget) Expenditures)	\$-88
10 year Sustainability Indicator (10 year planned exp. / projected. Expenditure)	99%
<b>Short Term (5 years) Sustainability</b>	
5 year Operations, Maintenance & Renewal Projected Expenditure	\$9,144
5 year Operations, Maintenance & Renewal Planned (Budget) Expenditure	\$7,949
5 year Funding Shortfall (5 year projected expenditures. - planned (budget) expenditures)	\$-1,194
5 year Sustainability Indicator (5 year planned expenditures. / projected expenditures)	87%



#### Renewal Financing

Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$25,953	\$6,808	-\$19,145	-\$19,145
2020	\$2,934	\$6,316	\$3,382	-\$15,763
2021	\$2,924	\$5,181	\$2,257	-\$13,506
2022	\$2,951	\$9,440	\$6,488	-\$7,018
2023	\$2,981	\$4,028	\$1,046	-\$5,971
2024	\$2,976	\$2,153	-\$823	-\$6,794
2025	\$2,956	\$6,281	\$3,324	-\$3,470
2026	\$2,956	\$2,832	-\$124	-\$3,594
2027	\$2,986	\$3,143	\$157	-\$3,437
2028	\$2,954	\$5,514	\$2,560	-\$877

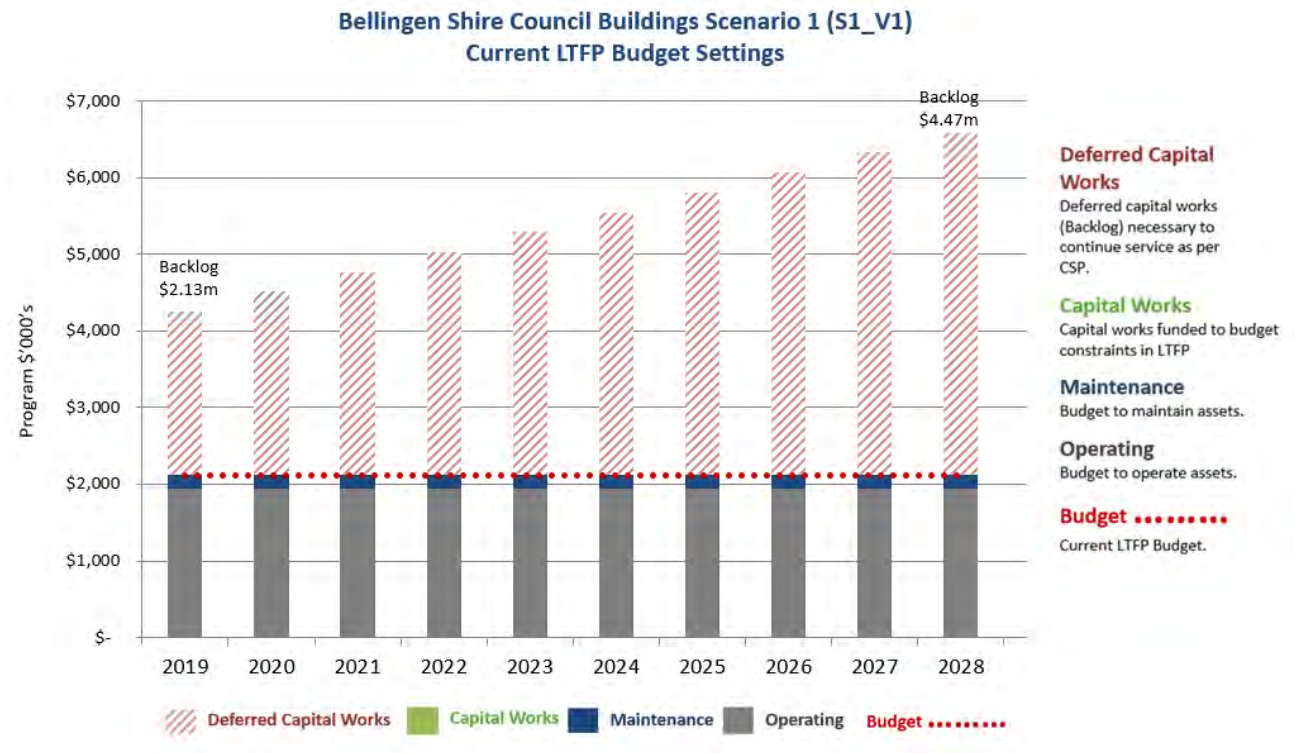


**Buildings**

Assets:

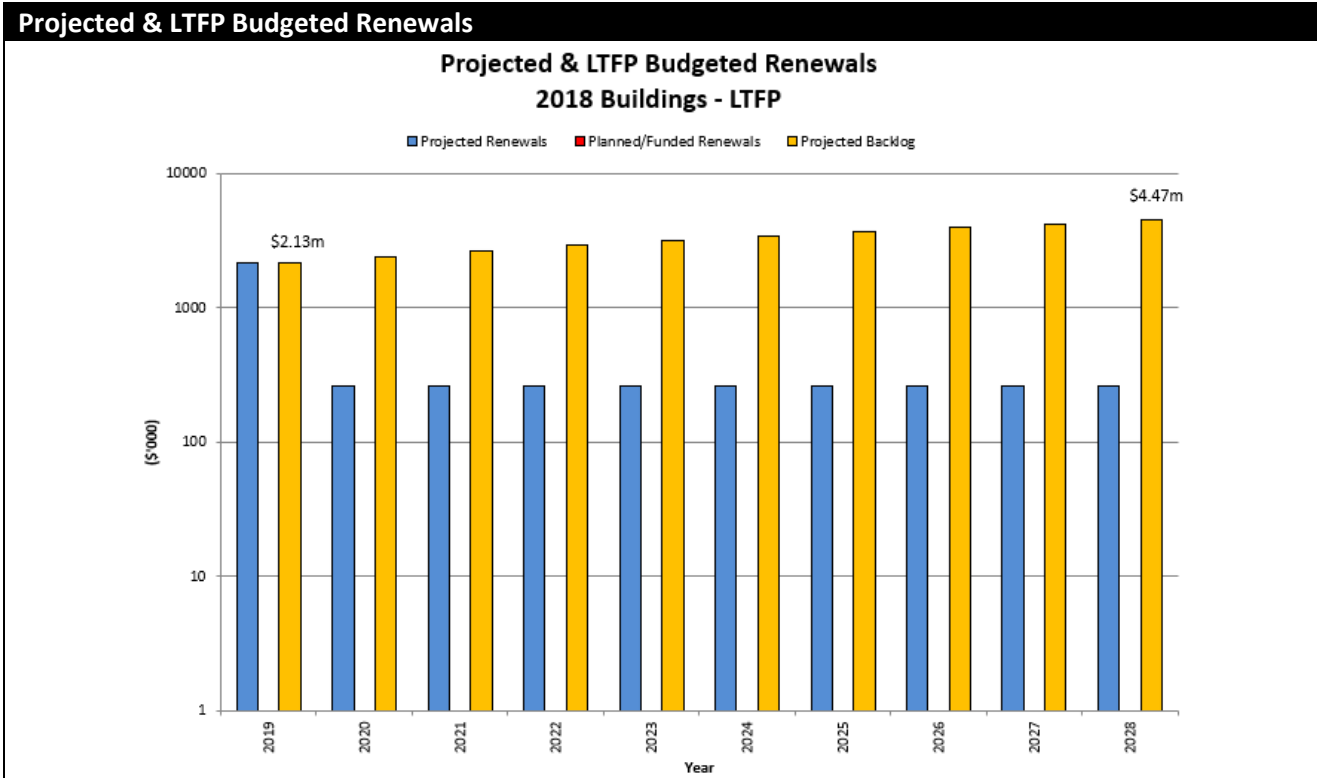
Buildings \$57,178,697.45

**Projected Operating & Capital Expenditure**



**Sustainability of service delivery (Including Backlog) (\$,000)**

<b>Asset Renewal Funding Ratio</b>	
Asset Renewal Funding Ratio	0%
<b>Medium Term (10 yrs) Sustainability</b>	
10 year Operations, Maintenance & Renewal Projected Expenditure	\$2,563
10 year Operations, Maintenance & Renewal Planned (Budget) Expenditures	\$2,116
10 year Funding Shortfall (10 year projected. expenditures. - Planned (Budget) Expenditures)	\$-447
10 year Sustainability Indicator (10 year planned exp. / projected. Expenditure)	83%
<b>Short Term (5 years) Sustainability</b>	
5 year Operations, Maintenance & Renewal Projected Expenditure	\$2,751
5 year Operations, Maintenance & Renewal Planned (Budget) Expenditure	\$2,116
5 year Funding Shortfall (5 year projected expenditures. - planned (budget) expenditures)	\$-635
5 year Sustainability Indicator (5 year planned expenditures. / projected expenditures)	77%

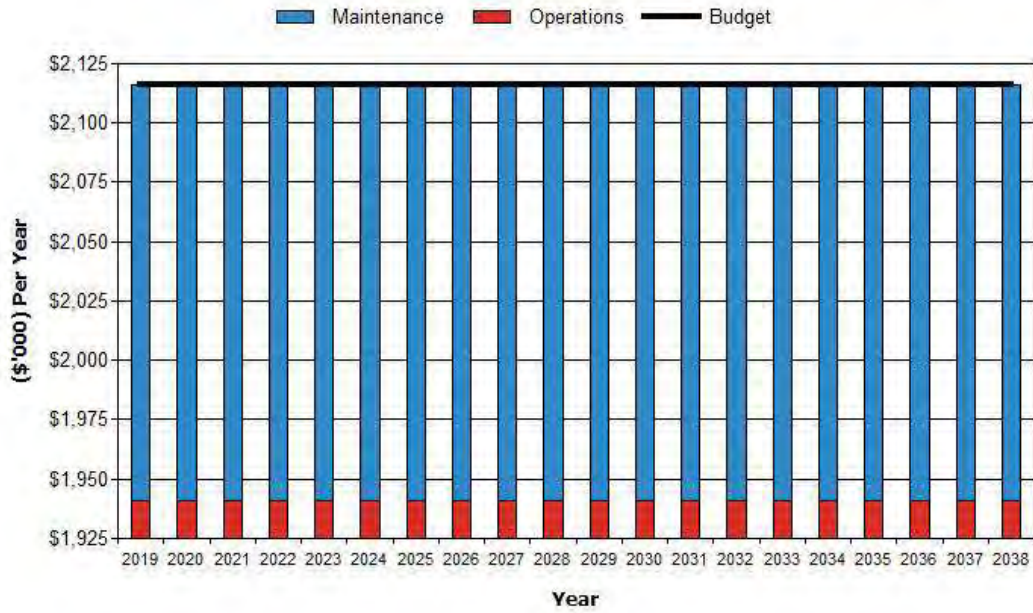


### Renewal Financing

Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$2,134	\$0	-\$2,134	-\$2,134
2020	\$260	\$0	-\$260	-\$2,394
2021	\$260	\$0	-\$260	-\$2,653
2022	\$260	\$0	-\$260	-\$2,913
2023	\$260	\$0	-\$260	-\$3,173
2024	\$260	\$0	-\$260	-\$3,433
2025	\$260	\$0	-\$260	-\$3,693
2026	\$260	\$0	-\$260	-\$3,952
2027	\$260	\$0	-\$260	-\$4,212
2028	\$260	\$0	-\$260	-\$4,472

**Projected Operations & Maintenance Expenditure**

### Bellingen SC - Projected Operations & Maintenance Expenditure





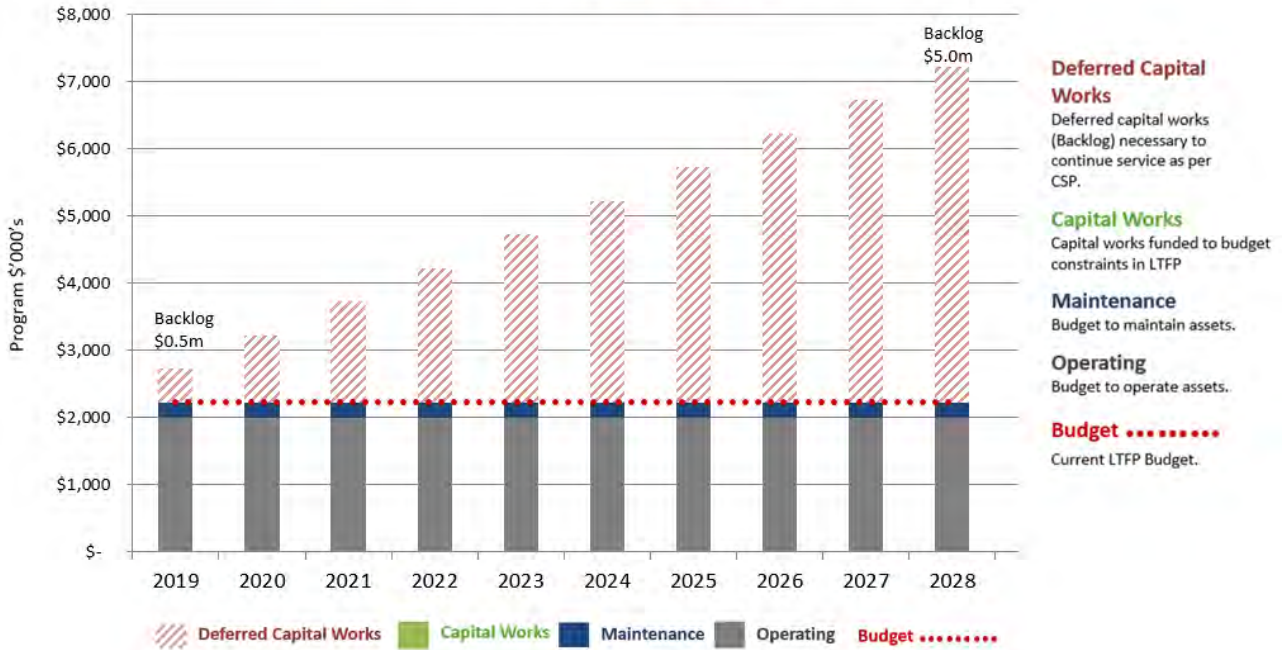
**Parks and Other Assets**

**Assets:**

- Infrastructure - Swimming Pools \$2,070,521.26
- Infrastructure - Open space/recreational assets \$3,985,532.52
- Infrastructure - Other Infrastructure \$3,291,273.33
- Land Improvements – Depreciable \$2,595,044.00

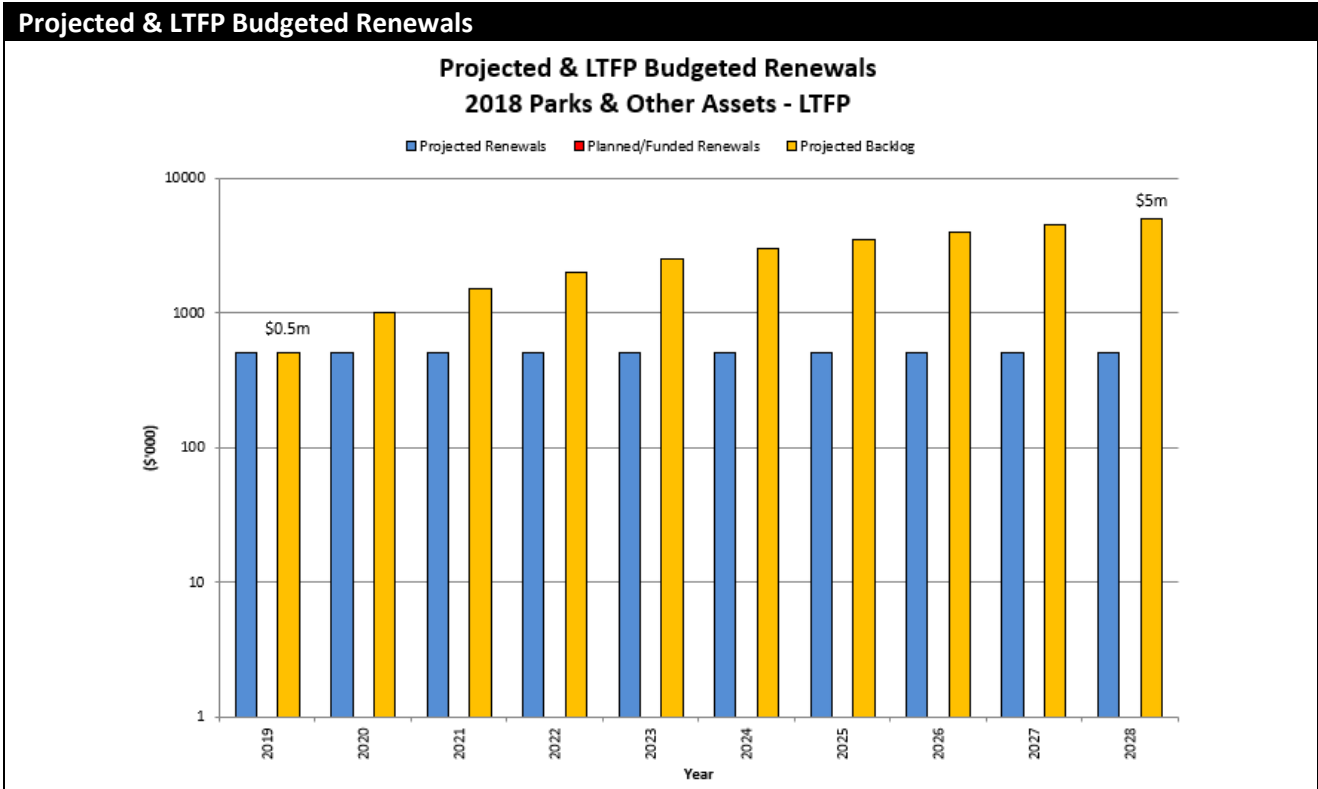
**Projected Operating & Capital Expenditure**

**Bellingham Shire Council Parks & Other Assets Scenario 1 (S1\_V1)**  
Current LTFP Budget Settings



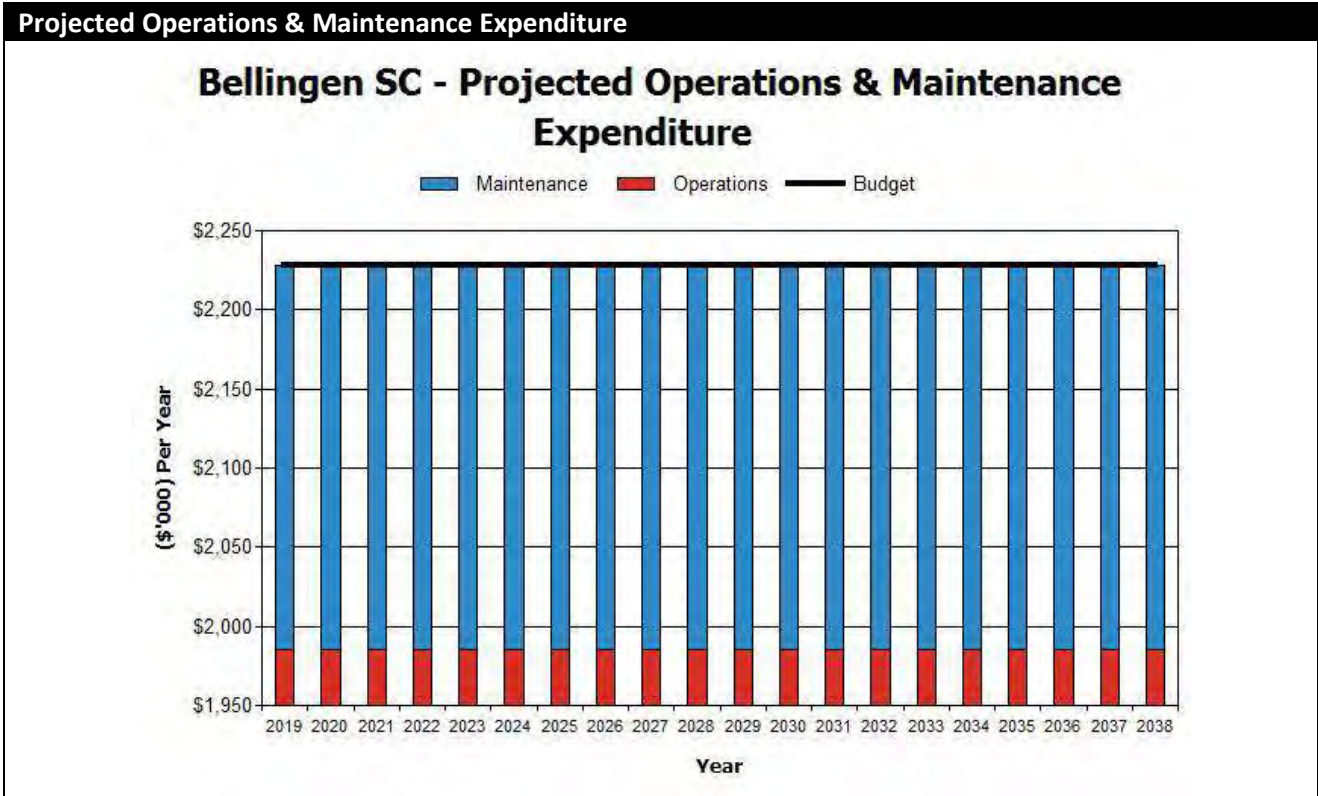
**Sustainability of service delivery (Including Backlog) (\$,000)**

<b>Asset Renewal Funding Ratio</b>	
Asset Renewal Funding Ratio	0%
<b>Medium Term (10 yrs) Sustainability</b>	
10 year Operations, Maintenance & Renewal Projected Expenditure	\$2,728
10 year Operations, Maintenance & Renewal Planned (Budget) Expenditures	\$2,228
10 year Funding Shortfall (10 year projected. expenditures. - Planned (Budget) Expenditures)	\$-500
10 year Sustainability Indicator (10 year planned exp. / projected. Expenditure)	82%
<b>Short Term (5 years) Sustainability</b>	
5 year Operations, Maintenance & Renewal Projected Expenditure	\$2,728
5 year Operations, Maintenance & Renewal Planned (Budget) Expenditure	\$2,228
5 year Funding Shortfall (5 year projected expenditures. - planned (budget) expenditures)	\$-500
5 year Sustainability Indicator (5 year planned expenditures. / projected expenditures)	82%



### Renewal Financing

Year	Projected Renewals	Planned/Funded Renewals	Annual Shortfall	Projected Backlog
2019	\$500	\$0	-\$500	-\$500
2020	\$500	\$0	-\$500	-\$1,000
2021	\$500	\$0	-\$500	-\$1,500
2022	\$500	\$0	-\$500	-\$1,999
2023	\$500	\$0	-\$500	-\$2,499
2024	\$500	\$0	-\$500	-\$2,999
2025	\$500	\$0	-\$500	-\$3,499
2026	\$500	\$0	-\$500	-\$3,999
2027	\$500	\$0	-\$500	-\$4,499
2028	\$500	\$0	-\$500	-\$4,998



**Appendix C Technical Levels of Service**

<b>TECHNICAL LEVELS OF SERVICE – TRANSPORT &amp; DRAINAGE</b>			
<b>Budget Area</b>	<b>Activities</b>	<b>Measure</b>	<b>Current LTFP Funded Level of Service</b>
<b>Operations</b>	Number of prompted Inspections	Number of prompted Inspections	Decreasing trend
	Percentage of bridges inspected as per inspection calendar	Percentage of bridges inspected as per inspection calendar	100%
	Number of stormwater service requests received	Number of requests received	Not expected to increase Passive reporting
<b>Operational Cost</b>			\$232,000 pa over the next 10 years
<b>Maintenance</b>	Remove hazards	Respond to complaints	Reactive maintenance to limit of budget allocation.
	Roads Defect Completion Rate	Defects completed during the half year as a percentage of defects identified during the half year	Not increasing trend
	Unresolved bridge defects	Number of open bridge defects at the end of the half year	Not increasing trend
	Number of defects outstanding	Number of defects outstanding	Declining trend
<b>Maintenance Cost</b>			\$1,363,000 pa over the next 10 years
<b>Renewal</b>	Renewal of assets	Replacement Cycle	Further assessment required to inform future revisions of this Asset Management Plan.
	Number of timber bridges load limited	Number of timber bridges load limited	Decreasing Trend
	Local unsealed road roughness	Percentage of identified local unsealed roads which exceed 300 NAASRA counts prior to grading	<5% likely to increase
<b>Renewal Cost</b>			\$5,169,532 average pa provided

TECHNICAL LEVELS OF SERVICE – TRANSPORT & DRAINAGE			
Budget Area	Activities	Measure	Current LTFP Funded Level of Service
Upgrade/New	Provide services in a cost-effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works. The augmentation of Transport Infrastructure systems to meet appropriate service and risk outcomes is not being funded
Upgrade/New Cost			\$0 Avg pa over the next 10

TECHNICAL LEVELS OF SERVICE – BUILDINGS			
Budget Area	Activities	Measure	Current LTFP Funded Level of Service
Operations	Number of prompted Inspections	Number of prompted Inspections	Increasing trend
	Percentage of Buildings inspected as per inspection calendar	Percentage of Buildings inspected as per inspection calendar	100%
	Number of Building service requests received	Number of requests received	Expected to increase Passive reporting
Operational Cost			\$1,941,000 pa over the next 10 years
Maintenance	Remove hazards	Respond to complaints	Reactive maintenance to limit of budget allocation.
	Building Defect Completion Rate	Defects completed during the half year as a percentage of defects identified during the half year	Expected increasing trend
	Unresolved Building defects	Number of open Building defects at the end of the half year	Expected increasing trend
Maintenance Cost			\$175,000 pa over the next 10 years
Renewal	Renewal of assets	Replacement Cycle	No building renewals funded in the current LTFP Projected building renewals to increase over the next 10 years

TECHNICAL LEVELS OF SERVICE – BUILDINGS			
Budget Area	Activities	Measure	Current LTFP Funded Level of Service
<b>Renewal Cost</b>			\$0 average pa provided
<b>Upgrade/New</b>	Provide services in a cost-effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works. No new or planned building upgrades have been funded in the current LTFP.
<b>Upgrade/New Cost</b>			\$0 Avg pa over the next 10

TECHNICAL LEVELS OF SERVICE – PARKS & OTHER ASSETS			
Budget Area	Activities	Measure	Current LTFP Funded Level of Service
<b>Operations</b>	Number of prompted Inspections	Number of prompted Inspections	Increasing trend
	Parks & gardens effectiveness and risk management.	Percentage of scheduled playground inspections completed	100%
	Pools number of regulatory non-compliances	Number of regulatory non-compliances	Passive reporting
<b>Operational Cost</b>			\$1,941,000 pa over the next 10 years
<b>Maintenance</b>	Parks defects identified	Number of requests received	Expected to increase
	Defects outstanding for the reporting period	Number of defects outstanding	Expected increasing trend
<b>Maintenance Cost</b>			\$175,000 pa over the next 10 years
<b>Renewal</b>	Renewal of assets	Replacement Cycle	No Parks and Other Assets renewals funded in the current LTFP. Projected Parks and Other Assets renewals to increase over the next 10 years
<b>Renewal Cost</b>			\$0 average pa provided

TECHNICAL LEVELS OF SERVICE – PARKS & OTHER ASSETS			
Budget Area	Activities	Measure	Current LTFP Funded Level of Service
Upgrade/New	Provide services in a cost-effective manner	Cost, Meet Corporate Strategy	Achieved by a combination of Council and Contract works. No new or planned Parks and Other Assets upgrades have been funded in the current LTFP.
Upgrade/New Cost			\$0 Avg pa over the next 10

TECHNICAL LEVELS OF SERVICE – WATER SUPPLY			
Budget Area	Activities	Measure	Current LTFP Funded Level of Service
Operations	Number of prompted Inspections	Number of prompted Inspections	Not increasing trend
	Number of days of water restrictions.	Number of days of water restrictions	Passive reporting
Operational Cost			\$426,000 pa over the next 10 years
Maintenance	Number of mains breaks	Number of mains breaks	Not increasing trend
	Pump station & Treatment defects identified	Number of defects identified	Not increasing trend
	Pump station & Treatment defects outstanding for the reporting period.	Number of defects outstanding	Not increasing trend
Maintenance Cost			\$251,000 pa over the next 10 years
Renewal	Renewal of assets	Replacement Cycle	Further assessment required to inform future revisions of this Asset Management Plan
Renewal Cost			\$2,185,000 average pa provided
Upgrade/New	Provide services in a cost-effective manner	Cost, Meet Corporate Strategy	Further assessment required to inform future revisions of this Asset Management Plan
Upgrade/New Cost			\$0 Avg pa over the next 10

<b>TECHNICAL LEVELS OF SERVICE – SEWER NETWORK</b>			
<b>Budget Area</b>	<b>Activities</b>	<b>Measure</b>	<b>Current LTFP Funded Level of Service</b>
<b>Operations</b>	Number of prompted Inspections	Number of prompted Inspections	Not increasing trend
	EPA compliance.	EPA compliance	100%
<b>Operational Cost</b>			\$630,000 pa over the next 10 years
<b>Maintenance</b>	Number of sewer mains breaks	Number of sewer mains breaks	Not increasing trend
	Number of Sewer chokes	Number of Sewer chokes	Not increasing trend
	Pump station & Treatment defects identified	Number of defects identified	Not increasing trend
	Pump station & Treatment defects outstanding for the reporting period.	Number of defects outstanding	Not increasing trend
<b>Maintenance Cost</b>			\$722,000 pa over the next 10 years
<b>Renewal</b>	Renewal of assets	Replacement Cycle	Further assessment required to inform future revisions of this Asset Management Plan
<b>Renewal Cost</b>			\$2,481,910 average pa provided
<b>Upgrade/New</b>	Provide services in a cost-effective manner	Cost, Meet Corporate Strategy	Further assessment required to inform future revisions of this Asset Management Plan
<b>Upgrade/New Cost</b>			\$0 Avg pa over the next 10



## **Appendix C    Abbreviations**

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRD	Written down current replacement cost

## Appendix D Glossary

### Annual service cost (ASC)

#### 1) Reporting actual cost

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

#### 2) For investment analysis and budgeting

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

### Asset

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

### Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

### Asset class

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

### Asset condition assessment

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

### Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

### Asset management (AM)

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

### Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

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

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

### Borrowings

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

### Capital expenditure

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

### Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is

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

#### **Capital expenditure - new**

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

#### **Capital expenditure - renewal**

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

#### **Capital expenditure - upgrade**

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

#### **Capital funding**

Funding to pay for capital expenditure.

#### **Capital grants**

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

#### **Capital investment expenditure**

See capital expenditure definition

#### **Capitalisation threshold**

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

#### **Carrying amount**

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

#### **Class of assets**

See asset class definition

#### **Component**

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

#### **Core asset management**

Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision-making).

#### **Cost of an asset**

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

#### **Critical assets**

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical

assets have a lower threshold for action than non-critical assets.

### **Current replacement cost (CRC)**

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

### **Deferred maintenance**

The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

### **Depreciable amount**

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

### **Depreciated replacement cost (DRC)**

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

### **Depreciation / amortisation**

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

### **Economic life**

See useful life definition.

### **Expenditure**

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

### **Fair value**

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

### **Financing gap**

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

### **Heritage asset**

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

### **Impairment Loss**

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

### **Infrastructure assets**

Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

### **Investment property**

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

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business.

### **Key performance indicator**

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators

commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

### Level of service

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

### Life Cycle Cost \*

1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

### Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

### Loans / borrowings

See borrowings.

### Maintenance

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

- Planned maintenance

Repair work that is identified and managed through a maintenance management system (MMS). MMS

activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

- Reactive maintenance

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

- Specific maintenance

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

- Unplanned maintenance

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

### Maintenance expenditure \*

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

### Materiality

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

### Modern equivalent asset

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

### **Net present value (NPV)**

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

### **Non-revenue generating investments**

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

### **Operations**

Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

### **Operating expenditure**

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

### **Operating expense**

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

### **Operating expenses**

Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

### **Operations, maintenance and renewal financing ratio**

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

### **Operations, maintenance and renewal gap**

Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

### **Pavement management system (PMS)**

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

### **PMS Score**

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

### **Rate of annual asset consumption \***

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

### **Rate of annual asset renewal \***

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

### **Rate of annual asset upgrade/new \***

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

### **Recoverable amount**

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

### **Recurrent expenditure**

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

**Recurrent funding**

Funding to pay for recurrent expenditure.

**Rehabilitation**

See capital renewal expenditure definition above.

**Remaining useful life**

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

**Renewal**

See capital renewal expenditure definition above.

**Residual value**

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

**Revenue generating investments**

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

**Risk management**

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

**Section or segment**

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

**Service potential**

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

**Service potential remaining**

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

**Specific Maintenance**

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

**Strategic Longer-Term Plan**

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

**Sub-component**

Smaller individual parts that make up a component part.

**Useful life**

Either:

(a) the period over which an asset is expected to be available for use by an entity, or

(b) the number of production or similar units expected to be obtained from the asset by the entity.

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

**Value in Use**

The present value of future cash flows expected to be derived from an asset or cash generating unit. It is

deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown \*



#### KEY DIRECTION

#### CONNECTED, SUSTAINABLE, CREATIVE

**Aspiration:** "We have a diversity of beautiful spaces that foster community happiness and wellbeing"

**Aspiration:** "We have the facilities and services needed to be a healthy and active community"

#### STRATEGIC DIRECTIONS:

- We have a variety of passive recreation spaces including riversides, parks and reserves.
- We have a variety of active recreation spaces including playgrounds, sporting fields and multi-purpose centres.
- We have a variety of shared community spaces including meeting spaces accommodating public art, cultural and environmental amenity.
- There is active participation in a range of sporting and recreational pursuits.
- Review service levels on a regular basis with a view to maintaining financial sustainability.
- Heritage buildings and sites are protected.
- Planning, creating, operating, maintaining, re-newing and disposing of assets in a manner that ensures cost effective service delivery.

#### SERVICE / ASSET ACTIVITIES

- ⇒ Buildings
- ⇒ Parks & Open Space
- ⇒ Recreation
- ⇒ Swimming Pools
- ⇒ Bus Shelters
- ⇒ Street Furniture

#### 10 year Capital works Planned Expenditures

\$0 M No planned Capital Expenditure 2019-28



0% of total \$120.7M budget

## Bellingen Shire COUNCIL



Council Services	Satisfaction Mean	Importance Mean	Satisfaction vs. Importance
Council Pool	3.80	3.36	Lower Importance Higher Satisfaction
Community Halls	3.70	3.42	Lower Importance Higher Satisfaction
Parks, Reserves and Playgrounds	3.58	3.89	Higher Importance Higher Satisfaction
Sporting Facilities	3.71	3.46	Lower Importance Higher Satisfaction
Public Toilets	3.27	3.76	Higher Importance Higher Satisfaction

### SERVICE LEVELS - for Parks, Open Space, Recreation, Swimming Pools, Buildings and other assets including depreciable land improvements

CURRENT SERVICE LEVEL	PROJECTED SERVICE LEVEL 10	RISKS	RESPONSES
		<p>There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:</p> <ul style="list-style-type: none"> <li>Modelling shows that building renewal forecasts are to significantly increase beyond current budget allocations in the next 5 to 15 years.</li> <li>Maintenance costs increasing as buildings age.</li> <li>Assets deteriorate to a lesser service standard and higher risk situation.</li> <li>Continually meeting compliance requirements as standards change.</li> <li>Knowledge gaps with regards to asset condition &amp; performance</li> </ul>	<p>We will ensure that needed services are provided at appropriate levels of service and at an affordable cost while managing risks</p> <p>Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels .</p> <p>Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to asset intensive services.</p> <p>Further documented service levels with respect to allowable condition function and capacity based on risk.</p>

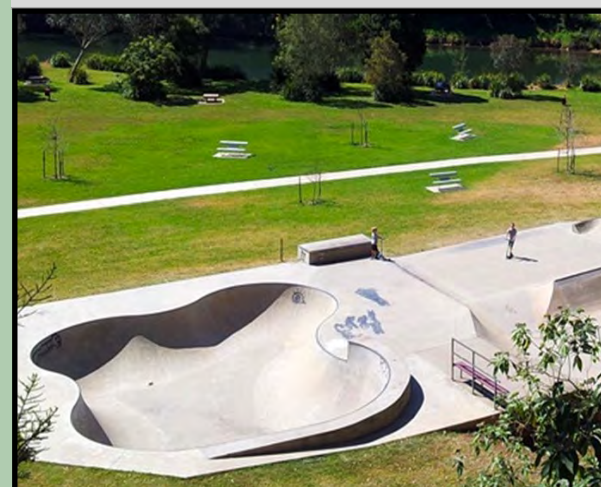
Confidence in Data: HIGH MODERATE LOW

#### WHAT SERVICE LEVELS LOOK LIKE

GOOD / FAIR QUALITY

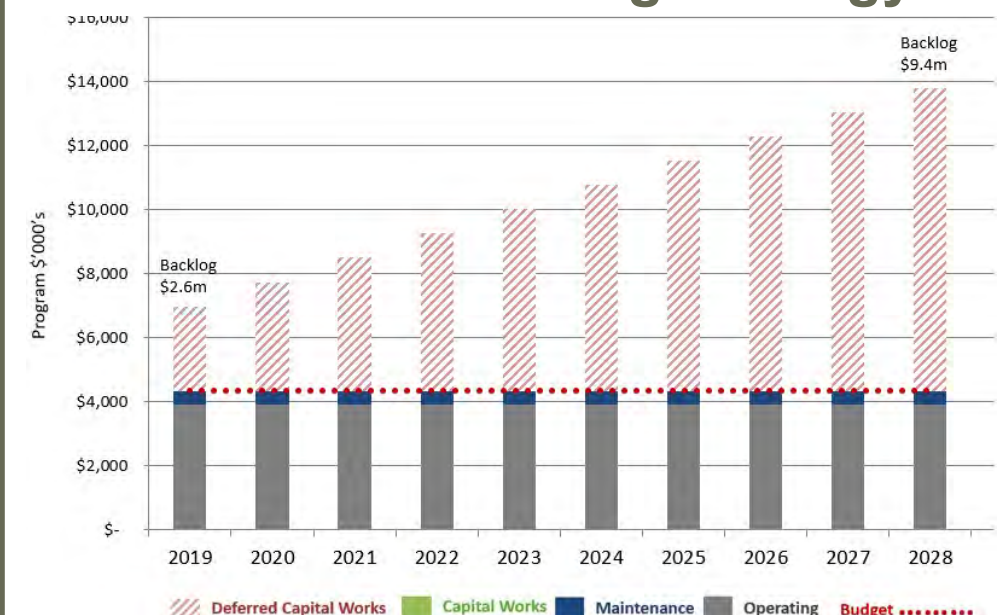
POOR QUALITY

#### PARKS, BUILDINGS & OTHER ASSETS



TechnologyOne: V1.0 20180228

### 10 Year Resourcing Strategy

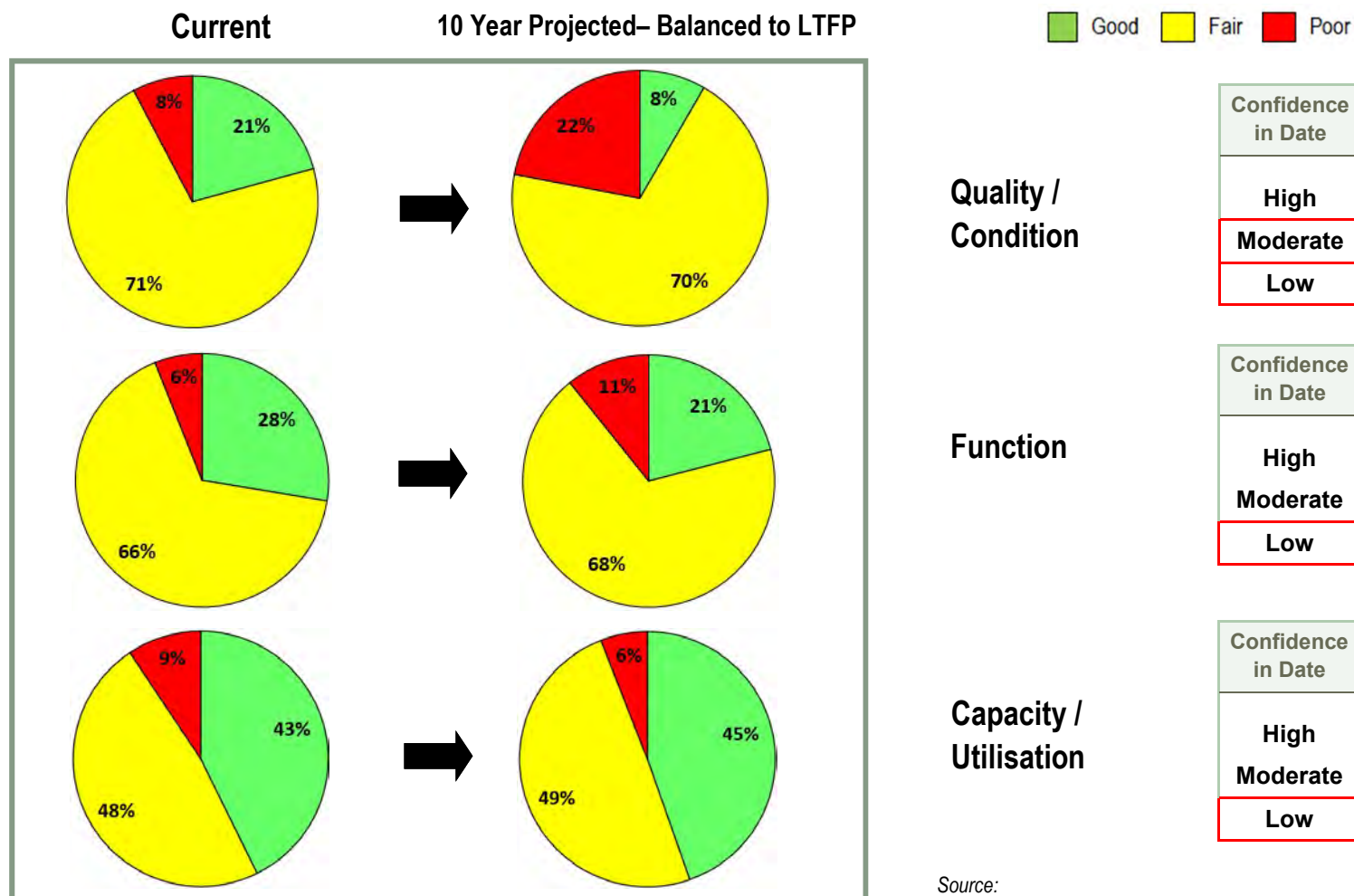


Source: 2018 Buildings & Infrastructure Strategic Asset Management Plan

## ASSET PLAN SUMMARY: PARKS, BUILDINGS & OTHER ASSETS

This Asset Management Plan Summary shows the current and projected service levels, budget and expenditure profiles for the current Long Term Financial Plan compared to the Asset Management Plan.

### OVERALL SERVICE LEVELS



### ASSETS SUPPORTING SERVICE



### ASSET MANAGEMENT PLAN SUMMARY

Councils' present funding levels are insufficient to continue to provide existing services at current levels in the medium to long term. Council presently has no capital funds allocated for these services. In this situation there is however higher community satisfaction with these services and the risk consequences for deferring work are considered more manageable when compared to roads and bridges at this time.

**Long Term:** 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. Council's Life cycle expenditure is currently 82% of life cycle costs. The life cycle costs and life cycle expenditure comparison highlights the difference between present outlays and the average cost of providing the service over the long term and indicates council may need to raise additional operating revenue if it is to sustain service levels over the long term.

**Medium Term (10 Years):** Council's asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$5.29M on average per year. Estimated (budget) operations, maintenance and capital renewal is \$4.34M average per year. This indicates that Council expects to have 82% of the projected expenditures needed to provide the services documented in its asset management plan.

There are risks associated with providing the service and not being able to complete all identified activities and projects. Potential risks and Council's response are further discussed within this document for each major service activity.

### Summary of Asset Costs

#### Asset Renewal Funding Ratio

The Asset Renewal Funding Ratio is the most important indicator and reveals whether projected capital renewal and replacement expenditure are able to be financed in the long-term financial plan. It is calculated by dividing the projected capital renewal expenditure shown in the AM Plan by the estimated capital renewal budget provided in the long-term financial plan.

Asset Renewal Funding Ratio 0%

#### MEDIUM TERM - 10 YEAR FINANCIAL PLANNING PERIOD

It is estimated there will be a funding shortfall of **\$947,000** each year over the next 10 years to maintain the current level of built assets for the Parks, Buildings and Other Asset services.

10 Year Cost (annually)	\$	5,291,000
10 Year Available Funding (annually)	\$	4,344,000
10 Year Gap (annually)	-\$	947,000
10 Year Financing Indicator		82%

### SUMMARY OF ASSET COSTS - FUNDING GAP

**SHORT TERM 5 YEAR GAP** **\$1,134,000 /yr**  
**MEDIUM TERM 10 YEAR GAP** **\$947,000 /yr**

## ASSET ACTIVITY: BUILDINGS

### COMMENTS

Council owns and maintains a wide variety of buildings. These buildings provide services for all members of our community – providing places to hold events, meet up with friends, attend a playgroup or borrow a book. Council also owns buildings that provide us with a source of income as well as providing a service, such as our child care centres and pools. There is general high satisfaction with building related services. Overall buildings are in fair condition however many are starting to show the signs of aging.

### RISKS

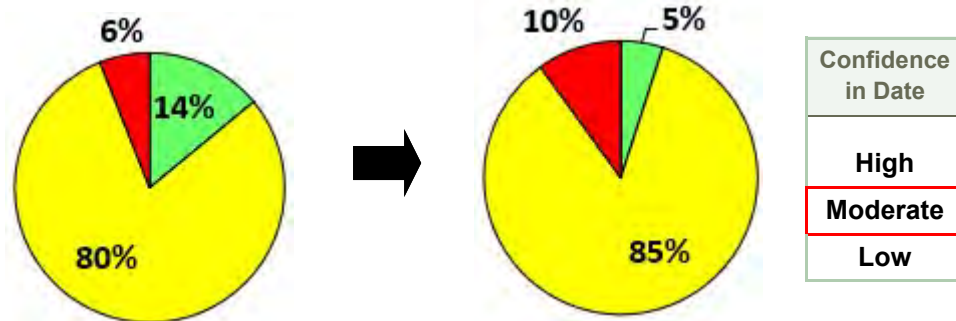
Risks to council's buildings portfolio are:

- Modelling shows that building renewal forecasts are to significantly increase beyond current budget allocations in the next 5 to 15 years.
- Maintenance costs increasing as buildings age.
- Buildings deteriorate to a lesser service standard and higher risk situation.
- Buildings not suiting the needs of service providers (Function/Capacity).
- Increasing financial pressure to adequately maintain the building portfolio, particularly if there is growth to the building portfolio from the provision of grants.

### RESPONSES

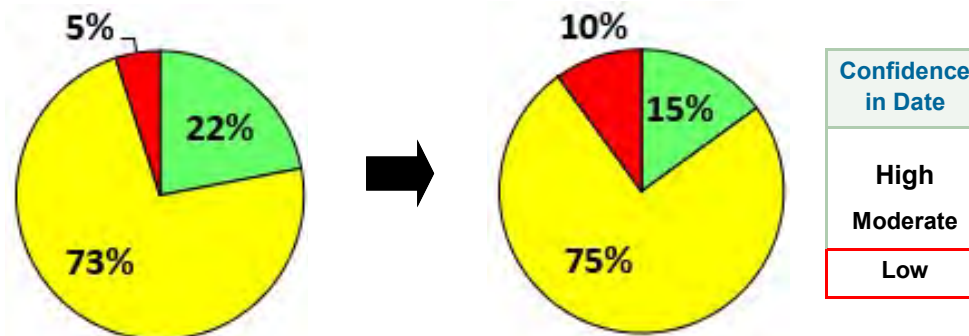
- Maintenance is managed appropriately at an operational level.
- Future planning improvements can be made by documented service level risks and utilisation of these in establishing future maintenance priorities.
- Continue to monitor not only the condition of buildings, but how well they suit the needs of users
- Although grants may be available for the capital cost of new or expanded facilities, due consideration should be made to ensure sufficient ongoing operation and maintenance funds can be provided to support these additional assets

### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



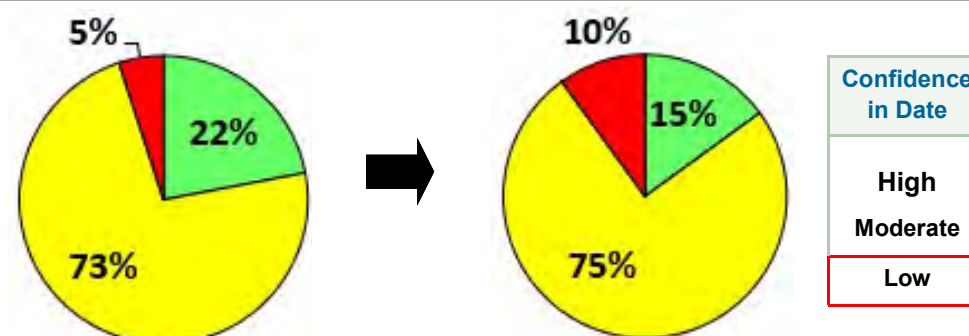
Confidence in Date
High
<b>Moderate</b>
Low

### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



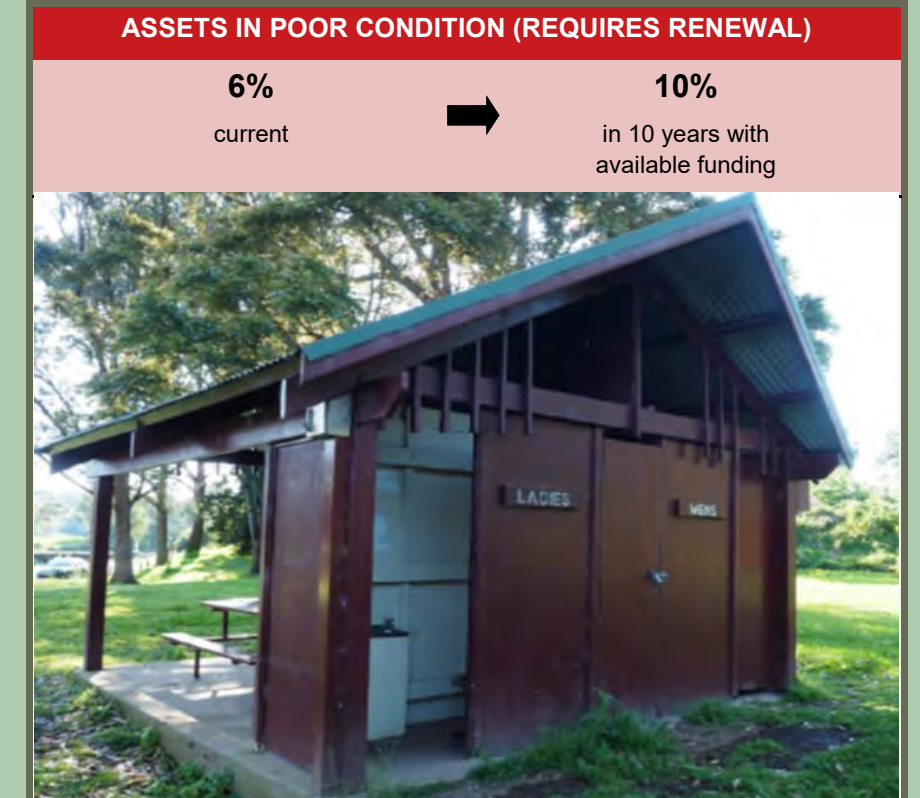
Confidence in Date
High
<b>Moderate</b>
Low

### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY

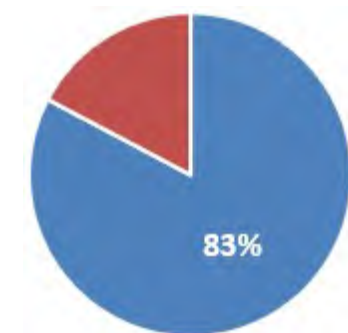


Confidence in Date
High
<b>Moderate</b>
Low

Good Fair Poor



### Current Replacement Value



**Buildings \$ 57,178,697 (83%)**

## ASSET ACTIVITY: PARKS

### COMMENTS

Council provides a network of parks infrastructure to enable delivery of services to the community. These parks assets include sporting ovals, playgrounds, active and passive reserves, park furniture, car parks and hard surface sporting facilities. They give our residents and those in surrounding areas the chance to be active in many ways, participate in organised sport or just relax and enjoy being outside. Whilst there is high community satisfaction with parks related services this is expected decline as infrastructure starts to age.

### RISKS

Risks to council's Parks and Recreational assets are:

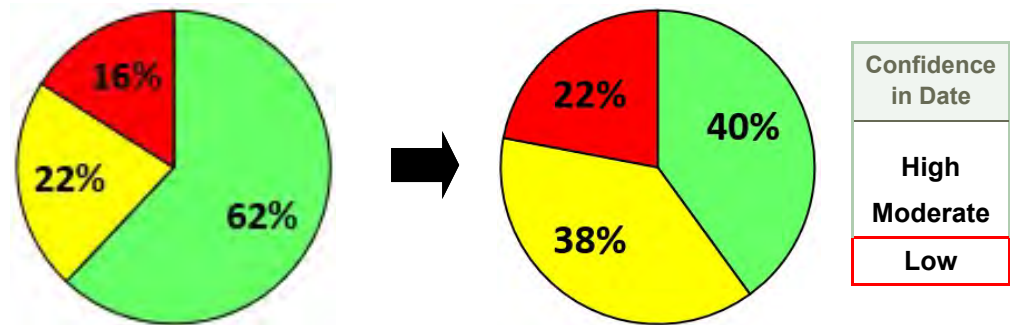
- Maintenance costs increasing as assets age.
- Deteriorate of assets to a lesser service standard and higher risk situation.
- Continually meeting compliance requirements as standards change

### RESPONSES

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

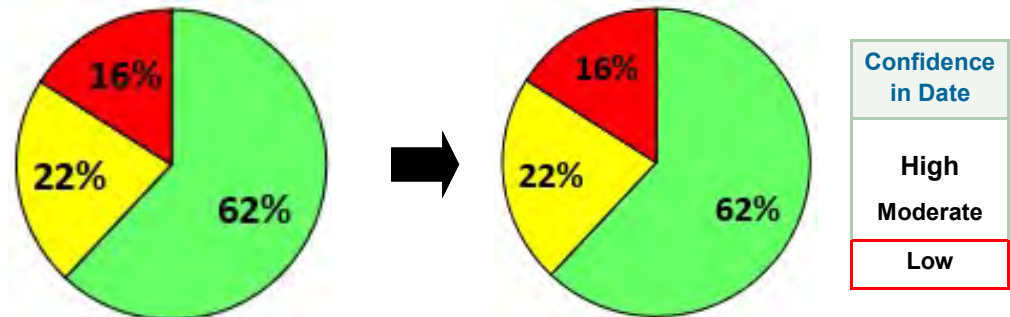
- Ensuring facilities are maintained at a safe functional level.
- Maximising assets useful life whilst minimising lifecycle expenditure.
- Maintenance is managed appropriately at an operational level.
- Future planning improvements can be made by documented service level risks and utilisation of these in establishing future maintenance priorities.
- Continue to inspect facilities so their standard is known. Monitor industry changes so that potential changes to regulatory standards can be anticipated.

### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



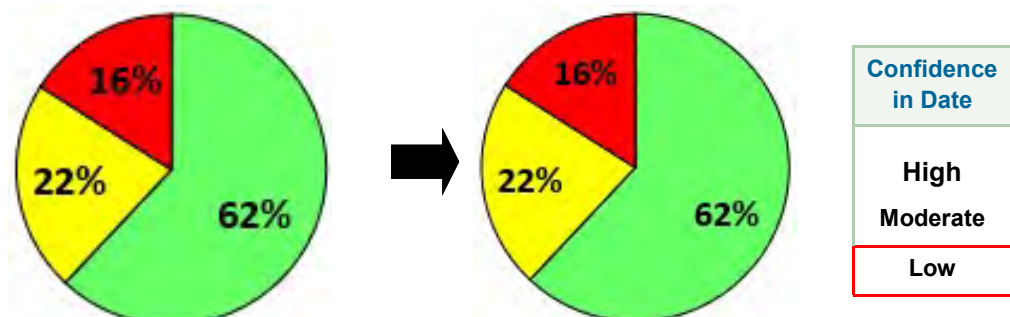
Confidence in Date  
High  
Moderate  
Low

### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



Confidence in Date  
High  
Moderate  
Low

### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Confidence in Date  
High  
Moderate  
Low

Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

84% current → 80% in 10 years with available funding

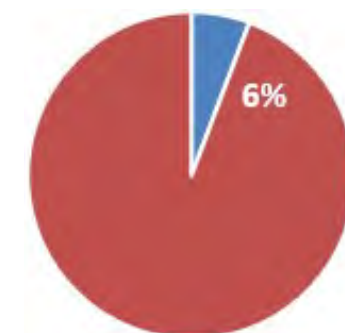


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

16% current → 20% in 10 years with available funding



### Current Replacement Value



Parks/Recreation \$ 3,985,533 (6%)

## ASSET ACTIVITY: POOLS

### COMMENTS

Council has three public swimming pools – Bellingen Swim Centre, Dorrigo Swim Centre and Mylestom Salt Water pool in the Bellinger River. Both Bellingen and Dorrigo are managed under contract with YMCA. The YMCA manage a range of public swimming pools across NSW. Council has found them to be excellent operators. All pools were subject to maintenance and improvements in the 17-18 financial year. Dorrigo Pool received a new filtration system and pump. Bellingen Pools were emptied, cleaned and repainted. Mylestom pool needed repairs to the internal stairs and decking around the pool.

Council pools provide a valuable contribution to our local communities. They offer: Learn to Swim Classes, recreation, remediation and exercise opportunities.

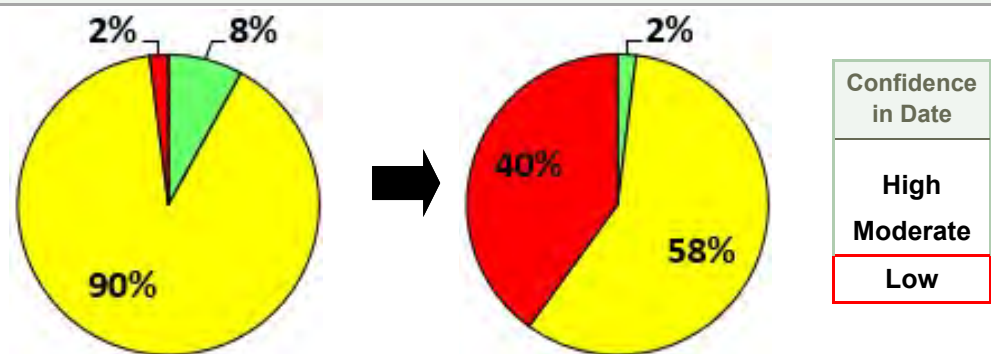
### RISKS

Public Swimming Pools have a high level of regulation to ensure the safety of patrons. Two lifeguards are on duty at all times during opening hours. A range of safety measures reduce the risks of accidents, for example, signage telling patrons not to run or dive. These safety standards have served our public well with no serious accidents being reported over the last five years. Bellingen Pool was recently vandalised, which seems to occur on an annual basis. The damage was significant on this last occasion and for that reason, Council is currently looking into installing CCTV. Risks associated with Mylestom Salt Water Pool include potential injuries from marine life. For example, sting rays or sharks. Council checks the net on an annual basis and after flooding occurs in the river. Similarly, Council's outdoor crew make regular checks on the pool infrastructure. This pool does not have a lifeguard service so there are added risks associated with unsafe behaviour. For example, diving into the pool at low tide.

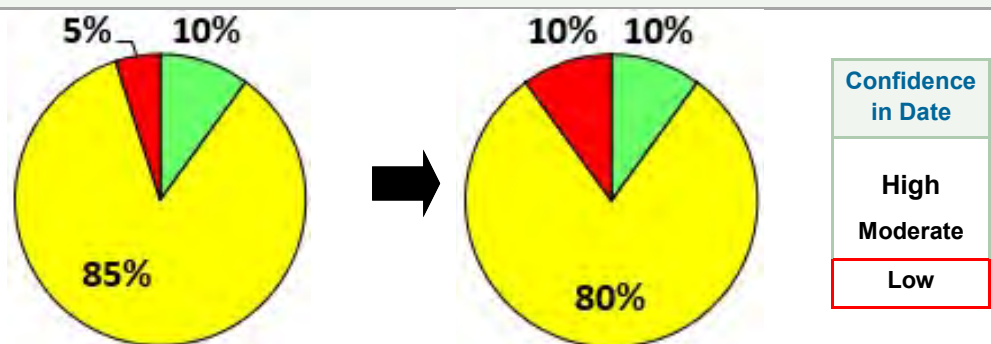
### RESPONSES

With Bellingen and Dorrigo Pools, Council's contractor, YMCA are required to submit monthly reports on incidents and maintenance issues. This ensures Council can address any significant issues promptly. It is unfortunate that the pools do not cover their operational costs. However, patronage to our pools is consistently growing which is a great indication of how much the community value them. Council is also actively working to reduce operational costs. For example, installing solar panels at both Dorrigo and Bellingen Pool and installing new and more efficient plant and equipment.

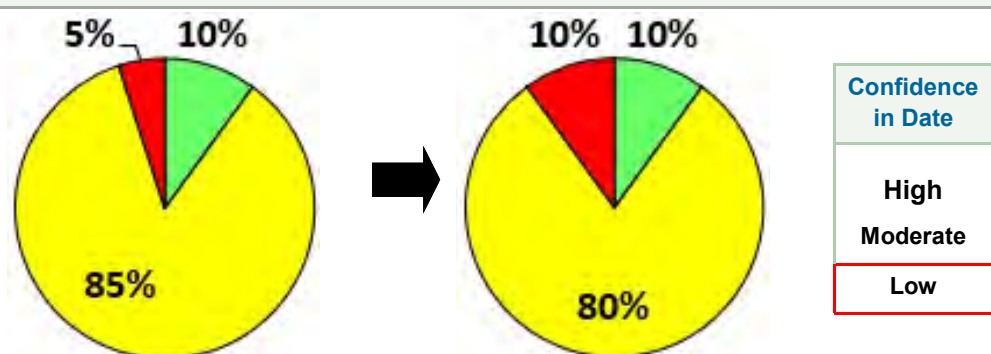
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

98% current → 60% in 10 years with available funding

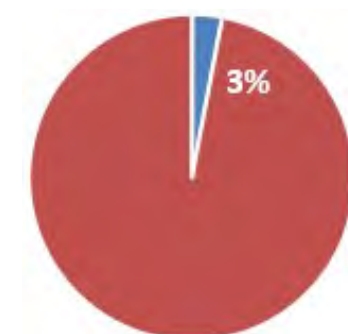


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

2% current → 40% in 10 years with available funding



### Current Replacement Value



Swimming Pools \$2,070,521 (3%)

## ASSET ACTIVITY: OTHER ASSETS

### COMMENTS

Bellingen Shire Council provides a mix of assets to enhance the overall amenity of area for both residents and visitors to the area. This mix of assets include bus shelters, street furniture, memorials, lookouts and other viewing platforms. The condition profile of these assets is not very well understood and remains a major knowledge gap.

### RISKS

Risks to these other assets are:

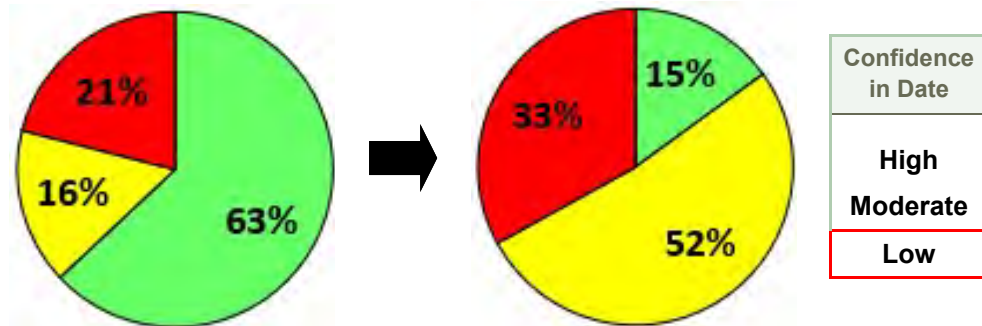
- Maintenance costs increasing as assets age.
- Deteriorate of assets to a lesser service standard and higher risk situation.

### RESPONSES

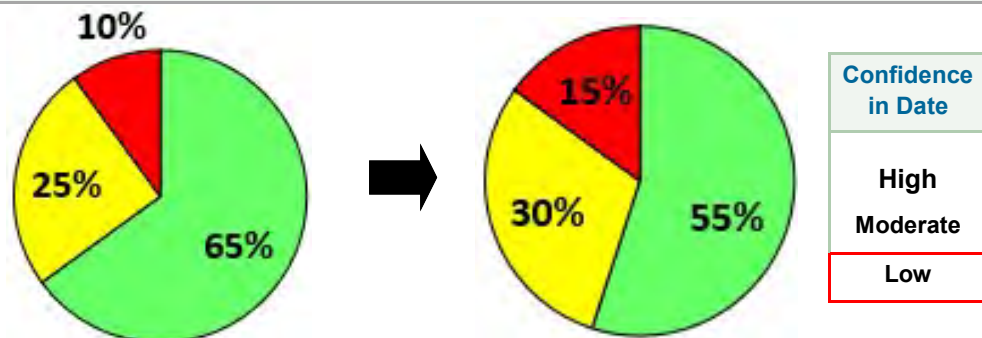
We will endeavour to manage these risks within available funding by:

- Ensuring facilities are maintained at a safe functional level.
- Maximising assets useful life whilst minimising lifecycle expenditure.
- Maintenance is managed appropriately at an operational level.
- Future planning improvements can be made by documented service level risks and utilisation of these in establishing future maintenance priorities.

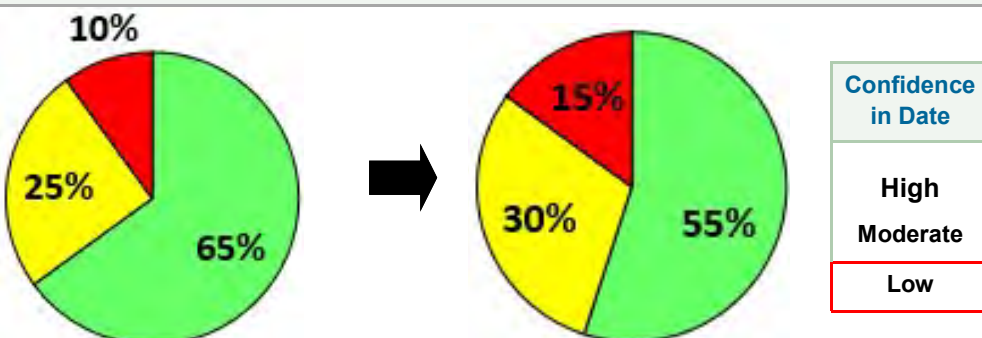
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

79% current → 67% in 10 years with available funding

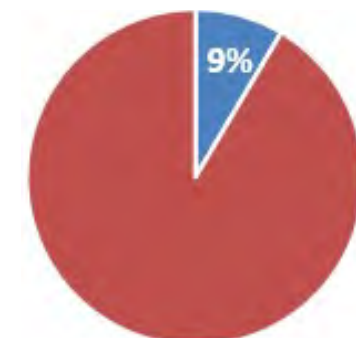


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

21% current → 33% in 10 years with available funding



### Current Replacement Value



Other Assets \$ 5,886,317 (9%)

## Document ID: Parks, Buildings & Other Assets

Version No.	Creation Date	Revision Details	Author	Reviewer	Approver
V1.0	23/10/2018	First Draft Dashboards	T1		

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## KEY DIRECTION

### CONNECTED, SUSTAINABLE, CREATIVE

**Aspiration:** "We work together to protect and enhance our environment".

**Aspiration:** "We reduce, reuse, recycle".

**Aspiration:** "We have clean water which is protected and used sustainably".

#### STRATEGIC DIRECTIONS:

- Our waterways and wetlands are valued, protected and enhanced
- We minimise our use of water
- We use our water and wastewater using best management practices
- Our natural environment is valued, protected and enhanced
- The consumption of resources is minimised
- We reduce, reuse and recycle our waste

## SERVICE / ASSET ACTIVITIES

⇒ Mains

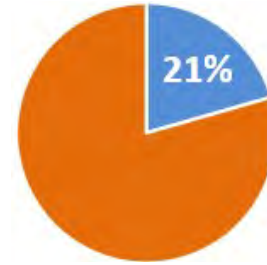
⇒ Pump Stations

⇒ Treatment

# Service: Sewer Network

## 10 year Capital works Planned Expenditures

\$ 24.8 M for Sewer Network for 2019-28



21% of total \$ 120.7M budget

# Bellingen Shire COUNCIL



## Community Satisfaction Survey

Scale ( 1—5 ): 1 being the lowest and 5 the highest.

Council Services	Satisfaction Mean	Importance Mean	Satisfaction vs. Importance
Sewage Collection and Treatment	3.78	3.84	Higher Importance Higher Satisfaction
River Water Quality	3.15	4.42	Higher Importance Higher Satisfaction
Environmental Monitoring and Protection	3.09	4.06	Higher Importance Higher Satisfaction
Waste and Recycling	3.62	4.17	Higher Importance Higher Satisfaction

**Service Level Measures:** Sourced from the 2016 CSS.

## SERVICE LEVELS - for Sewer Network including mains, pump stations and treatment facilities

CURRENT SERVICE LEVEL	PROJECTED SERVICE LEVEL 10 YRS	RISKS	RESPONSES
<p>Confidence in Data: HIGH MODERATE LOW</p>		<p>There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:</p> <ul style="list-style-type: none"> <li>• Vegetation planted to close to mains.</li> <li>• Incomplete master plans of network for future development.</li> <li>• Flooding and infiltration.</li> <li>• Disinfection failure.</li> <li>• Loss of automated control of the treatment plant.</li> <li>• Unexpected failure of critical assets such as pumps, control panels and power supply.</li> </ul>	<p>Ongoing rolling capital works program focusing on the renewal (like for like replacement) of existing infrastructure prioritised by condition, usage, safety and importance.</p> <p>Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels .</p> <p>Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to asset intensive services.</p> <p>Further documented service levels with respect to allowable condition function and capacity based on risk.</p>

### WHAT SERVICE LEVELS LOOK LIKE

GOOD / FAIR QUALITY

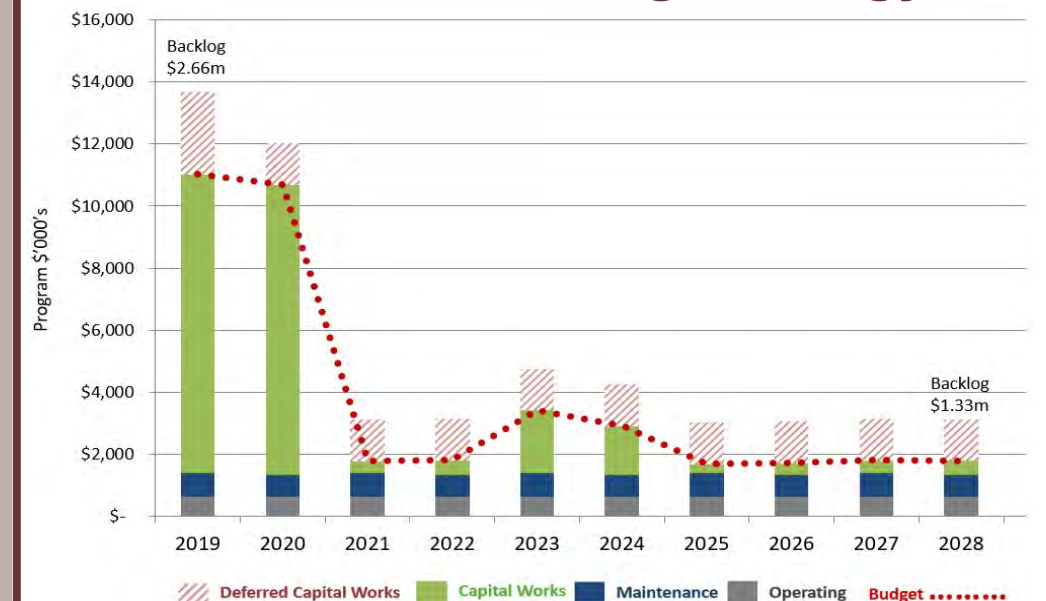
POOR QUALITY

### SEWERAGE NETWORK



TechnologyOne: V1.0 20181008

## 10 Year Resourcing Strategy



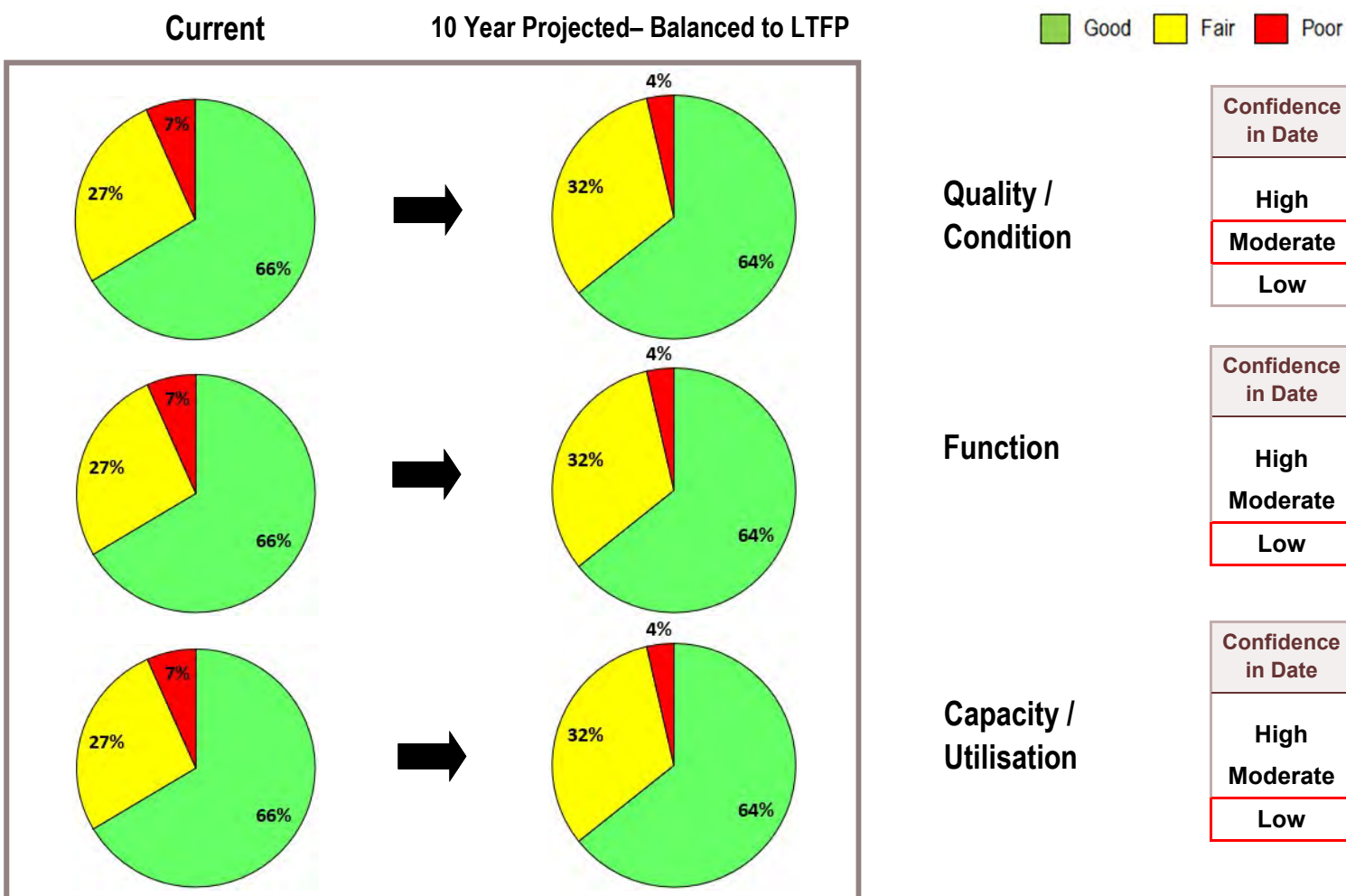
Source: 2018 Buildings & Infrastructure Strategic Asset Management Plan



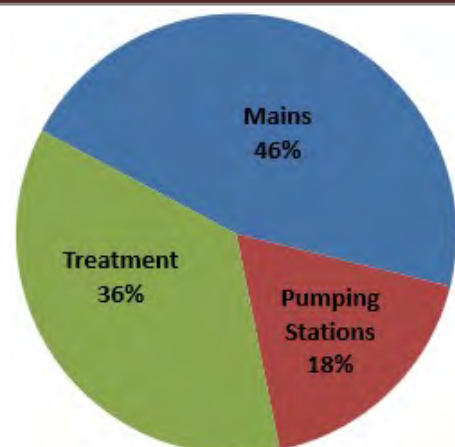
## ASSET PLAN SUMMARY: SEWER NETWORK

This Asset Management Plan Summary shows the current and projected service levels, budget and expenditure profiles for the current Long Term Financial Plan compared to the Asset Management Plan.

### OVERALL SERVICE LEVELS



### ASSETS SUPPORTING SERVICE



- 75.4km of gravity sewer mains
- 25.6km of rising mains
- 3 Treatment Plants
- 28 Pump Stations
- 1483 manholes

**\$59,038,000**  
Total Asset Value

### ASSET MANAGEMENT PLAN SUMMARY

Whilst there is a minor short in funding Councils' present funding levels are sufficient to continue to provide existing services at current levels in the medium to long term.

**Long Term:** 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. Council's Life cycle expenditure is currently 158% of life cycle costs. The life cycle costs and life cycle expenditure comparison highlights the difference between present outlays and the average cost of providing the service over the long term and indicates council may need to raise additional operating revenue if it is to sustain service levels over the long term.

**Medium Term (10 Years):** Council's asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$3.99M on average per year. Estimated (budget) operations, maintenance and capital renewal is \$3.86M average per year. This indicates that Council expects to have 97% of the projected expenditures needed to provide the services documented in its asset management plan.

There are risks associated with providing the service and not being able to complete all identified activities and projects. Potential risks and Council's response are further discussed within this document for each major service activity.

### Summary of Asset Costs

#### Asset Renewal Funding Ratio

The Asset Renewal Funding Ratio is the most important indicator and reveals whether projected capital renewal and replacement expenditure are able to be financed in the long-term financial plan. It is calculated by dividing the projected capital renewal expenditure shown in the AM Plan by the estimated capital renewal budget provided in the long-term financial plan.

**Asset Renewal Funding Ratio** 94%

#### MEDIUM TERM - 10 YEAR FINANCIAL PLANNING PERIOD

It is estimated there will be a funding shortfall of **\$947,000** each year over the next 10 years to maintain the current level of built assets for the Parks, Buildings and Other Asset services.

10 Year Cost (annually)	\$	3,997,000
10 Year Available Funding (annually)	\$	3,864,000
10 Year Gap (annually)	-\$	133,000
10 Year Financing Indicator		97%

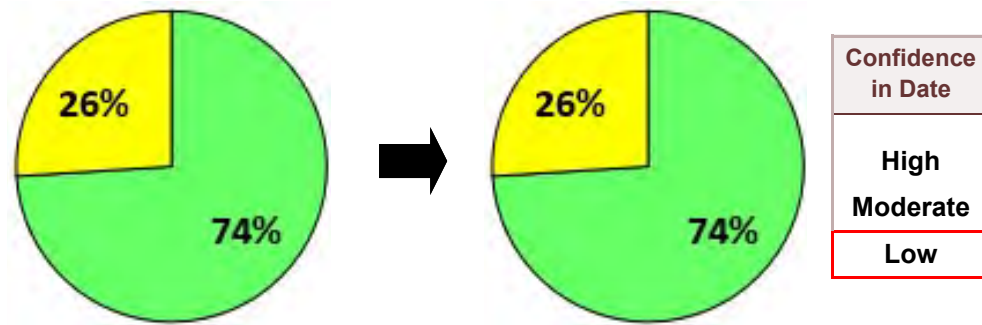
### SUMMARY OF ASSET COSTS - FUNDING GAP

**SHORT TERM 5 YEAR GAP** \$267,000 /yr  
**MEDIUM TERM 10 YEAR GAP** \$133,000 /yr

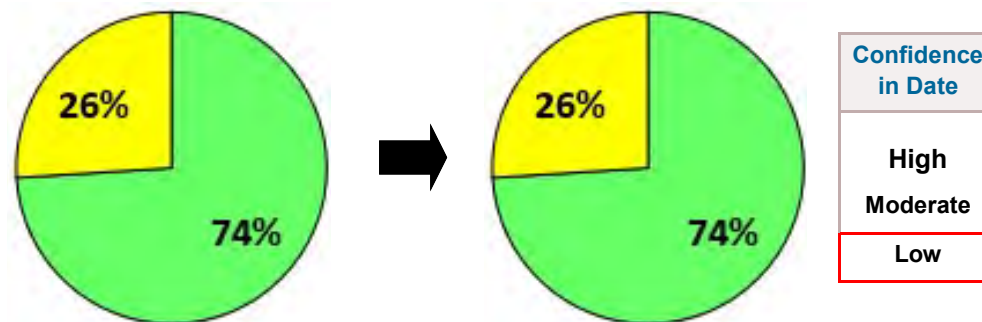
## ASSET ACTIVITY: MAINS

COMMENTS	RISKS	RESPONSES
<p>Council's sewer reticulation network is a combination of some very old assets and a large portion of relatively new mains assets all installed around the same time period. All of the original 1942 sewer mains have either been replaced or relined recently. Most of the reticulation network has a relatively long expected service life remaining, however the prevalence of trees planted near or over mains had led to failure of assets well before design life expectancy.</p>	<p>Risks to the reticulation network are:</p> <ul style="list-style-type: none"> <li>Premature failure of mains or associated assets.</li> <li>Vegetation planted to close to mains.</li> <li>Incorrect installation of pipes.</li> <li>Failure to adequately fund renewal programs.</li> <li>Incomplete master plans of network for future development.</li> </ul>	<p>To minimise the risks Council needs to ensure funding for maintenance and renewals is fully committed. A regular inspection program to identify defects before they become a major issue and a program to "jet" or clean the mains in implemented. Ensure correct planning controls are in place.</p>

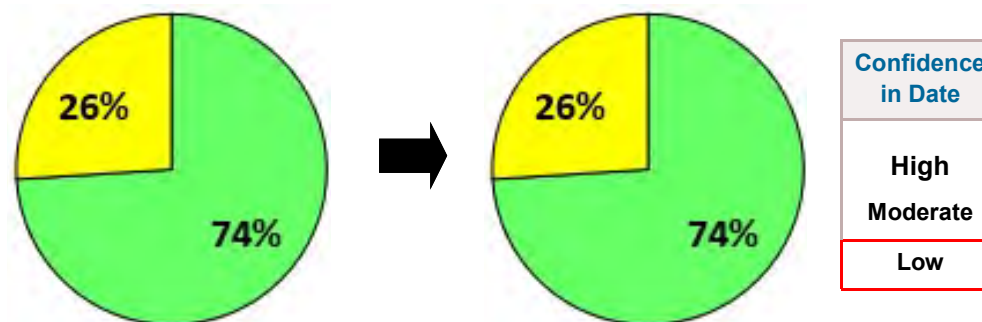
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



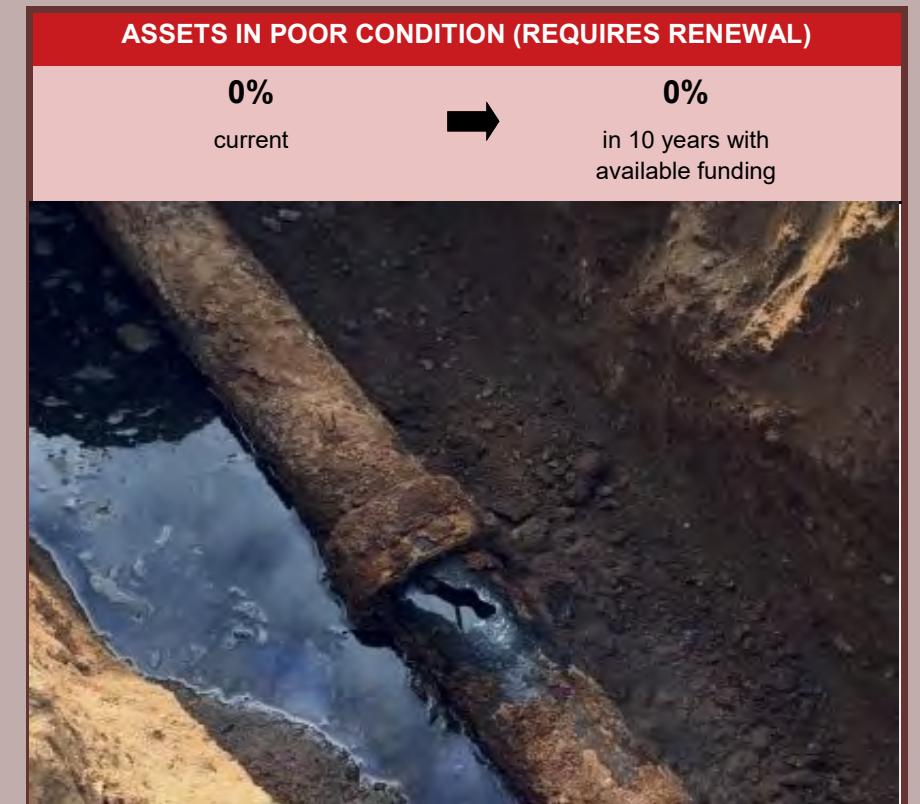
### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



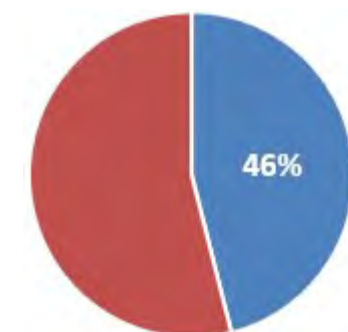
### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor



### Current Replacement Value

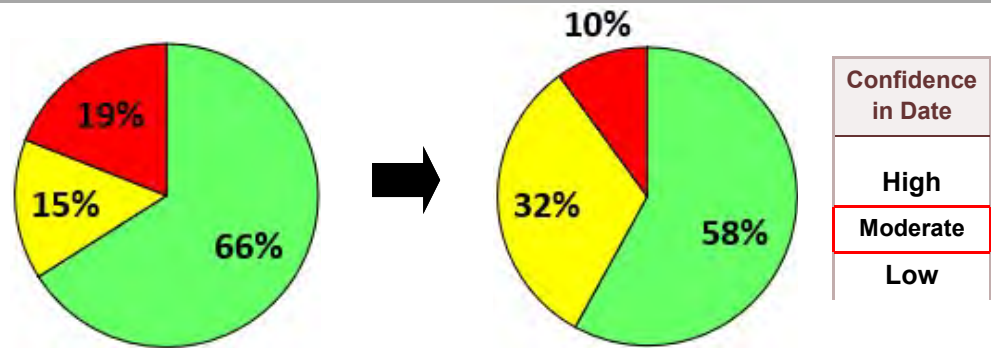


Mains \$ 27,189,000 (46%)

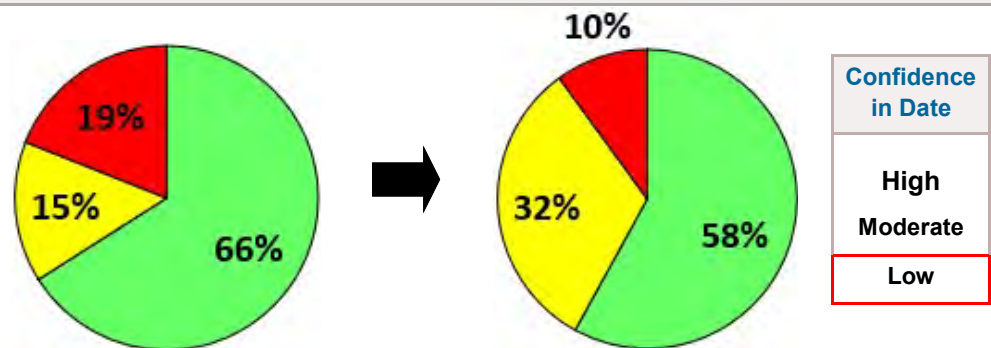
## ASSET ACTIVITY: PUMP STATIONS

COMMENTS	RISKS	RESPONSES
<p>Council currently has 28 sewer pumping stations with the majority in good condition. All the pump stations except for domestic stations have dual pumps to ensure ongoing operation. Dorrigo's main pump station were constructed in 1969, Bellingen's in the 1966 onwards and Urunga's in the 70's and 80's. The civil infrastructure is estimated to have a residual life of 50 years plus with the exception of Pilot St in Urunga.</p>	<p>Risks to the pump station network are:</p> <ul style="list-style-type: none"> <li>• Failure of civil infrastructure</li> <li>• Multiple pump failure</li> <li>• Electronic control failure</li> <li>• Infiltration</li> <li>• Pipe and valve failure</li> </ul>	<p>To minimise the risks Council needs to ensure funding for maintenance and renewals is fully committed. Council has a regular inspection program to ensure all aspects of the assets are in good working order. Pumps are replaced after 25 years service irrespective of condition. There is a rolling program to replace or upgrade electronic control panels. Pipes and valves are replaced in a rolling program. All pump stations have the capacity to be powered by mobile backup generators.</p> <p>Pilot St pump station is currently being replaced to rectify failing civil infrastructure and increase capacity.</p>

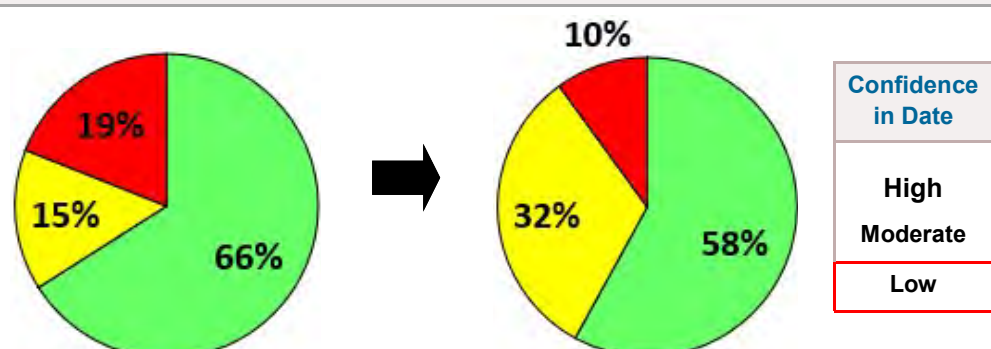
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION

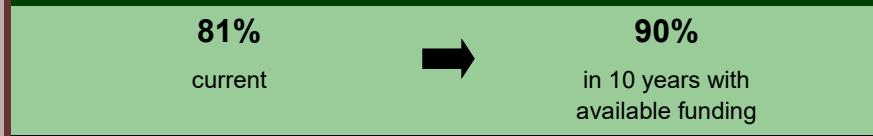


### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY

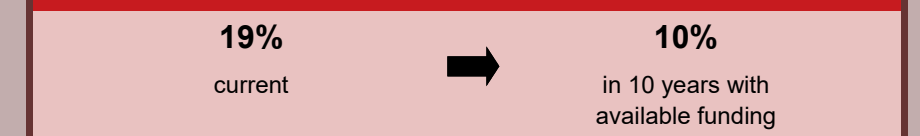


Good Fair Poor

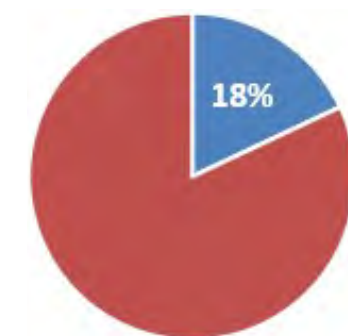
### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)



### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)



### Current Replacement Value

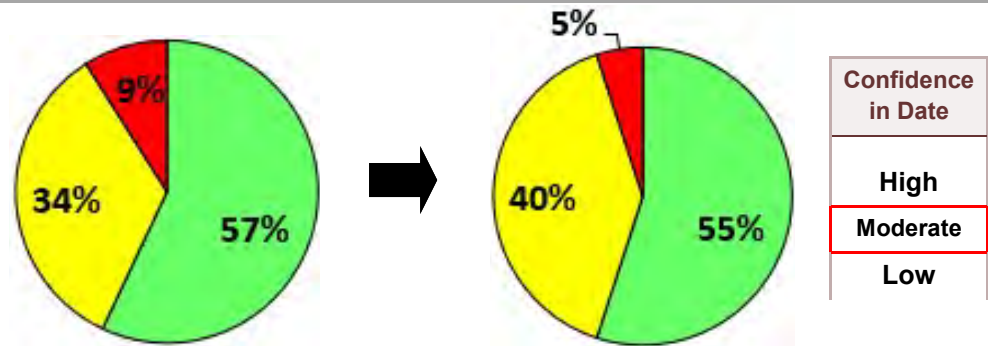


Pump Stations \$ 10,635,000 (18%)

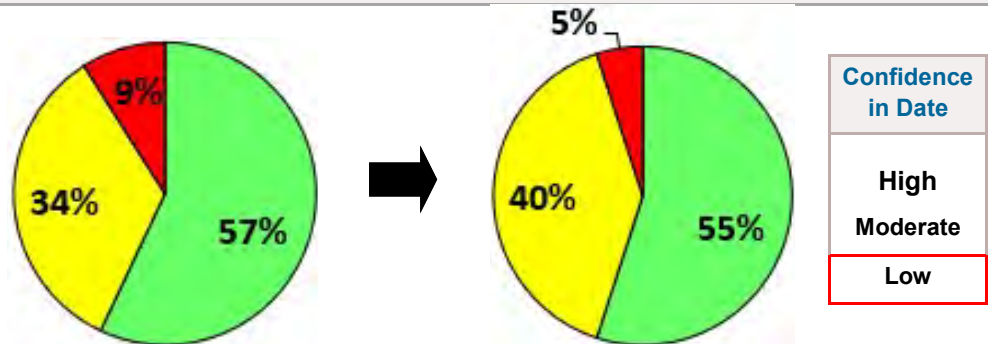
## ASSET ACTIVITY: TREATMENT

COMMENTS	RISKS	RESPONSES
<p>All 3 sewer treatments plants are relatively new and in excellent condition. Urunga was commissioned in 1989, Bellingen in 1994 and Dorrigo in 2015. With the correct maintenance they are expected to operate at optimal capacity for the foreseeable future. Urunga STP will require an increase in capacity if Mylestom, Repton and Raleigh are sewered.</p>	<p>Risks to the treatment process are:</p> <ul style="list-style-type: none"> <li>• Failure of major components</li> <li>• Disinfection failure</li> <li>• Power failure</li> <li>• Loss of automated control</li> <li>• Flooding and infiltration</li> <li>• Inadequate maintenance.</li> </ul>	<p>To minimise the risks Council needs to ensure funding for maintenance and renewals is fully committed. That major short life components are replaced at the optimal time. All maintenance is carried out. Urunga and Bellingen STP's have had their automatic control upgraded and are currently being converted to SCADA control. PLC replacement components are kept on site and all software programs are backed up and kept in safe place. There is permanent auto changeover generators at all treatment plants.</p>

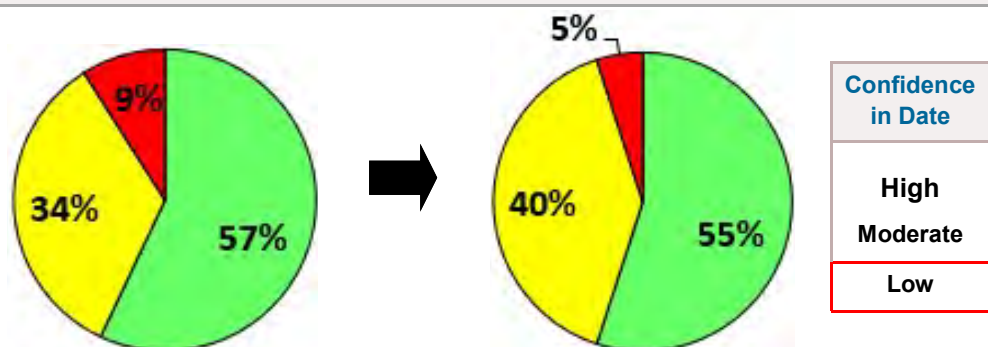
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

91% current → 95% in 10 years with available funding

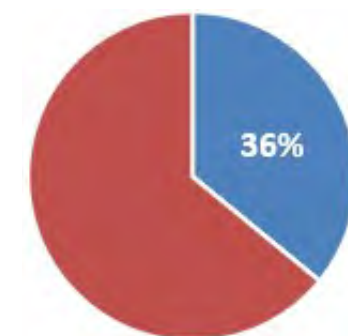


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

9% current → 5% in 10 years with available funding



### Current Replacement Value



Treatment \$ 21,214,000 (36%)

Document ID: Sewer Network

Version No.	Creation Date	Revision Details	Author	Reviewer	Approver
V1.0	23/10/2018	First Draft Dashboards	T1		

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### KEY DIRECTION

### CONNECTED, SUSTAINABLE, CREATIVE

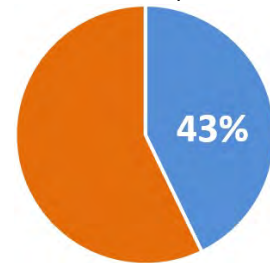
**Aspirations:** "We are connected and able to move around in a safe, accessible, affordable, healthy and environmentally friendly way"

### STRATEGIC DIRECTIONS:

- We have effective public and community transport linking townships in the Shire and linking to regional centres
- We have a network of cycleways, footpaths and walking trails, supported by maps and signage which encourage active transport and reduce car dependency
- Our local infrastructure supports electric vehicles and non-motorised forms of transport
- We have a system of safe, well-maintained roads including car calming infrastructure

### 10 year Capital works Planned Expenditures

\$ 51.7 M for Transport for 2019-28



43% of total \$120.7M budget

# Bellingen Shire COUNCIL



Council Services	Satisfaction Mean	Importance Mean	Satisfaction vs. Importance
Footpaths & Cycleways	2.61	3.67	Higher Importance Lower Satisfaction
Maintenance of Sealed Roads	2.43	4.33	Higher Importance Lower Satisfaction
Maintenance of Unsealed Roads	2.38	3.40	Lower Importance Lower Satisfaction
Maintenance of Bridges	3.08	4.03	Higher Importance Higher Satisfaction
Maintenance of Stormwater Drainage	2.92	3.74	Higher Importance Lower Satisfaction

**Service Level Measures:** Sourced from the 2016 CSS.

## SERVICE LEVELS - for Sealed and Unsealed Roads, Bridges, Footpaths, K&G and Stormwater

CURRENT SERVICE LEVEL	PROJECTED SERVICE LEVEL 10 YRS	RISKS	RESPONSES
<p>Confidence in Data: HIGH MODERATE LOW</p>		<p>There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:</p> <ul style="list-style-type: none"> <li>• Reseal not done in time causing water penetration into pavements resulting in substantially increased renewal costs</li> <li>• Highly variable and unpredictable extreme weather events, and the impact this will have on the Transport &amp; Stormwater network.</li> <li>• Route closure due to bridge collapse and subsequent service disruptions.</li> <li>• Imposed Load Limits on bridges due to reduced structural capacity, subsequent impact on freight accessibility.</li> <li>• Flooding caused by blockages or inadequate or lack of storm-water systems.</li> </ul>	<p>Continued acceleration of the road resealing program to prevent water penetration into the underlying pavement.</p> <p>A program to complete all high priority Bridge works identified from the recent level 2 and level 3 bridge audits.</p> <p>Renewal of poor condition footpaths and kerb &amp; gutter sections.</p> <p>Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels .</p> <p>Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to asset intensive services.</p> <p>Further documented service levels with respect to allowable condition function and capacity based on risk.</p>

### SERVICE / ASSET ACTIVITIES

⇒ Sealed Roads

⇒ Unsealed Roads

⇒ Bridges

⇒ Footpaths

⇒ Kerb and Gutter

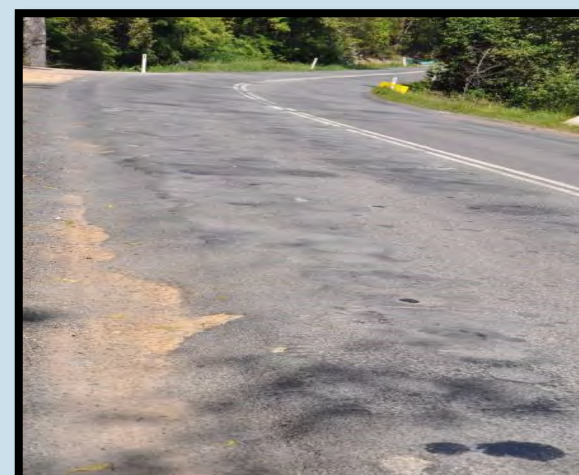
⇒ Stormwater

### WHAT SERVICE LEVELS LOOK LIKE

GOOD / FAIR QUALITY

POOR QUALITY

### ROADS



TechnologyOne: V1.0 20180228

## 10 Year Resourcing Strategy

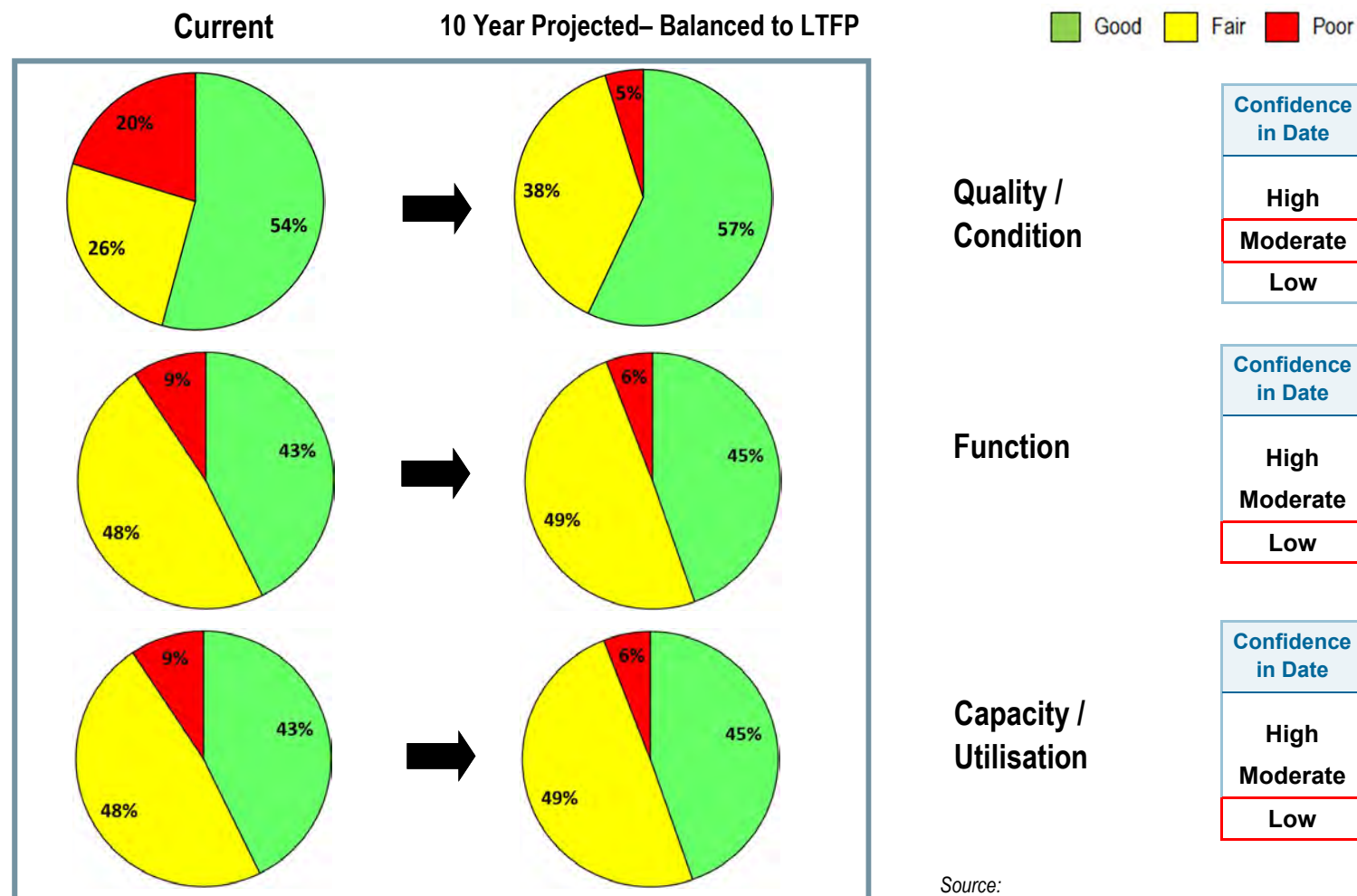


Source: 2018 Buildings & Infrastructure Strategic Asset Management Plan

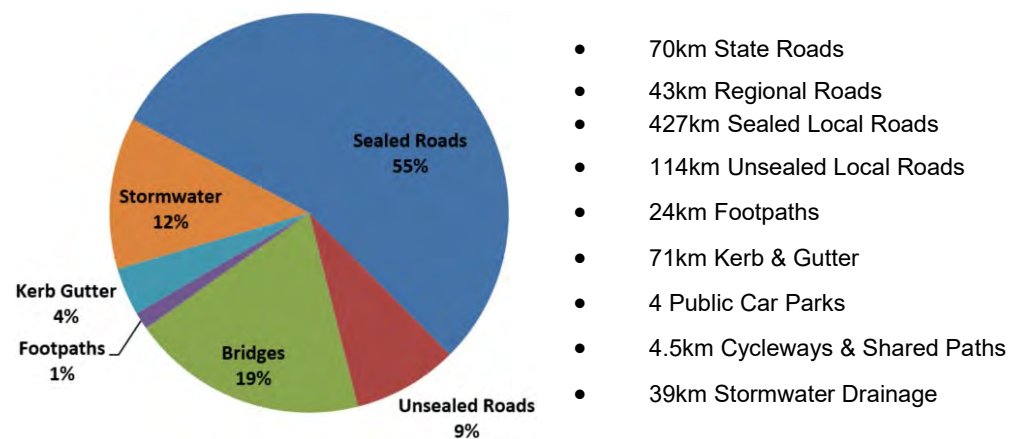
## ASSET PLAN SUMMARY: TRANSPORT & STORMWATER

This Asset Management Plan Summary shows the current and projected service levels, budget and expenditure profiles for the current Long Term Financial Plan compared to the Asset Management Plan.

### OVERALL SERVICE LEVELS



### ASSETS SUPPORTING SERVICE



**\$183,519,480**  
Total Asset Value  
(excl. \$163,967,105 Bulk earthworks)

### ASSET MANAGEMENT PLAN SUMMARY

Whilst there is a minor short in funding Councils' present funding levels are sufficient to continue to provide existing services at current levels in the medium to long term.

**Long Term:** 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. Council's Life cycle expenditure is currently 139% of life cycle costs. The life cycle costs and life cycle expenditure comparison highlights the difference between present outlays and the average cost of providing the service over the long term and indicates council may need to raise additional operating revenue if it is to sustain service levels over the long term.

**Medium Term (10 Years):** Council's asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$6.85M on average per year. Estimated (budget) operations, maintenance and capital renewal is \$6.77M average per year. This indicates that Council expects to have 99% of the projected expenditures needed to provide the services documented in its asset management plan.

There are risks associated with providing the service and not being able to complete all identified activities and projects. Potential risks and Council's response are further discussed within this document for each major service activity.

### Summary of Asset Costs

#### Asset Renewal Funding Ratio

The Asset Renewal Funding Ratio is the most important indicator and reveals whether projected capital renewal and replacement expenditure are able to be financed in the long-term financial plan. It is calculated by dividing the projected capital renewal expenditure shown in the AM Plan by the estimated capital renewal budget provided in the long-term financial plan.

Asset Renewal Funding Ratio 93%

#### MEDIUM TERM - 10 YEAR FINANCIAL PLANNING PERIOD

It is estimated there will be a funding shortfall of \$87,000 each year over the next 10 years to maintain the current level of built assets for the Transport asset service.

10 Year Cost (annually)	\$	6,852,000
10 Year Available Funding (annually)	\$	6,765,000
10 Year Gap (annually)	-\$	87,000
10 Year Financing Indicator		99%

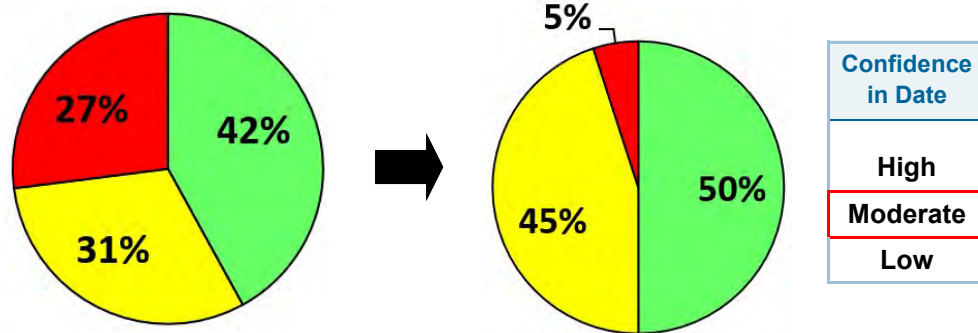
### SUMMARY OF ASSET COSTS - FUNDING GAP

**SHORT TERM 5 YEAR GAP** **\$1,194,000 /yr**  
**MEDIUM TERM 10 YEAR GAP** **\$87,000 /yr**

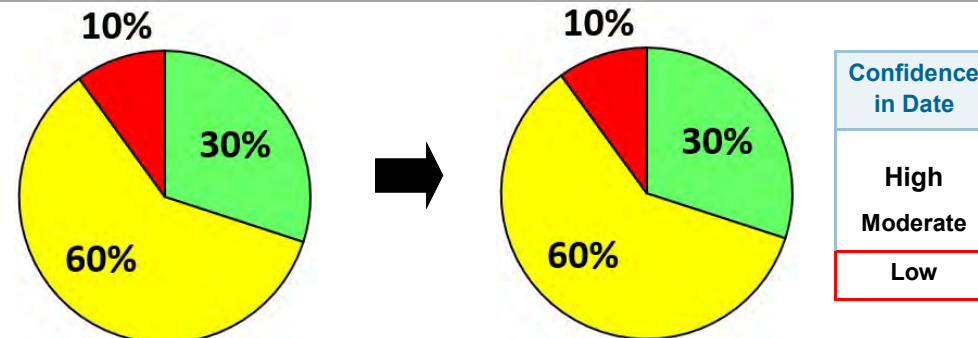
## ASSET ACTIVITY: SEALED ROADS

COMMENTS	RISKS	RESPONSES
<p>Council currently has 654km of sealed roads made up of 70km of State Roads (Not funded by Council), 43km of Regional Roads and 427km of sealed local roads. The sealed road network provides the primary transport links for communities and commerce within both urban and rural areas, accommodating efficient all-weather movement of traffic. Whilst most of the pavements are in good to fair condition a large proportion of the networks seals are identified as poor. A recent condition assessment of the sealed road network found that the condition of both the rural and urban sealed road network is well below satisfactory. In addition pavement depth and material quality varies, but is generally considered inadequate for current day traffic loadings, particularly for heavy freight and garbage collection vehicles.</p>	<p>Key risks identified in managing council's sealed road network include:</p> <ul style="list-style-type: none"> <li>Reseal not done in time causing water penetration into pavements resulting in substantially increased renewal costs</li> <li>Highly variable and unpredictable extreme weather events, and the impact this will have on the sealed roads network.</li> <li>Vehicle Mass Limits VML – restricted access for Higher Mass Limit (HML) and High Productivity Vehicles (HPV), with projected increase in demand for HML and HPV vehicles leading to increased loading on road pavements impacting overall useful lives</li> </ul>	<p>Council through it's SRV program will continued acceleration of the road resealing program to prevent water penetration into the underlying pavement . Proactive inspection program to maintain / improve knowledge of asset condition and rate of deterioration. Will continue to identify sourcing of additional grant funds to supplement recurrent budgets. Documented service levels with respect to allowable condition (surface / pavement condition, road drainage) and capacity (width, alignment, traffic control and management devices) on a route importance (hierarchy / risk) basis. Review reactive maintenance capacity (resources, skills, response time, budget) and proactive maintenance program to prolong asset life.</p>

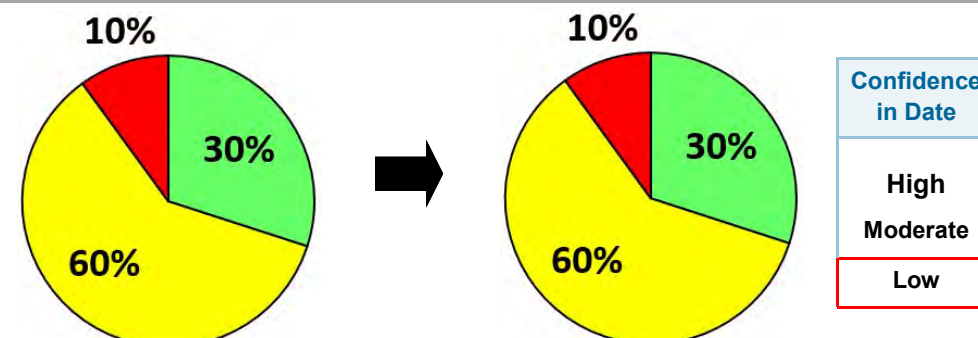
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

73% current → 95% in 10 years with available funding

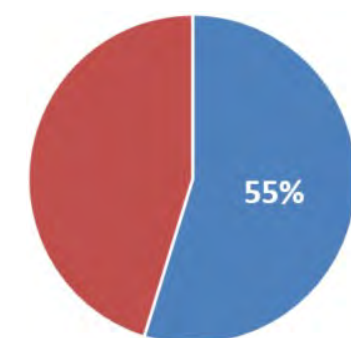


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

27% current → 5% in 10 years with available funding



### Current Replacement Value



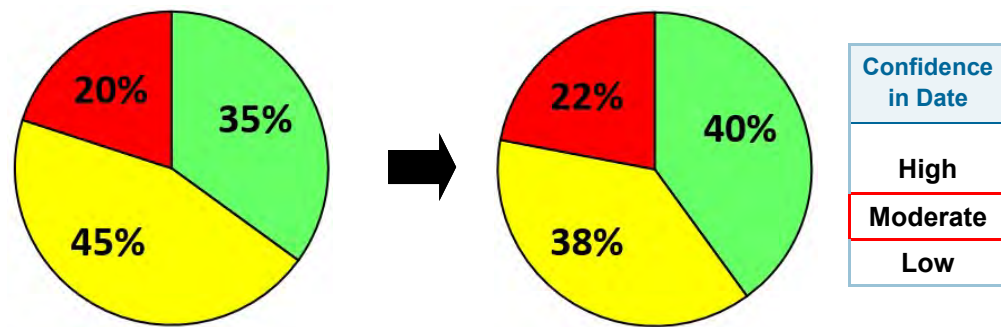
Sealed Roads \$ 100,516,755 (55%)



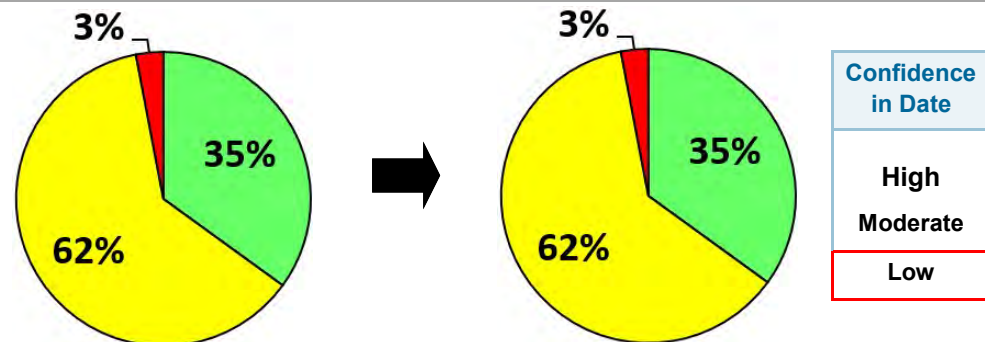
## ASSET ACTIVITY: UNSEALED ROADS

COMMENTS	RISKS	RESPONSES
<p>Council currently has 114km of unsealed road network, consisting of gravel roads. The unsealed road network provides the primary transport links for rural communities, particularly those in more remote areas and a secondary transport link for commerce and tourism. At present 20% of the network is identified as poor Pavement depth and material quality varies, but is generally considered adequate for their intended rural community access purpose. Current funding levels provide for the rural community access purpose, however a significant increase in funding would be required to improve service levels and upgrade (widen, improved alignment, increased regravelling) which is not presently a community priority.</p>	<p>Key risks identified in managing council's unsealed road network include:</p> <ul style="list-style-type: none"> <li>Highly variable and unpredictable extreme weather events, and the impact this will have on the unsealed roads network.</li> <li>Roughness, corrugation, potholes and gravel loss causing lower travel speed and increased risk of traffic crashes. They will also cause higher road user costs and discomfort.</li> <li>Inadequate surface drainage and hydraulic capacity.</li> <li>In the case of declared disasters there is an exclusion clause such that funding is not provided where there is "any damage where there is evidence the cause is a lack of proper maintenance or where previous restoration work was not completed satisfactorily may impact future assistance packages.</li> </ul>	<p>Council will be investing \$2.35m on capital renewals over the next 10 years. Council has implemented a proactive inspection program to maintain / improve knowledge of asset condition and rate of deterioration. Will continue to identify sourcing of additional grant funds to supplement recurrent budgets. Documented service levels with respect to allowable condition (NAASRA Roughness &gt;300) and capacity (width, alignment, traffic control and management devices) on a route importance (hierarchy / risk) basis. Review reactive maintenance capacity (resources, skills, response time, budget) and proactive maintenance program to prolong asset life.</p>

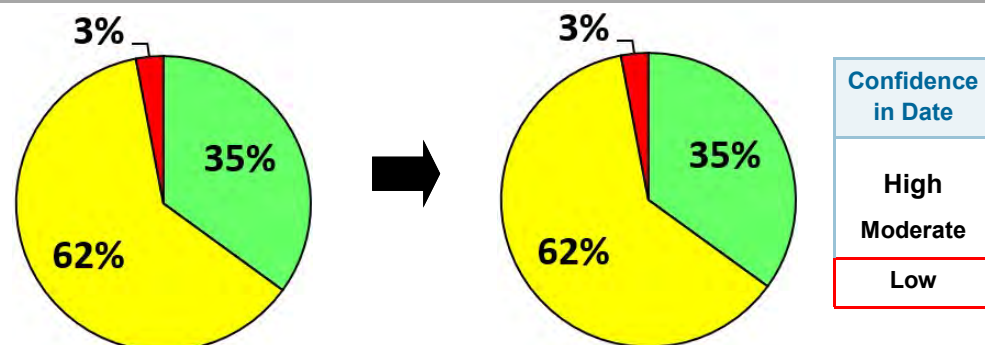
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



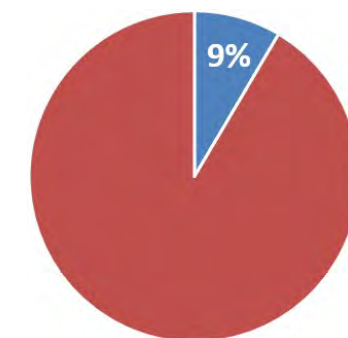
### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor



### Current Replacement Value



Unsealed Roads \$ 15,633,655 (9%)

## ASSET ACTIVITY: BRIDGES

### COMMENTS

Council currently has 87 timber/Composite and 26 concrete bridges. Council also has 21 major culverts within its transport network. These timber bridges are an important component of council's transport assets network as bridge infrastructure spans otherwise impassable gaps ensuring road connectivity across the LGA, particularly connecting the more remote rural communities which often have no alternative access routes. Council has 20 critical bridges that it has identified in having the higher risk of failure. These bridges are load limited, and have been prioritised for renewal. Council has allocated 29 million for the renewal and rehabilitation of these bridges over the next eleven years for completion.

### RISKS

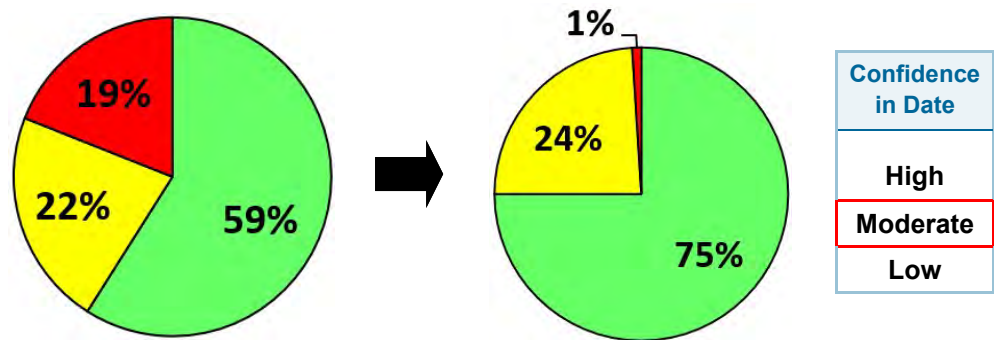
Key risks identified in managing council's bridges network include:

- Highly variable and unpredictable extreme weather events, and the impact this will have on the sealed roads network.
- Route closure due to bridge collapse, subsequent service disruption will affect the day to day life and business in rural community and alternate access routes via long detour or non existent due to the mountainous topography.
- Imposed Load Limits due to reduced structural capacity, subsequent impact on freight accessibility and increase costs and time for road users and residents due to length of detour and freight inefficiencies.

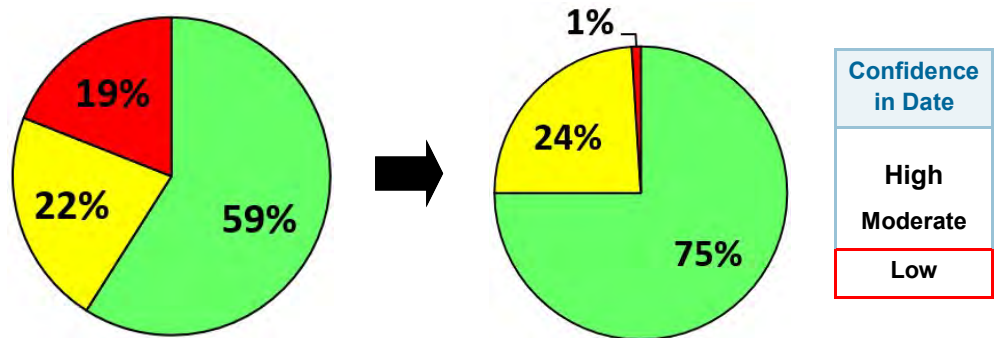
### RESPONSES

Continue to renew the Condition 4 and 5 bridges based on Prioritisation program, continue with Level 2 and 3 inspections of both timber and concrete structures, continue to liaise with community and particularly utilities of any bridge failures immediately so that swift arrangement of alternative services can be arranged. Proactive inspection program to maintain / improve knowledge of asset condition and rate of deterioration.

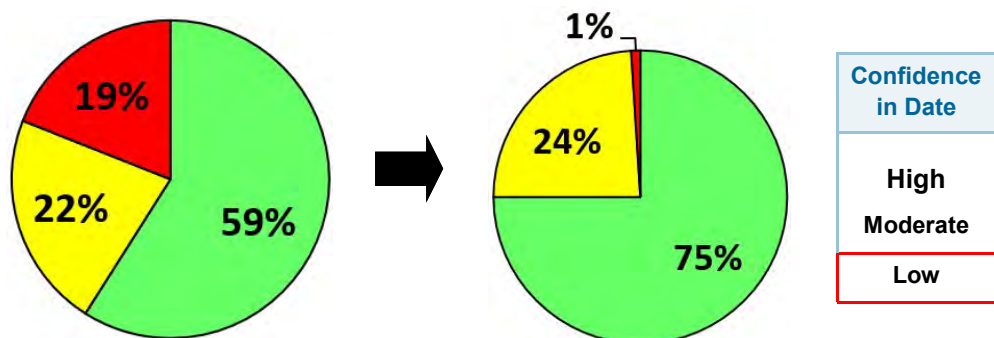
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

81% current → 99% in 10 years with available funding

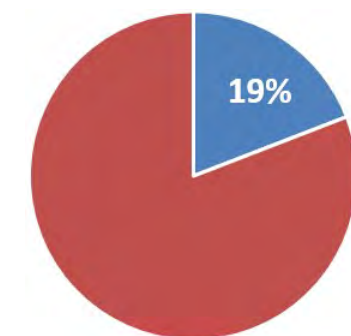


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

19% current → 1% in 10 years with available funding



### Current Replacement Value

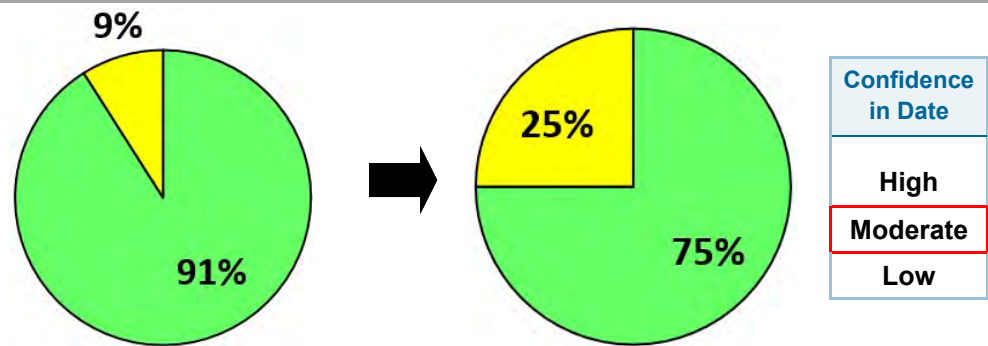


Bridges \$ 35,119,937 (19%)

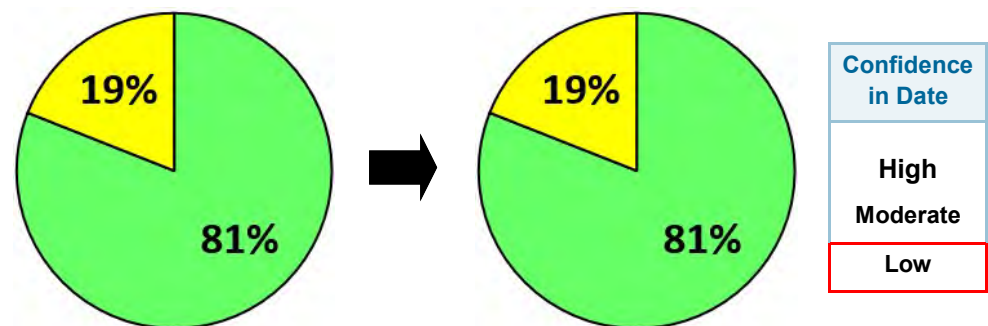
## ASSET ACTIVITY: FOOTPATHS

COMMENTS	RISKS	RESPONSES
<p>Council currently has 24km of footpaths, consisting of gravel and paved surfaces. Footpath age and condition quality varies, but is generally considered adequate for their 'traditional' pedestrian purpose. Whilst there are areas of failure these are usually limited to individual sections and predominately caused by trees and heavy vehicles.</p>	<p>Key risks identified in managing council's footpath network include:</p> <ul style="list-style-type: none"> <li>Safety of pedestrians due to increased incidence of trip hazards.</li> <li>The emerging challenge to meet the needs of an ageing and less mobile community combined with ever increasing disability access legislation.</li> <li>Tree root damage</li> </ul>	<p>Council will be investing \$170,000 on renewal and repair of poor condition footpath sections over the next 10 years. Council has implemented a proactive inspection program to maintain / improve knowledge of asset condition and rate of deterioration. Will continue to identify sourcing of additional grant funds to supplement recurrent budgets. Review reactive maintenance capacity (resources, skills, response time, budget) and proactive maintenance program to prolong asset life.</p>

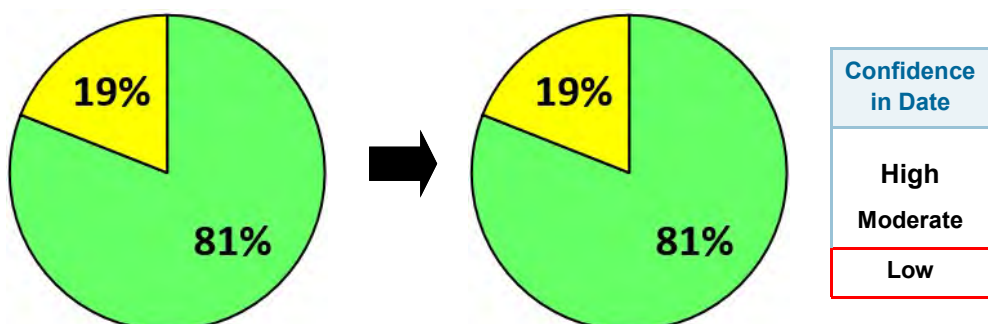
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

100% current → 100% in 10 years with available funding

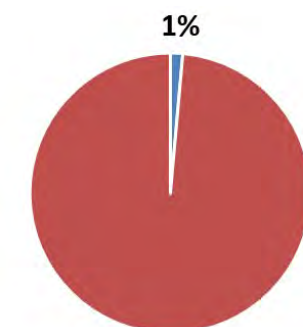


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

0% current → 0% in 10 years with available funding



### Current Replacement Value

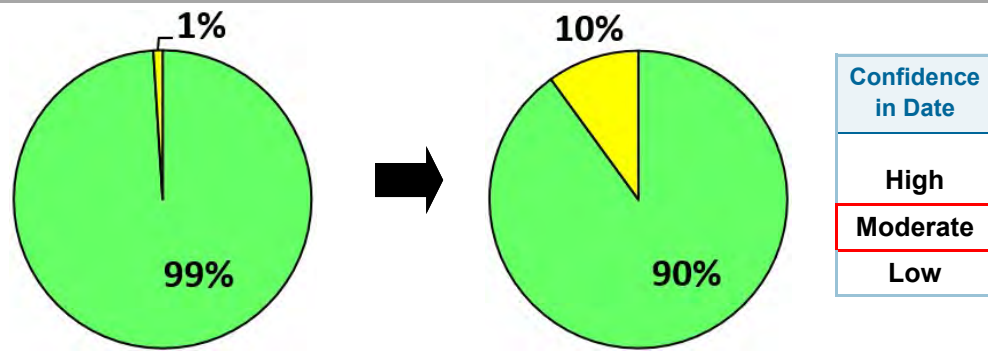


Footpaths \$ 2,603,392 (1%)

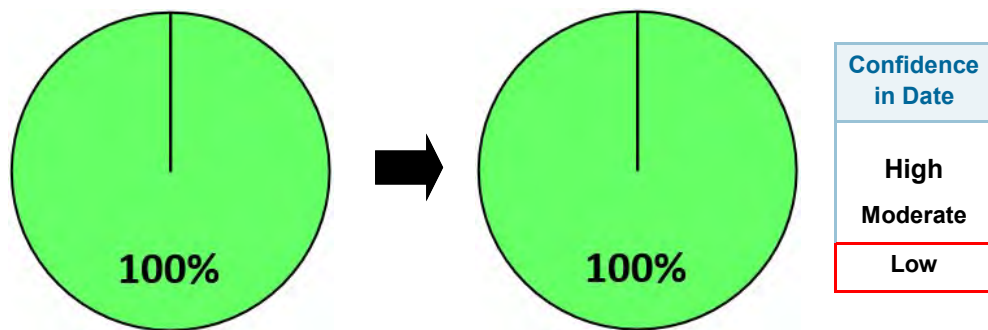
## ASSET ACTIVITY: KERB & GUTTER

COMMENTS	RISKS	RESPONSES
<p>Council currently has 71km of kerb and gutter network. Kerb and gutter age and quality varies, but is generally considered adequate for its intended purpose. Failed sections of kerb and gutter must be addressed as they lead to failure of surrounding road pavement, present a trip / vehicle hazard and impede the effective management of stormwater during heavy rain events.</p>	<p>Key risks identified in managing council's kerb &amp; gutter network include:</p> <ul style="list-style-type: none"> <li>Safety of pedestrians and patrons accessing parked vehicles and damage to vehicles due to uneven nature of the kerb and gutter.</li> <li>Pavement failure adjacent to failed kerb and gutter due to water ponding and penetration of the underlying road base.</li> <li>Damage caused by trees and heavy vehicles</li> </ul>	<p>Council will be investing \$0.7M on renewal and repair of poor condition kerb and gutter sections over the next 10 years. Council has implemented a proactive inspection program to maintain / improve knowledge of asset condition and rate of deterioration. Will continue to identify sourcing of additional grant funds to supplement recurrent budgets. Review reactive maintenance capacity (resources, skills, response time, budget) and proactive maintenance program to prolong asset life.</p>

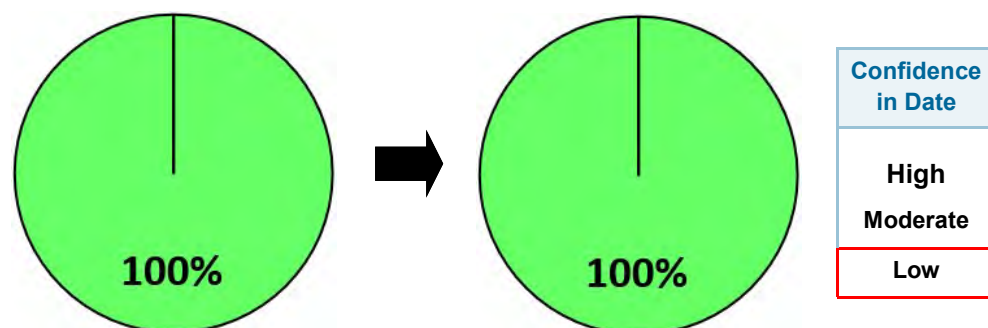
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

100% current → 100% in 10 years with available funding

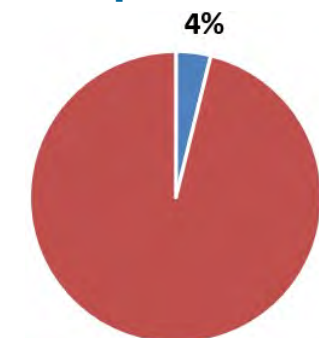


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

0% current → 0% in 10 years with available funding



### Current Replacement Value

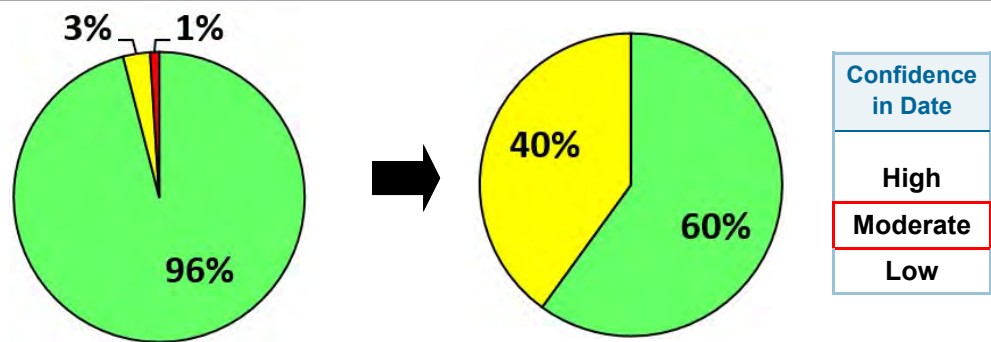


**Kerb & Gutter \$ 7,060,864 (4%)**

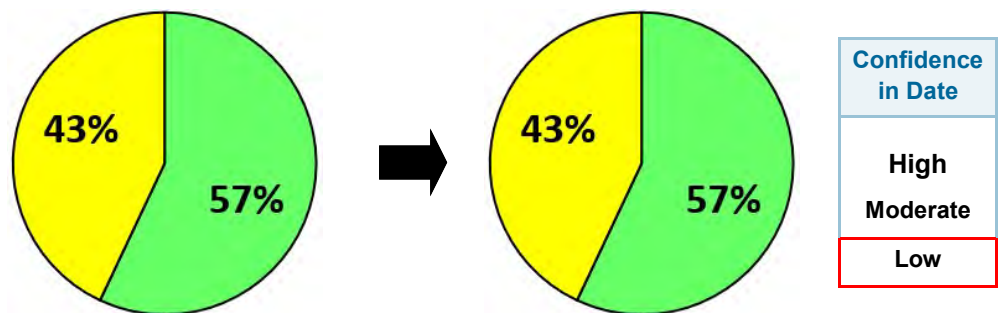
## ASSET ACTIVITY: STORMWATER

COMMENTS	RISKS	RESPONSES
<p>Council currently has 39km of stormwater drainage. Overall, the Network (Urban) is monitored by reactive maintenance when an issue develops during wet weather. The condition profile of our assets is not very well understood and remains a major knowledge gap. It is proposed that when condition monitoring of other 'pipe' assets is carried out in conjunction with CCTV footage, that condition is ranked on a 1-5 grading system in order to prioritise renewal works.</p>	<p>Key risks identified in managing council's Stormwater network include:</p> <ul style="list-style-type: none"> <li>• Flooding due to blockages</li> <li>• Flooding caused by inadequate or lack of stormwater systems</li> <li>• Asset register not accurate and the financial shock to the organisation in the event of flooding to residential property,</li> <li>• Spatial data not accurate, leading to issues of unknown assets uncovered on private land leading to insurance claims</li> </ul>	<p>Council will be investing just \$0.95M on renewal and repair of stormwater drainage system over the next 10 years. Council will be implementing a proactive inspection program to maintain / improve knowledge of asset condition and rate of deterioration. Will continue to identify sourcing of additional grant funds to supplement recurrent budgets. Review reactive maintenance capacity (resources, skills, response time, budget) and proactive maintenance program to prolong asset life.</p>

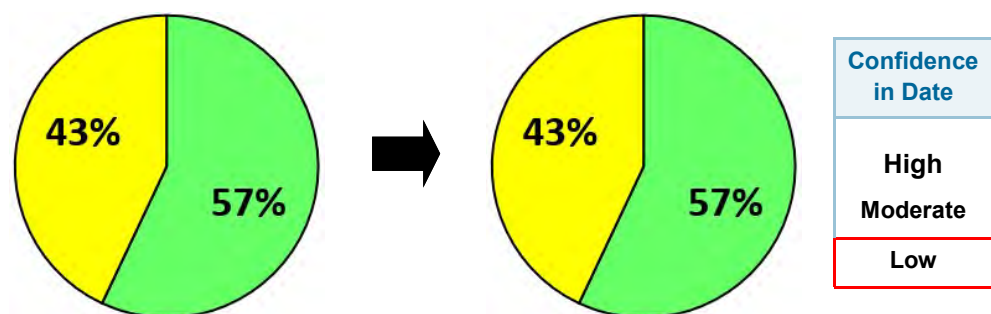
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

99% current → 100% in 10 years with available funding

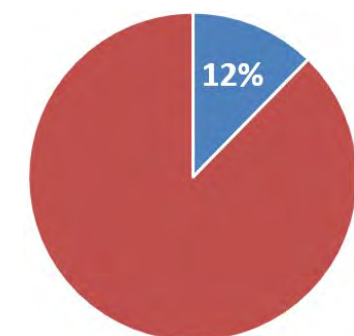


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

1% current → 0% in 10 years with available funding



### Current Replacement Value



Stormwater \$ 22,584,868 (12%)

Document ID: Transport & Stormwater

Version No.	Creation Date	Revision Details	Author	Reviewer	Approver
V1.0	23/10/2018	First Draft Dashboards	T1		

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## KEY DIRECTION

### CONNECTED, SUSTAINABLE, CREATIVE

**Aspiration:** "We have clean water which is protected and used sustainably"

**Aspiration:** "We work together to protect and enhance our environment".

**Aspiration:** "We reduce, reuse, recycle".

#### STRATEGIC DIRECTIONS:

- Our waterways and wetlands are valued, protected and enhanced
- We minimise our use of water
- We use our water and wastewater using best management practices
- Our natural environment is valued, protected and enhanced
- The consumption of resources is minimised
- We reduce, reuse and recycle our waste

## SERVICE / ASSET ACTIVITIES

⇒ Mains

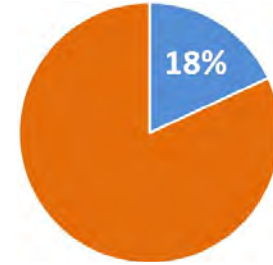
⇒ Pump Stations

⇒ Treatment

# Service: Water Supply

## 10 year Capital works Planned Expenditures

\$ 21.9 M for Water Supply for 2019-28



18% of total \$ 120.7M budget

# Bellingen Shire COUNCIL



## Community Satisfaction Survey

Scale ( 1—5 ): 1 being the lowest and 5 the highest.

Council Services	Satisfaction Mean	Importance Mean	Satisfaction vs. Importance
Water Supply	4.00	4.15	Higher Importance Higher Satisfaction
River Water Quality	3.15	4.42	Higher Importance Higher Satisfaction
Environmental Monitoring and Protection	3.09	4.06	Higher Importance Higher Satisfaction

**Service Level Measures:** Sourced from the 2016 CSS.

## SERVICE LEVELS - for Water Supply including mains, pump stations and treatment facilities

CURRENT SERVICE LEVEL	PROJECTED SERVICE LEVEL 10	RISKS	RESPONSES
<p>Confidence in Data: HIGH MODERATE LOW</p>		<p>There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:</p> <ul style="list-style-type: none"> <li>• A large portion of mains are in the same age bracket and will require a significant investment in a short time span.</li> <li>• That the water mains do not reach their expected useful life</li> <li>• Borefields failing to meet demand due to low river flows or pump failure.</li> <li>• Failure of chemical dosing and disinfection .</li> <li>• Extreme turbidity levels .</li> <li>• Unexpected failure of critical assets such as pumps, control panels and power supply.</li> </ul>	<p>Ongoing rolling capital works program focusing on the renewal (like for like replacement) of existing infrastructure prioritised by condition, usage, safety and importance.</p> <p>Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels .</p> <p>Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to asset intensive services.</p> <p>Further documented service levels with respect to allowable condition function and capacity based on risk.</p>

## WHAT SERVICE LEVELS LOOK LIKE

GOOD / FAIR QUALITY

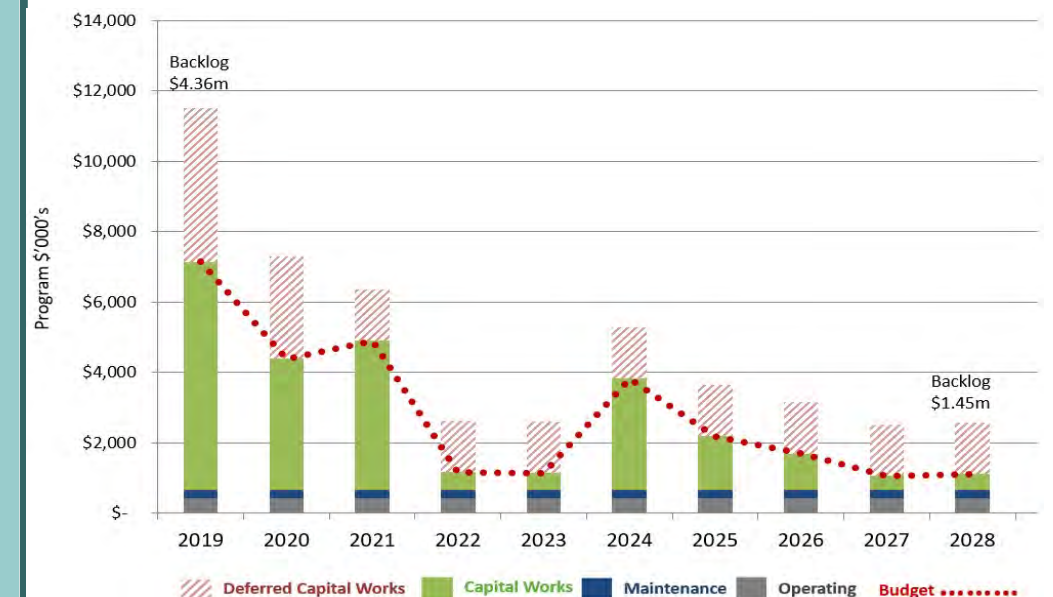
POOR QUALITY

### WATER SUPPLY



TechnologyOne: V1.0 20180228

## 10 Year Resourcing Strategy

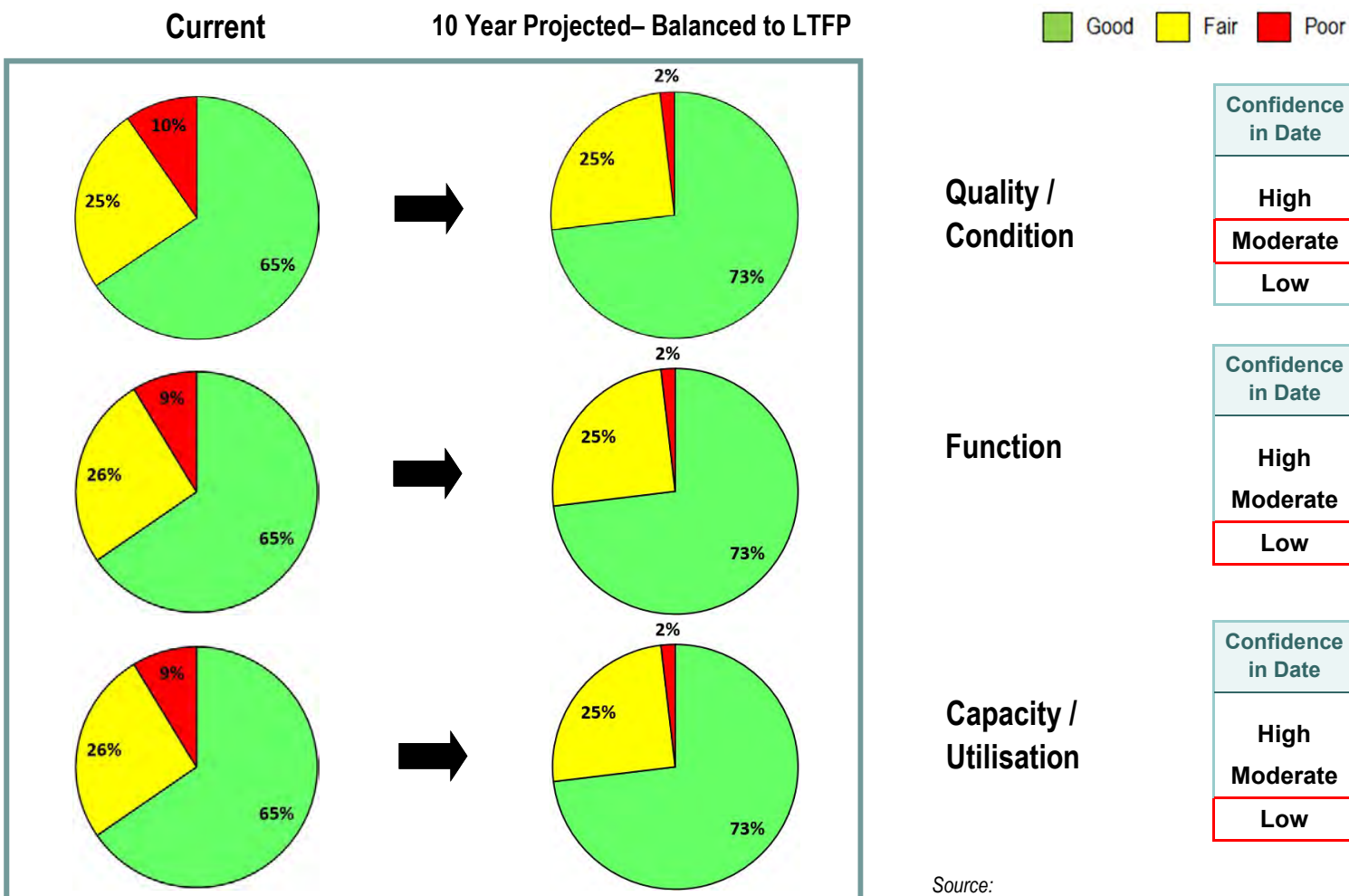


Source: 2018 Buildings & Infrastructure Strategic Asset Management Plan

## ASSET PLAN SUMMARY: WATER SUPPLY

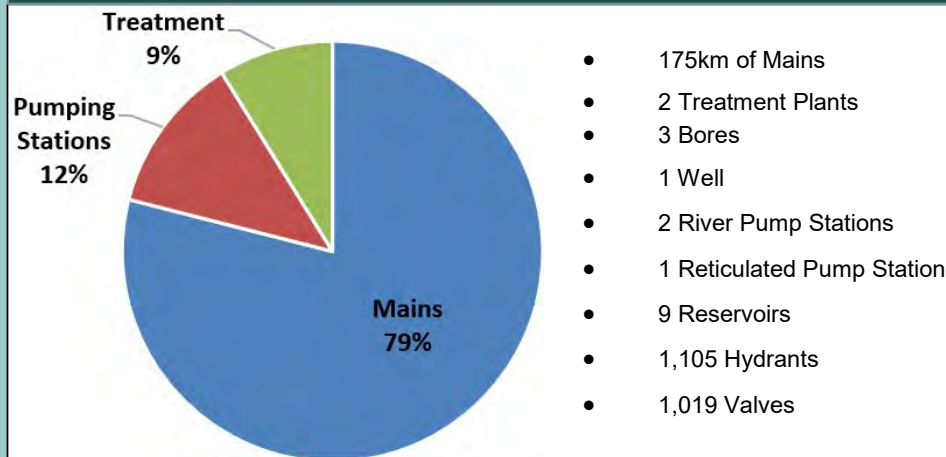
This Asset Management Plan Summary shows the current and projected service levels, budget and expenditure profiles for the current Long Term Financial Plan compared to the Asset Management Plan.

### OVERALL SERVICE LEVELS



Source:

### ASSETS SUPPORTING SERVICE



**\$56,483,000**  
Total Asset Value

### ASSET MANAGEMENT PLAN SUMMARY

Whilst there is a minor short in funding Councils' present funding levels are sufficient to continue to provide existing services at current levels in the medium to long term.

**Long Term:** 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. Council's Life cycle expenditure is currently 93% of life cycle costs. The life cycle costs and life cycle expenditure comparison highlights the difference between present outlays and the average cost of providing the service over the long term and indicates council may need to raise additional operating revenue if it is to sustain service levels over the long term.

**Medium Term (10 Years):** Council's asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$3.01M on average per year. Estimated (budget) operations, maintenance and capital renewal is \$2.86M average per year. This indicates that Council expects to have 95% of the projected expenditures needed to provide the services documented in it's asset management plan.

There are risks associated with providing the service and not being able to complete all identified activities and projects. Potential risks and Council's response are further discussed within this document for each major service activity.

### Summary of Asset Costs

#### Asset Renewal Funding Ratio

The Asset Renewal Funding Ratio is the most important indicator and reveals whether projected capital renewal and replacement expenditure are able to be financed in the long-term financial plan. It is calculated by dividing the projected capital renewal expenditure shown in the AM Plan by the estimated capital renewal budget provided in the long-term financial plan.

**Asset Renewal Funding Ratio** **93%**

#### MEDIUM TERM - 10 YEAR FINANCIAL PLANNING PERIOD

It is estimated there will be a funding shortfall of **\$146,000** each year over the next 10 years to maintain the current level of built assets for the Water Supply service.

10 Year Cost (annually)	\$	3,008,000
10 Year Available Funding (annually)	\$	2,862,000
10 Year Gap (annually)	-\$	146,000
10 Year Financing Indicator		95%

### SUMMARY OF ASSET COSTS - FUNDING GAP

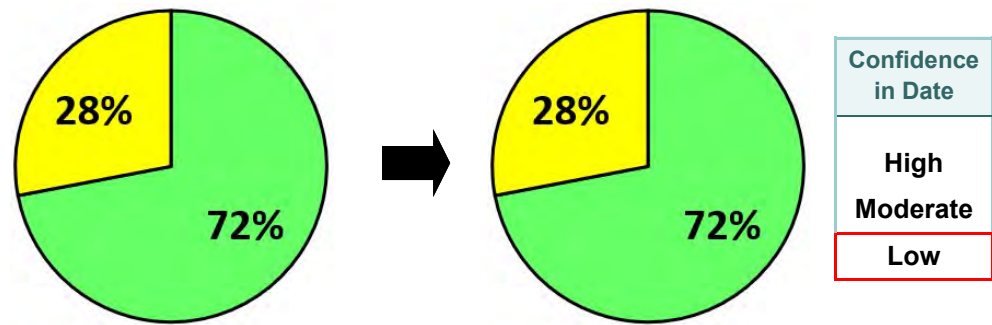
**SHORT TERM 5 YEAR GAP** \$291,000 /yr  
**MEDIUM TERM 10 YEAR GAP** \$146,000 /yr



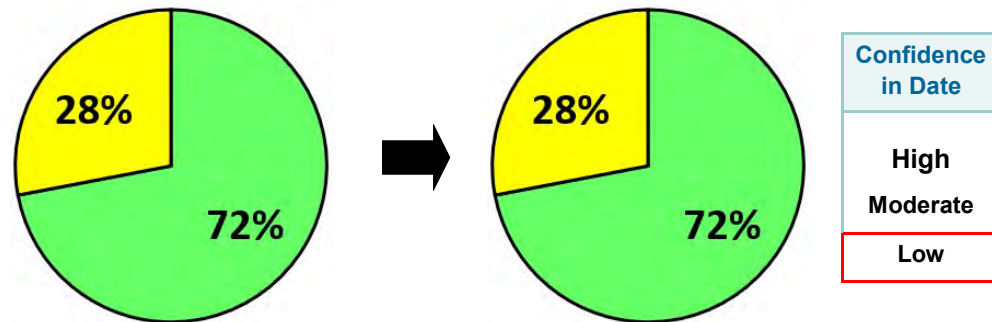
## ASSET ACTIVITY: MAINS

COMMENTS	RISKS	RESPONSES
Council water mains are relatively young in age and generally in good condition. They will require very little renewal in the short term except for mains that have a history of issues whether due to the environment they are in or a fault in manufacturing.	<p>The risks for a water reticulation are:</p> <ul style="list-style-type: none"> <li>That the water mains do not reach their expected useful life</li> <li>Council does not put aside enough funds for the long term replacement program.</li> <li>A large portion of mains are in the same age bracket and will require a significant investment in a short time span.</li> </ul>	Ensure all mains break are logged to determine any pattern in faults. Ensure long term financial plan has sufficient funding for long term replacement.

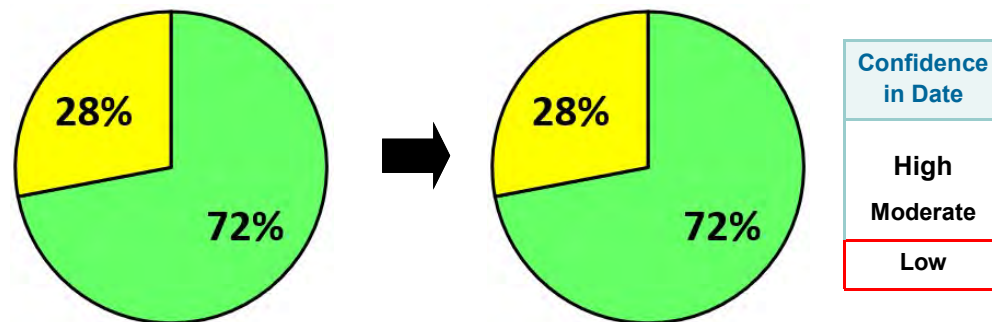
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

100% current → 100% in 10 years with available funding

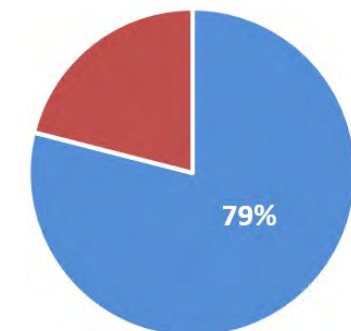


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

0% current → 0% in 10 years with available funding



### Current Replacement Value



Mains \$ 44,604,000 (79%)

## ASSET ACTIVITY: PUMP STATIONS

### COMMENTS

The active water pump stations were mainly installed in the 1990's and are in good condition. The infiltration well in Bellingen is older but in good condition and relatively easy to repair or renew. The Rocky Creek water pump station is very old but still in working condition and is only used during extreme low flow situations when the Bielsdown has a cease to pump order.

### RISKS

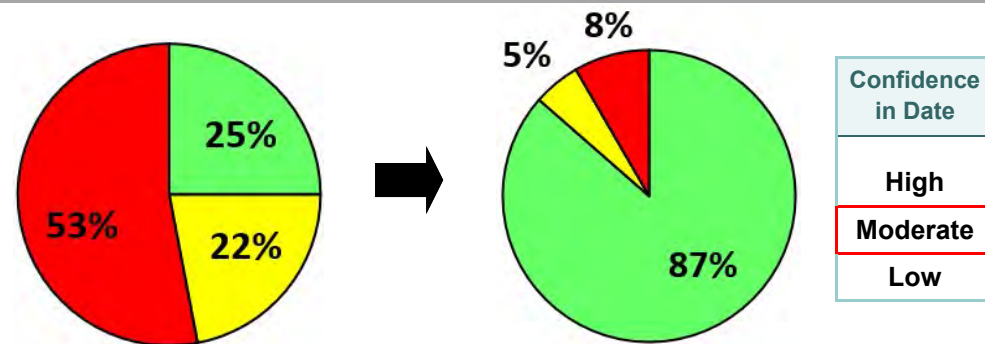
The risks for a water pumping are:

- Multiple pump failure resulting in a water shortage
- Borefields failing to meet demand due to low river flows or pump failure
- Power failure
- Control panel failure

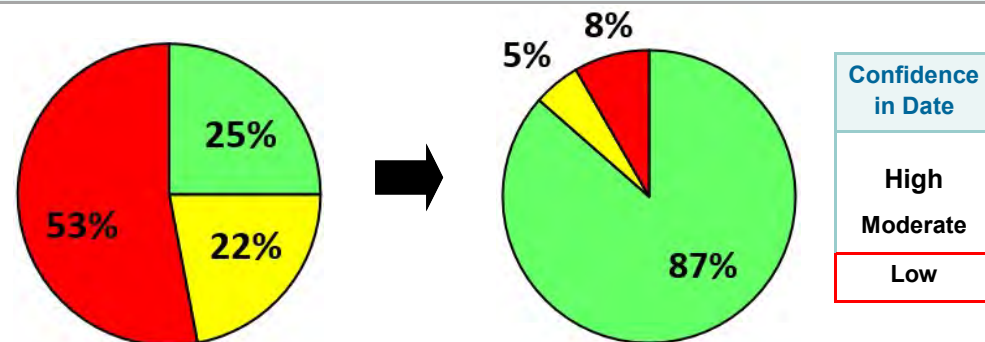
### RESPONSES

Ensure required maintenance carried out on all pumps. All transfer pump stations have 2 pump sets to ensure reliability. A third back up pump for Bellingen and the Seaboard should be kept on site. Funding has been allocated to replace aging pumps, install a new bore when required and carry out all maintenance and major overhauls. Backup generators are installed at the infiltration well and transfer pump station. There is a grant funding application being considered to connect the seaboard to the Coffs Harbour reticulation network or install desalination.

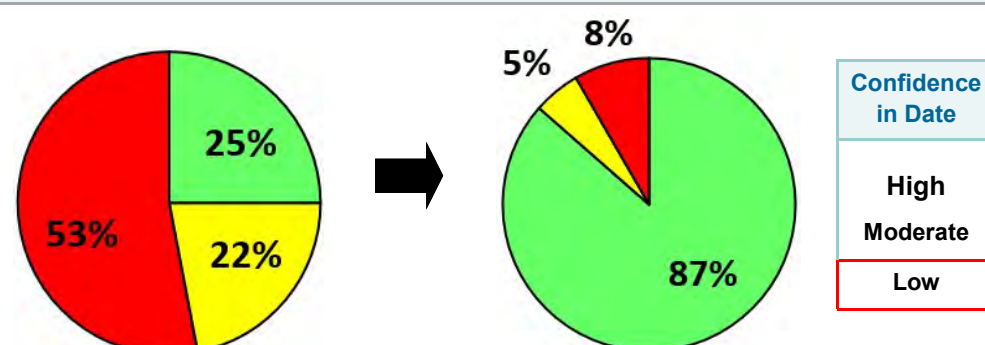
### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



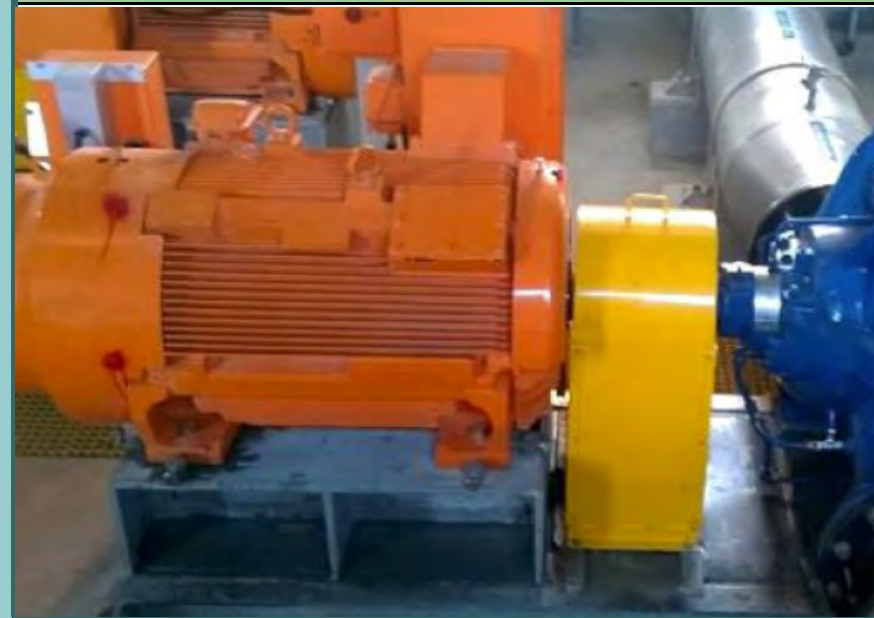
### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

47% current → 92% in 10 years with available funding

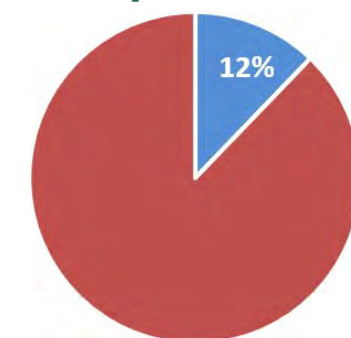


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

53% current → 8% in 10 years with available funding



### Current Replacement Value



Pump Stations \$ 6,889,000 (12%)

## ASSET ACTIVITY: TREATMENT

### COMMENTS

Bellingen water treatment plant is a simple chemical dosing and pump station plant. It was constructed in 1986 and is in good condition with numerous upgrades having been carried out. Dorrigo water treatment plant is a conventional plant with sediment removal and was constructed in 1994 and is in excellent condition.

### RISKS

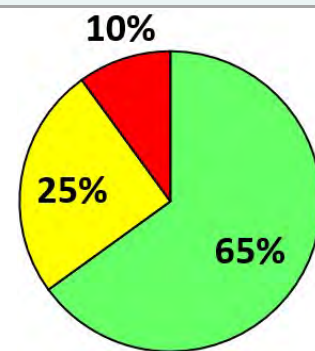
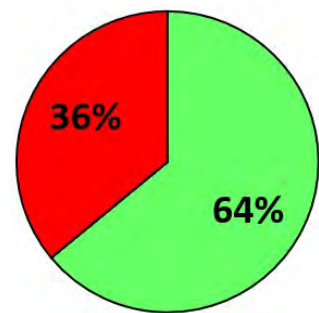
Risks to the water treatment process are as follows:

- Failure of chemical dosing and disinfection
- Power failure
- Pump and valve failure
- Filtration failure.
- Extreme turbidity levels

### RESPONSES

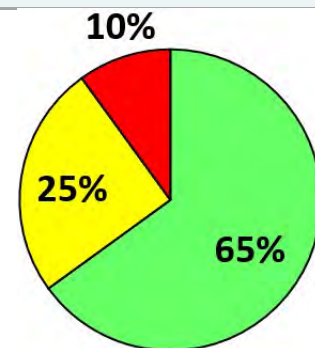
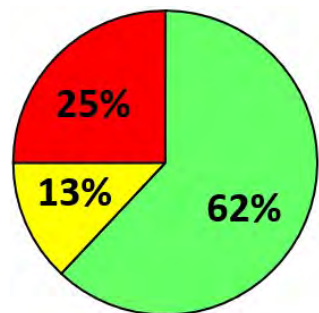
To minimise the risk Council needs to ensure all maintenance is carried out to prevent unplanned stoppages. There is an adequate budget to carry out all maintenance and renewals. Constant monitoring of performance is crucial to identifying and emerging issues. Control panel has been replaced at Dorrigo WTP with SCADA control installed. Bellingen WTP control panel to be replaced in 2019. Auto changeover generators have been installed at both plants. Online monitoring for turbidity levels will be implemented in the future. PLC replacement components are kept on site and all software programs are backed up and kept in safe place.

### CURRENT CONDITION 10 YEAR PROJECTED CONDITION



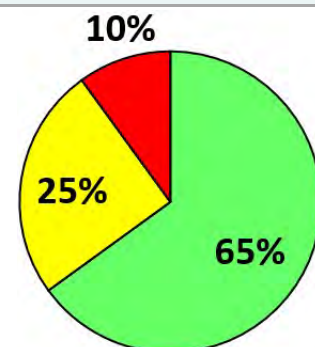
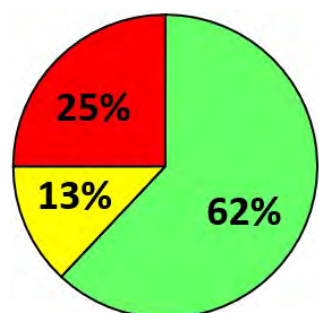
Confidence in Date
High
<b>Moderate</b>
Low

### CURRENT FUNCTION 10 YEAR PROJECTED FUNCTION



Confidence in Date
High
<b>Moderate</b>
Low

### CURRENT CAPACITY 10 YEAR PROJECTED CAPACITY



Confidence in Date
High
<b>Moderate</b>
Low

Good Fair Poor

### ASSETS IN GOOD / FAIR CONDITION (MAINTENANCE ONLY)

64%  
current



90%  
in 10 years with  
available funding

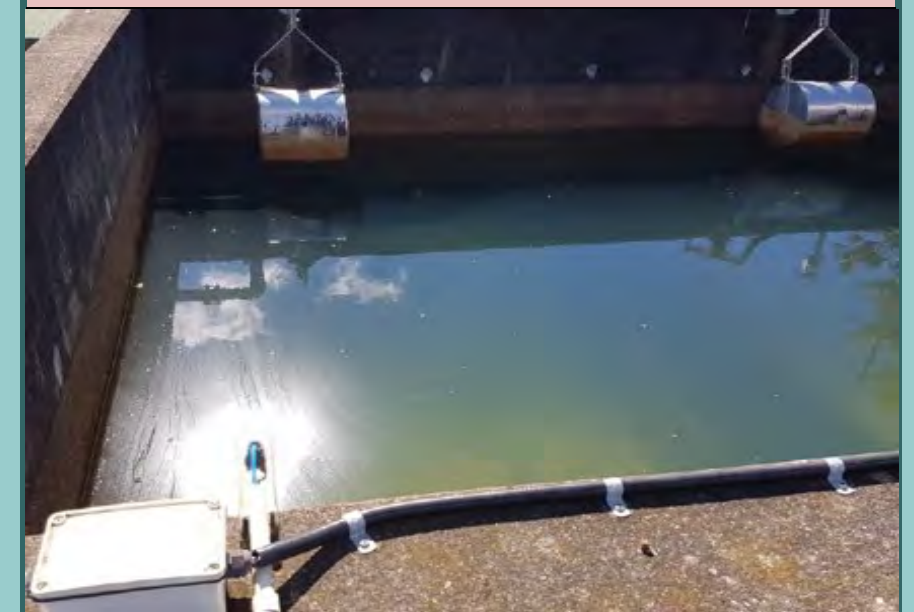


### ASSETS IN POOR CONDITION (REQUIRES RENEWAL)

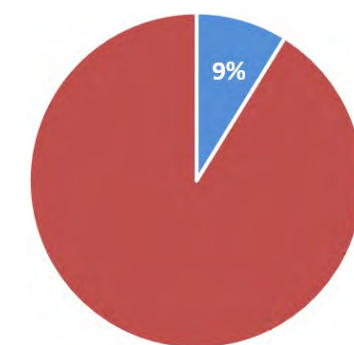
36%  
current



10%  
in 10 years with  
available funding



### Current Replacement Value



Treatment \$ 4,990,000 (9%)

## Document ID: Water Supply

Version No.	Creation Date	Revision Details	Author	Reviewer	Approver
V1.0	23/10/2018	First Draft Dashboards	T1		

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