Sunshine Coast Council

Sunshine Coast Council Asset Management Plan 2017/18 - 2022/23

Waste and Resource Management

www.sunshinecoast.qld.gov.au
mail@sunshinecoast.qld.gov.au
T 07 5475 7272 **F** 07 5475 7277
Locked Bag 72 Sunshine Coast Mail Centre Qld 4560

Acknowledgements

Council wishes to thank all contributors and stakeholders involved in the development of this document.

Disclaimer

Information contained in this document is based on available information at the time of writing. All figures and diagrams are indicative only and should be referred to as such. While the Sunshine Coast Regional Council has exercised reasonable care in preparing this document it does not warrant or represent that it is accurate or complete. Council or its officers accept no responsibility for any loss occasioned to any person acting or refraining from acting in reliance upon any material contained in this document.

Version control:

Version	Date	Revision Details	Author	Reviewed By	Approved By
1	Sept 2011	Development of asset management plan	Sascha Tolsdorf		
1.1	Sept 2011	Review draft core asset management plan	Sascha Tolsdorf	Chris Campbell	
1.2	Sept 2011	Final core asset management plan	Sascha Tolsdorf	Chris Campbell	
2	Oct 2012	Update Assets listed, replacement values and expenditure planning	Sascha Tolsdorf		
3	Mar 2015	Update Assets listed, replacement values and expenditure planning	Sascha Tolsdorf		
3.1	Nov 2015	Update Assets listed, replacement values and expenditure planning	Sascha Tolsdorf		
4	Feb 17	Major updates/improvements to most sections	Sascha Tolsdorf		

Contents

1 Executive Summary

1.1 What council provides

The Waste and Resources network of assets has a replacement value of $87.8.million and a written down value of $71.1 million as at 30 June 2016.

Sunshine Coast Council has an obligation to its ratepayers to manage these physical assets so that an acceptable level of service is maintained and improvement initiatives implemented in an efficient and cost-effective manner. In addition, council has the obligation to manage assets in an environmentally friendly and sustainable way.

To fulfil this role and responsibility of providing a long-term cost effective management of the assets, council must develop an asset management plan to be the vehicle by which council can provide a long-term management framework.

The Waste and Resource Asset Management Plan links long-term investment to council's strategic goals and desired day-to-day service levels.

Waste and Resource Management's major assets value is currently $87.8 million which includes:

- two operating landfills strategically positioned in Caloundra and Nambour
- 8 Resource Recovery Centres / Transfer Stations throughout the region in Caloundra, Buderim, Beerwah, Nambour, Witta, Kenilworth, Mapleton and Yandina
- a depot located at Sippy Creek
- a Material Recovery Facility located in Nambour for the processing of recyclables
- a Waste, Recycling and Sustainability Education facility, and
- Public Place waste receptacles for waste collection at footpaths, parks, beaches.

Projected asset growth will be generated by the:

- Sunshine Coast Waste Strategy 2015-2025
- Regional Infrastructure needs Analysis Plan
- New developments including Caloundra South and Palmview

1.2 What does it cost?

There are two key indicators of cost to provide the Waste and Resource service.

The life cycle cost being the average cost over the life cycle of the asset, and

The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by council's long term financial plan.

The life cycle cost for Waste and Resource Management is estimated at **$10.549 million** per annum. Council's planned average life cycle expenditure over this 10 year period is **$6.047m** which gives a life cycle sustainability index of **.57.**

The total maintenance and capital renewal expenditure required to provide the Waste and Resource service in the next 10 years is estimated at **$177 million**. This is an average of **$17** million per annum.

Waste Managements operations, maintenance and capital renewal expenditure for year one of the asset management plan is **$7.783** million giving a 10 year sustainability index of **1.29.**

1.2.1 Safety

Risks that impact on Waste and Resource Management include greater competition from private enterprise in collection and land filling operations and the effect of the state waste levy on disposal tonnages at our landfills and transfer stations.

1.3 Next steps

Actions resulting from this Plan include carrying out an asset condition inspection program, review of asset categories and alignment of this Plan with Waste and Resource Management's financial model.

2 Introduction

2.1 Background

This Plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding required to provide the required levels of service. Modelling within this plan is completed to represent a ten year planning period, with a full revision of the plan every five years as a minimum and an update of financial elements completed annually.

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

- Sunshine Coast Waste Strategy 2015-2025
- Regional Infrastructure needs Analysis Plan
- Sunshine Coast Planning Scheme 2014
- SCC Corporate Plan 2017-21
- SCC 10 year Capital Works Program 2017/18
- SCC Operational Plan 2017-21

This plan covers both operational and closed facilities. Operational facilities are funded through regular operational and capital budgets (Appendix B) however closed facilities are funded through a Provision Fund (Appendix C):

Operational:

- Beerwah Resource Recovery Centre
- Buderim Resource Recovery Centre
- Caloundra Landfill & Resource Recovery Centre
- Kenilworth Transfer Station
- Mapleton Transfer Station
- Nambour Landfill & Resource Recovery Centre (incl. Materials Recovery Facility & Education Centre)
- Sippy Creek Depot
- Sustainability Park
- Witta Resource Recovery Centre
- Yandina Transfer Station
- Regional Assets (public place and waste & recycling collection bins)

Closed:

- Conondale Landfill
- Coolum Landfill
- Eumundi Landfill
- Duck Holes Creek Landfill
- Glass House Mountains Landfill
- Landsborough Landfill

- Mapleton Landfill
- Witta Landfill

Table 2.1 Assets covered by this Plan

The table below summarises Waste and Resource Managements assets as administered in Councils Financial Asset Information System. Appendix A has a full breakdown by facility of individual assets.

Beerwah Resource Recovery Centre	Asset Category Count	Replacement Value
Buildings	5	$1,124,624
Land	1	$213,758
Other Infrastructure	5	$254,807
P&E - General	2	$12,537
Totals	**13**	**$1,605,727**
Buderim Resource Recovery Centre		
Buildings	8	$3,058,481
Other Infrastructure	25	$3,563,452
P&E - General	10	$565,210
Totals	**43**	**$7,187,143**
Caloundra Landfill & Resource Recovery Centre		
Buildings	14	$2,638,540
Land	1	$239,869
Other Infrastructure	44	$29,658,281
P&E - General	7	$311,440
Totals	**66**	**$32,848,129**
Conondale Landfill		
Land	1	$254,017
Coolum Landfill		
Land	2	$724,416
Other Infrastructure	1	$41,177
Totals	**3**	**$765,593**
Glass House Mountains Landfill		
Land	1	$244,019
Kenilworth Transfer Station		
Other Infrastructure	1	$8,930
P&E - General	1	$16,204
Totals	**2**	**$25,134**
Mapleton Transfer Station		
Buildings	1	$8,949
Land	1	$326,311
Other Infrastructure	3	$328,815
P&E - General	2	$30,283
Totals	**7**	**$694,357**
Nambour Landfill & Resource Recovery Centre		
Buildings	17	$5,080,021
Land	6	$10,220,171
Other Infrastructure	20	$20,094,503
P&E - General	4	$3,109,252
Totals	**47**	**$38,503,948**
Regional Assets		
P&E - General	2	$17,374
Public Place Bin	548	$834,729
Totals	**550**	**$852,103**
Sippy Creek Depot		
Buildings	5	$1,023,093
Other Infrastructure	3	$463,721
Totals	**8**	**$1,486,814**
Sustainability Park		
Land	1	$2,844,442
Witta Resource Recovery Centre		
Land	1	$108,093
Other Infrastructure	3	$308,373
Totals	**4**	**$416,465**
Yandina Transfer Station		
Other Infrastructure	1	$25,406
P&E - General	2	$32,909
Totals	**3**	**$58,314**
Grand Totals	**749**	**$87,786,204**

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

Waste and Resource Management	Asset owner / manager Responsible for the development and implementation of this asset management plan

	Annual business plan and budget process Long term financial plan
DEHP	Environmental policy/guidelines
Council's Asset Management and Service Programming Unit	Corporate asset management leadership and capital planning advice
Sunshine Coast councillors	Plan adoption and asset management leadership
Executive Director – Infrastructure Services	Executive management endorsement, sign-off and executive ownership
Community	Asset users

2.2 Goals and objectives of asset management

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

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Taking a life cycle approach
- Developing cost-effective management strategies for the long term
- Providing a defined level of service and monitoring performance
- Understanding and meeting the demands of growth through demand management and infrastructure investment
- Managing risks associated with asset failures
- Sustainable use of physical resources
- Continuous improvement in asset management practices.[i]

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

Council's vision is:

"To be Australia's most sustainable region – healthy, smart, creative".

Council goals and objectives and how these are addressed in this Plan are outlined in Table 2.2.

Table 2.2 Council goals and how these are addressed in this Plan

Goal	Objective	How goals are addressed in this AMP
A new economy	Providing the regional policy, regulatory settings and identity	Facilitate the delivery of key infrastructure projects for our preferred economic growth

	that shape a globally competitive economy	
A strong community	Supporting an engaged, resilient and inclusive community that embraces diversity	Implement a business approach that focuses on maximising opportunities, managing risks and improving quality of service
A healthy environment	Maintaining and enhancing the region's natural assets, liveability and environmental credentials	In partnership with government and the community, develop and implement energy transition and greenhouse gas reduction strategies for the region
Service excellence	Providing value for money services responsive to the needs of the community	Foster partnerships with governments, business and the community to encourage innovation and sustainability
An outstanding organisation	Delivering a high performance organisation, supported by good governance, robust decision-making and regional leadership	Provide ongoing opportunity for cost effective resource recovery and efficient disposal of residual waste

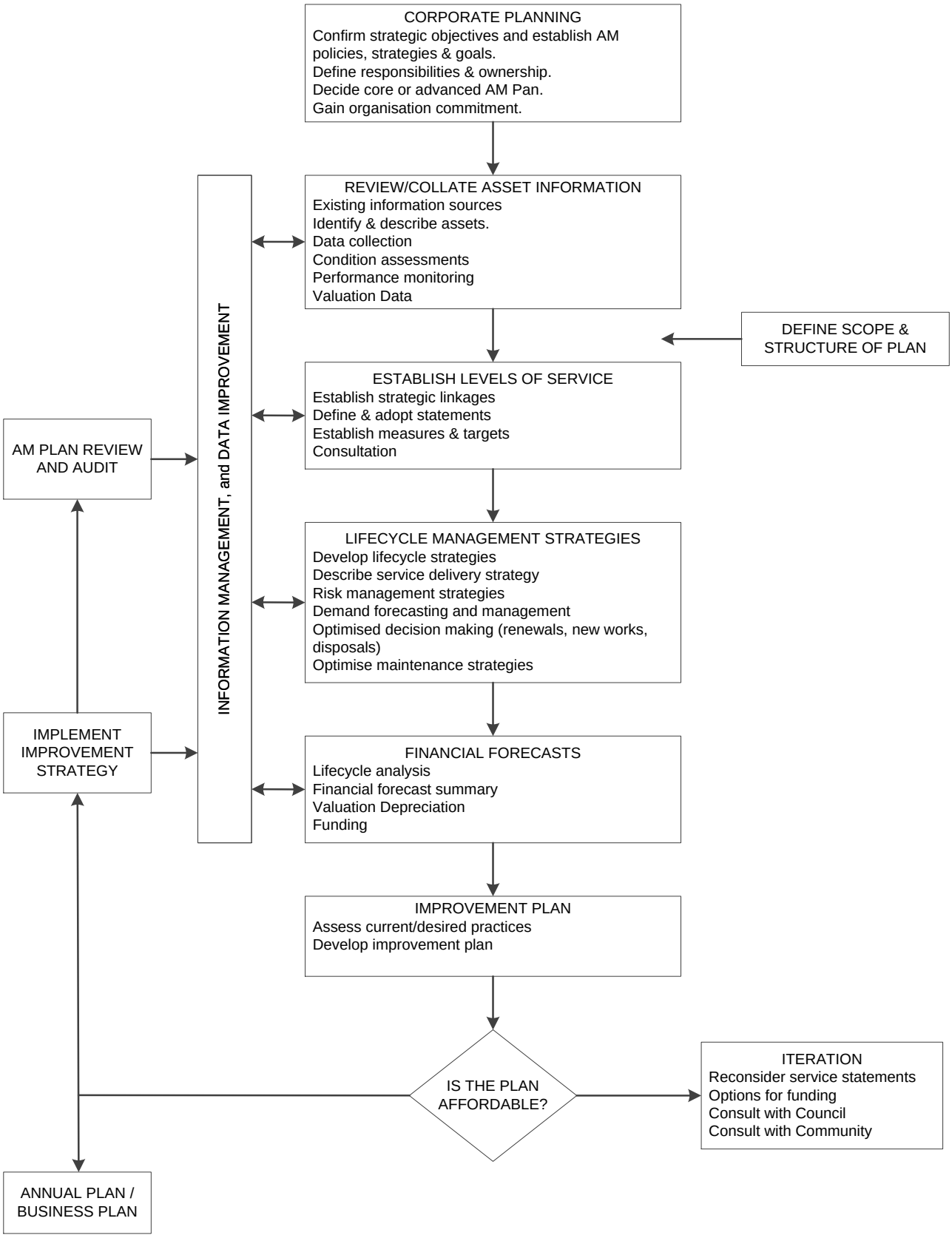
2.3 Plan framework

Key elements of the Plan are:

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

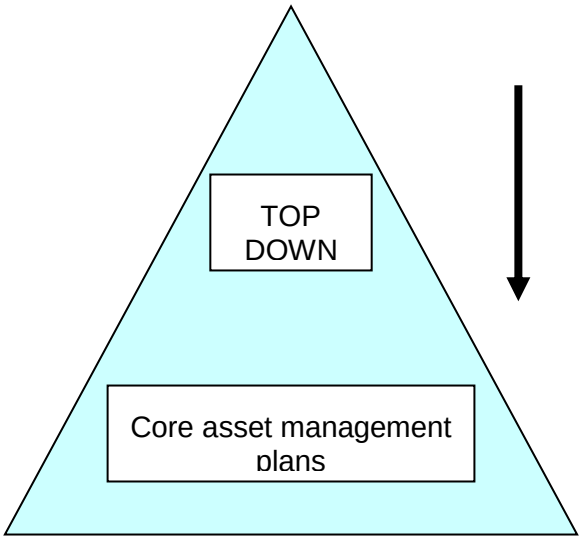
A road map for preparing an asset management plan is shown below:

Road map for preparing an asset management plan
Source: IIMM Figure 1.5.1, p.1.11



2.4 Core and advanced asset management

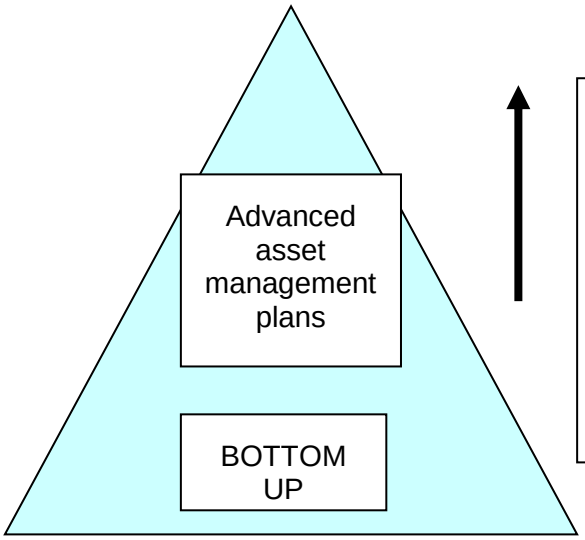
This Plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual (IIMM). It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset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



Systems / knowledge approach

- Based on what we know
- Current financial and physical data
- Uses current levels of service (not desired)
- Inconsistent data sets a major constraint
- Provides a base to move forward
- Provides a detailed improvement plan

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



Asset / component data

- Finding out what we don't know
- Analysis to individual assets and services
- Support optimisation of activities and programs to meet desired levels of service
- Implemented improvement plan

3 Levels of service

3.1 Customer research and expectations

A customer satisfaction survey was conducted with the intention of monitoring community satisfaction with the delivery of services provided by Sunshine Coast Regional Council. The goal of the study was to measure Sunshine Coast Regional Council's performance and provide up-to-date insights into perceptions of service delivery, as well as uncovering community issues of importance. The survey is designed to provide a high-level community view of the performance of council services to assist the council in identifying service priorities for future review and improvement.

The objectives for the community survey process were to:

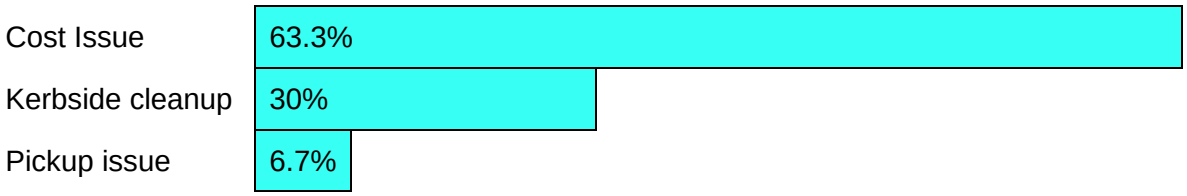
- measure the importance of and satisfaction with services and facilities provided by Sunshine Coast Regional Council;
- Assist Sunshine Coast Regional Council by identifying the priority issues for the community;
- Identify key drivers of resident dissatisfaction

The survey included a question related to the facilities and services provided by the Waste and Resource Management branch. The question was made of two parts the first of which was to rate the importance of the facilities and services provided and the second the satisfaction with the facilities and services provided, the table below outlines the results.

Table 3.1 Community satisfaction survey

Waste collection, recycling and material reuse	Level			
	Low	Medium	High	Can't say
Importance of the service	0.1%	2.5%	97.2%	0.1%
Satisfaction with the service	9.5%	22.7%	66.1%	1.7%

Where residents gave a low satisfaction rating they were asked for a reason. The responses are summarised below:



Council uses this information in developing the strategic branch plan and in allocation of resources in the budget.

3.2 Legislative requirements

Council has to meet many legislative requirements including Australian and state legislation and state regulations. These are outlined in Table 3.2 below.

Table 3.2 Legislative requirements

Legislation	Requirement
Environment Protection Act 1994	Sets out requirement for waste management services, including waste prevention and minimisation
Environment Protection Regulation 2008	Sets out requirements and responsibilities regarding transportation and/or treatment of f specific waste types.
Local Government Act 2009	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Local Government Regulation 2012	Sets out responsibilities as a significant business activity for full cost pricing
Workplace Health and Safety Act 2011	Sets out roles and responsibilities to secure the health, safety and welfare of persons at work.
Waste Reduction and Recycling Act 2011	Sets out role to protect Queensland's environment through: (a) promotion of waste avoidance and reduction, and resource recovery and efficiency actions; (b) reducing the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste; (c) minimising the overall impact of waste generation and disposal; (d) ensuring a shared responsibility between government, business and industry and the community in waste management and resource recovery; (e) support and implement of national frameworks, objectives and priorities for waste management and resource recovery.
Waste Reduction and Recycling Regulation 2011	Provides a framework for council to make consistent and fair decisions that ensure waste is managed in a way that is consistent with ecologically sustainable development and minimise the impact of waste on the environment including, in particular, the impact of waste so far as it directly affects human health

3.3 Current levels of service

Council has defined service levels in two terms.

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

Service criteria	Technical measures may relate to:
Quality	Reliability of collection services
Quantity	Appropriate service capacity and frequency
Availability	Distance from a property to a waste facility
Safety	Number of injury accidents

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

Table 3.3 Current service levels - Waste

Key Performance Measure	Level of service	Performance measure process	Performance target	Current performance
COMMUNITY LEVELS OF SERVICE				
Quality	Provide efficient and reliable collection services	Customer Service requests (CRMs)	< 1 in 2000 missed services	Meeting performance as validated by CRMs
Function	Disposal facilities operate during equitable opening times	CRM's	< 1 in 2000 complaints regarding operating hours	Meeting performance as validated by CRMs
Safety	W&RM will comply with all requirements under the Workplace Health and Safety Act 1995	1. Register of all accidents and/or injuries occurring due to poor WH&S. 2. Record identified risks as high, medium and low.	1. No serious accidents / incidents per annum 2. Maintain a WR&M risk register	1. No serious accidents / incidents 2. Risk register updated and reviewed annually

Key Performance Measure	Level of service	Performance measure process	Performance target	Current performance
Sustainability	1. Resource recovery / landfill diversion 2. Disposal facilities are managed in a way to meet all DERM licensing requirements	1. Wasteman2G reporting 2. Disposal facility inspections as per site based Strategic Branch Management Plans (SBMP's)	1. Percentage of waste that is diverted is greater than for previous year adjusted for population and economic growth 2. Inspections carried out and recorded.	1. 32 per cent 2. 100 per cent
TECHNICAL LEVELS OF SERVICE				
Condition	Landfill / Transfer Station plant is reliable and well maintained	1. Register of breakdown / incidents	< 1 breakdown per annum	< 1 breakdown per annum
Accessibility	All areas of disposal facilities are accessible in all weather or traffic conditions	Contractor, CRM and/or weighbridge reports of delays due to accessibility	< 1 in 2000	Meeting performance as validated by contractor, CRMs and/or weighbridge reports
Cost effectiveness	Waste disposal facilities operations and management are governed by sound financial planning principals	Cost for facility operations as per financial model	Expense within 2% of budget	<1% for 2015/16
Sustainability	The waste facilities are managed with respect to future generations	Identification of new landfill sites, associated bulk haul options and/or alternative waste technologies in and out of SCC region	Business case in place for future waste disposal / transfer infrastructure requirements	Business case in development

3.4 Desired levels of service

At present indications of desired levels of service are obtained from customer feedback and the Waste & Resource Management Branch Plan and these have been built into the above table in the current level of service targets.

4 Future demand

4.1 Demand forecast

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

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

Table 4.1 Demand factors, projections and impact on services

Demand drivers	Present position		Projection		Impact on services
Population	303,802 (2016)		456,966 (2031)		Projected population increases will increase pressure on existing assets and increase demand for provision of new assets in high growth areas.
Demographics	Highest growth patterns occurring in Central area of region		High growth expectation within Southern area of region		Requirement for new disposal asset in southern part of region to service increased population.
	17% > 65 years old 1.6% >85 years old 24.2% < 18 years old		21.7% > 65 years old 3.2% >85 years old 21% < 18 years old		Provision of suitable disposal assets to meet the needs of the ageing population
	Migration patterns have seen net gains of young families and retirees from interstate and a net loss of young people to other parts of Queensland		Current patterns predicted to continue		No expected impact on current asset management program
Number of persons/household	23.3%	1 person	23%	1 person	Minor changes mean little impact to current asset management program
	39.1%	2 person	40%	2 person	
	14.9%	3 person	15%	3 person	
	14.4%	4 person	15%	4 person	
	5.8%	5 person	6%	5 person	

4.2 Changes in technology

Historically changes in technology have had the effect of reducing whole-of-life (WOL) costs. Therefore, changes in technology will be embraced where possible to reduce future WOL costs.

Table 4.2 Changes in technology and forecast effect on service delivery

Technology change	Effect on service delivery
Improved purpose-built software technology	Faster and more accurate data collection and processing
Energy use and efficiency	Minimise energy use. Major focus has been on use of low draw pumps and water tanks for collection of roof water from buildings/structures. Examine expanding the use of solar power.
Adoption of improved/new technologies including but not limited to AWT (alternative waste technologies), composting, organic waste collection.	Improved resource recovery rates and landfill diversion lessening reliance on land filling.
On-line service requests	Refinement and additions to on-line service requests will allow more flexibility for customers managing their waste collection needs
Continue to examine opportunities for Sustainability Park to provide opportunities for start up recycle/reuse type business	Improved resource recovery rates and landfill diversion lessening reliance on land filling.

4.3 Demand management plan

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

Opportunities identified to date for demand management are shown in Table 4.3.

Table 4.3 Demand management plan summary

Service activity	Demand management plan
Provision of waste management facilities	SCC Waste Strategy 2015-2025 • Alternative waste Collection System (AWCS) Maroochydore City Centre • Infrastructure Needs Analysis Report • Investigation into site for new regional landfill • Purchase of land adjacent to Nambour Landfill to allow for expansion
Maintenance of waste management facilities	SCC Corporate Plan 2017-21 SCC Operational Plan 2017-21 Waste & Resource Management - Annual Budget Site Based Management Plans

4.4 New assets from growth

The new assets required to meet growth will be based on the requirement for increased landfill space and for a new larger Resource Recovery Facility to meet the inevitable demand generated by the population increases forecast for the southern part of the region. Appendix A details the WR&M 10 year capital works plan.

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

5 Life cycle management plan

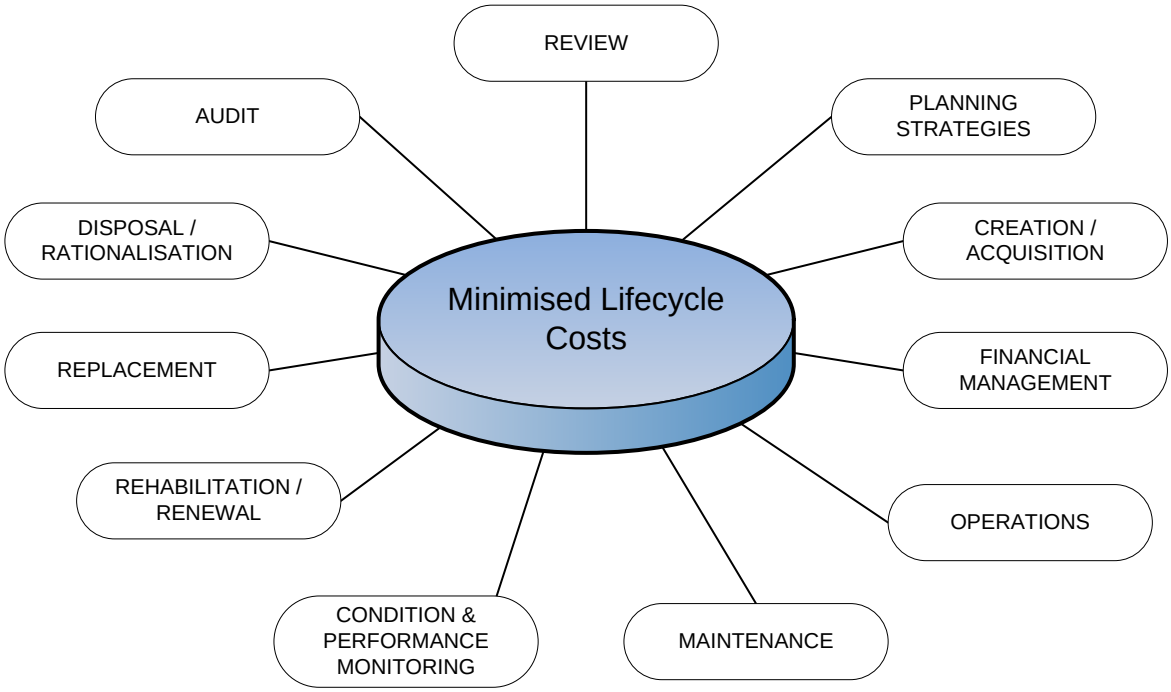
The life cycle management plan details how council plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while minimising life cycle costs.

5.1 Background data

Life cycle asset management takes account of the whole-of-life implications for acquiring, operating, maintaining and disposing of Waste and Resources assets. The objectives of life cycle planning are to:

- Establish the total cost of an asset over its useful life
- Establish a sound basis on which asset management decisions are made
- Plan for the impact of refurbishment, maintenance, and renewals
- Increase the service delivery capacity for the asset

The standard asset's life cycle costs are depicted in the following diagram:



5.1.1 Physical parameters

Beerwah Resource Recovery Centre

Asset category	Condition	Future use
BUILD	Offices and transfer station new in 2002, buildings and structures are all in good condition	Footprint leaves no room for expansion. Investigation into new site to service large population increase for Caloundra South
OTHER INFRASTRUCTURE	Transfer station new in 2002, car parks and roads are all in good condition	
PLANT EQUIPMENT	Software may be upgraded in next two years however it still meets requirements	

Buderim Resource Recovery Centre

Asset category	Condition	Future use
BUILD	Transfer station front end and weighbridge office new in 2012, buildings and structures in general are all in good condition	Resource Recovery Centre drop off zones to be expanded 2017/18 Post closure plan being developed Anticipate to remain as Resource Recovery Centre
PLANT EQUIPMENT	Weighbridges, walking floor and security system on preventative maintenance program.	
OTHER INFRASTRUCTURE	Roads and paths new in 2004 (entrance resealed 2012), sealed areas are all in good condition	

Caloundra Landfill and Resource Recovery Centre

Asset category	Condition	Future use
BUILD	Weighbridge office and transfer stations, retail facility new in 2004, buildings and structures are all in good condition	No current plans for expansion beyond current cell development
PLANT EQUIPMENT	Weighbridges and security system on preventative maintenance program.	
OTHER INFRASTRUCTURE	Roads and paths new in 2006, sealed areas are all in good condition	

Kenilworth Transfer Station

Asset category	Condition	Future use
BUILD	Oil and chemical collection facilities in good condition	A current capital program has no plans for expansion/upgrade.
PLANT EQUIPMENT	New transfer bins 2014	
OTHER INFRASTRUCTURE	Fences and roads maintained as required and are all in good condition	

Mapleton Transfer Station

Asset category	Condition	Future use
BUILD	Oil and chemical collection facilities in good condition	A current capital program has no plans for expansion/upgrade. Post closure plan being developed
PLANT EQUIPMENT	2 x new transfer bins 2008	
OTHER INFRASTRUCTURE	Fences and roads maintained as required and are all in good condition	

Nambour Landfill and Resource Recovery Centre

Asset category	Condition	Future use
BUILD	Depot and office buildings maintained as required and are all in good condition	New Resource Recovery Centre to be constructed 2017/18 Masterplan for Landfill expansion being developed
PLANT EQUIPMENT	Weighbridge in good condition and regularly maintained	
OTHER INFRASTRUCTURE	Fences and roads maintained as required and are all in good condition	

Regional Assets

Asset category	Condition	Future use
PUBLIC PLACE BIN	Public place waste receptacles repaired / replaced as required	Continued requirement and expansion as population increases

Sippy Creek Depot

Asset category	Condition	Future use
BUILD	Offices workshop sheds maintained through collection contract site lease, buildings and structures are all in good condition	Car park to be expanded and sealed 2017/18

Asset category	Condition	Future use
OTHER INFRASTRUCTURE	Fences and roads maintained through collection contract site lease, all in good condition	

Witta Resource Recovery Centre

Asset category	Condition	Future use
OTHER INFRASTRUCTURE	Fences and roads maintained as required and are all in good condition	A current capital program has no plans for expansion/upgrade. Post closure plan being developed
PLANT EQUIPMENT	Software may be upgraded in next two years however it still meets requirements	

Yandina Transfer Station

Asset category	Condition	Future use
PLANT EQUIPMENT	2 x new transfer bins 2008	A current capital program has no plans for expansion/upgrade.
OTHER INFRASTRUCTURE	Fences and roads maintained as required and are all in good condition	

Conondale Landfill

Asset category	Condition	Future use
LAND	Maintained on as needs basis	Post closure plan being developed

Coolum Landfill

Asset category	Condition	Future use
LAND	Maintained on as needs basis	Post closure plan being developed

Eumundi Landfill

Asset category	Condition	Future use
LAND	Maintained on as needs basis	Post closure plan being developed

Duck Holes Creek Landfill

Asset category	Condition	Future use
LAND	Maintained on as needs basis	Post closure plan being developed

Glass House Mountains Landfill

Asset category	Condition	Future use
LAND	Maintained on as needs basis	Post closure plan being developed

Landsborough Landfill

Asset category	Condition	Future use
LAND	Maintained on as needs basis	Post closure plan being developed

The typical asset life for each asset category is shown below:

Asset category	Typical useful life (years)
BUILD	50
OTHER INFRASTRUCTURE	20
PLANT EQUIPMENT	10

The age profile of council's assets is shown in Figure 2, based on council's financial asset information module.

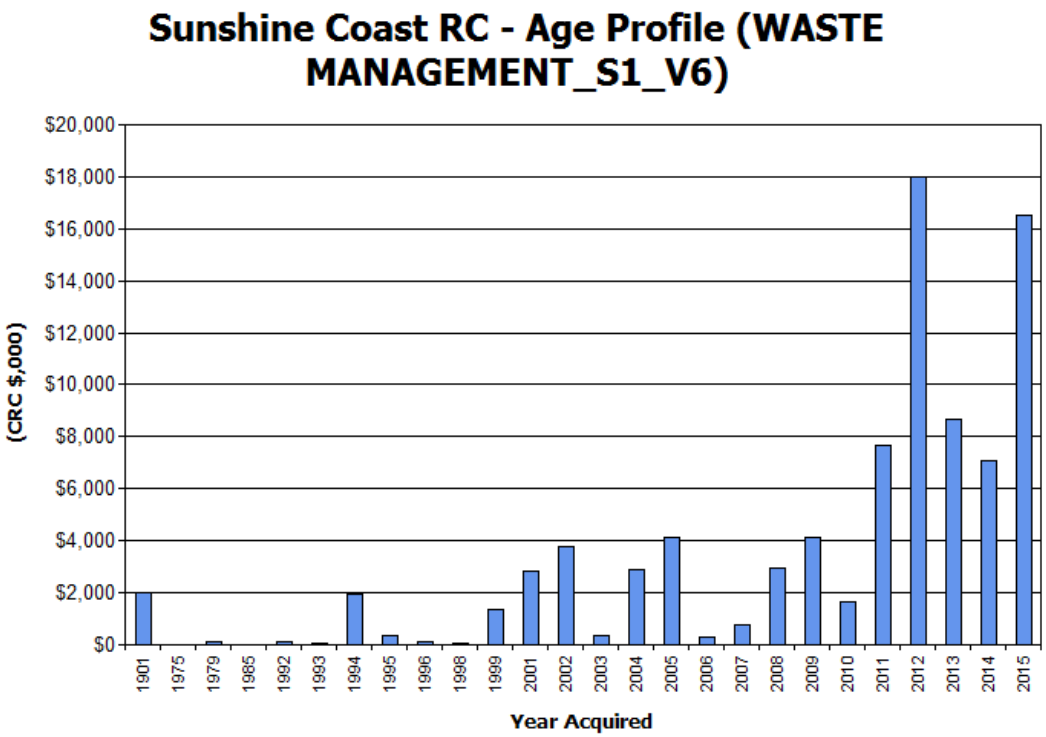


Figure 2 Asset age profile

Figure 2 indicates the majority of council's asset base is young. This combined with long useful lives results in relatively consistent ongoing maintenance costs.

(Asset age profile information currently held in FAIM requires data cleansing)

5.1.2 Asset capacity and performance

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

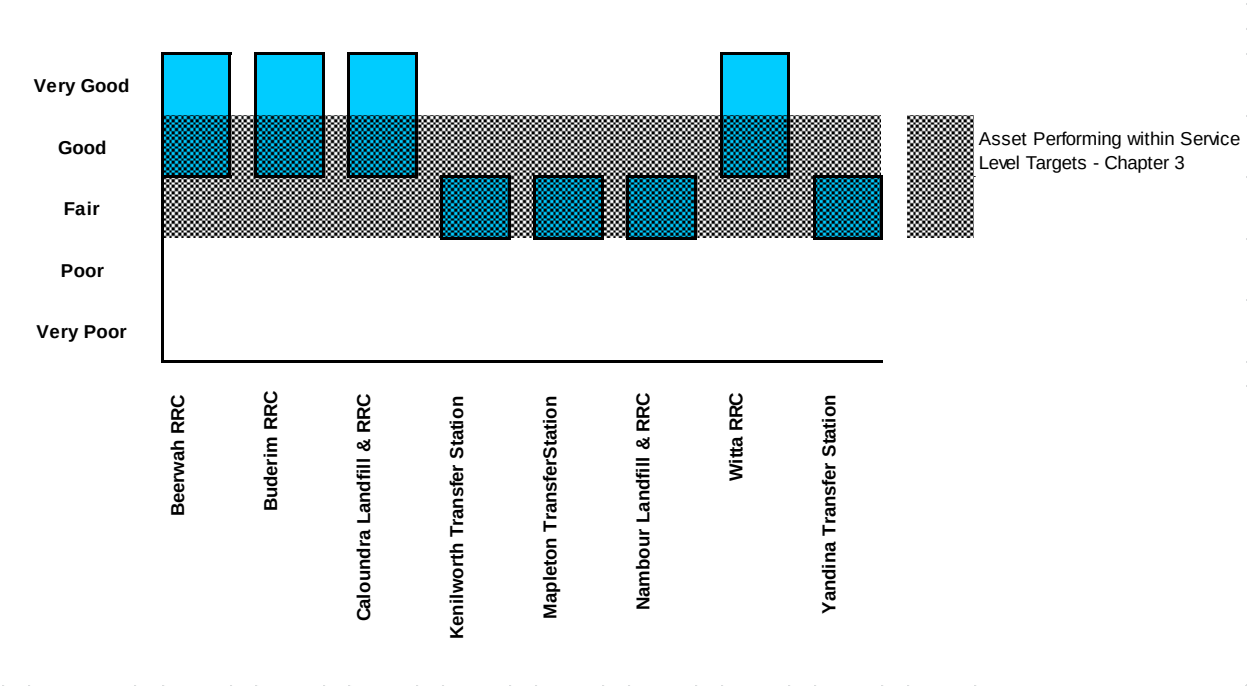
Table 5.1.2 Known service performance deficiencies

Location	Service deficiency
Nambour	Upgrade of Resource Recovery/Transfer Station facilities to meet customer demand and improve landfill diversion rates
Regional	Investigation into new landfill site to provide for disposal of residual waste into the future.
Southern part of Region	Beerwah RRC will not meet demand as Caloundra south developments progresses, current footprint does not allow for expansion and new land will need to be identified for the construction of a new RRC.

5.1.3 Asset condition

The condition profile of council's assets is shown in Figure 3.

Figure 3 Asset condition profile



Condition is measured using a 1 – 5 rating system.[1]

Rating	Status	Description of Condition
1	Very good	Only planned maintenance required
2	Good	Minor maintenance required plus planned maintenance
3	Fair	Significant maintenance required
4	Poor	Significant renewal/rehabilitation required
5	Very Poor	Physically unsound and/or beyond rehabilitation

[1] IIMM 2011, Appendix B, p B:1-3 ('cyclic' modified to 'planned')

5.1.4 Asset valuations

The value of assets as at June 2016 covered by this asset management plan is summarised below. Assets were last re-valued at 30 June 2016.

Current replacement cost	$87,786,000
Depreciable amount	$87,786,000
Depreciated replacement cost	$71,063,000
Annual depreciation expense	$2,452,000

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion (renewal and upgrade based on 10 year average).

Asset consumption	2.8%
Asset renewal	0.8%
Annual upgrade/expansion	13.8%

5.2 Risk management plan

Sunshine Coast Council is committed to delivering quality outcomes to the community and its workforce through consideration of balanced risks and opportunities.

To achieve this objective, council has established core categories of risks / opportunities which are collectively considered as integral decision making tools for strategic resolutions. Risk calculators (Appendix D) illustrate the calculable likelihood and consequence which are combined by the risk assessor in selecting the most appropriate overall risk category.

Risks to Waste and Resource Management assets are summarised in Table 5.2 highlighting primary risks identified as moderate to high in relation to the risk calculators.

Table 5.2 Critical risks and treatment plans

Asset	Details of Risk	Net Risk	Risk treatment plan
Nambour, Buderim, Coolum and Caloundra	Leachate contamination into environment	M-32	• Monitoring, collection, disposal to sewer, Capping landfills, smaller operating faces, onsite water control / separation • Recent upgrades and installations of leachate collection systems, and installation of sewer rising main, SCADA systems operational at active sites and some closed sites • Trade waste agreement with UnityWater for acceptance of leachate
Nambour, Buderim,	Landfill Gas Odour	M-32	• Odour treatment / masking systems if needed

Asset	Details of Risk	Net Risk	Risk treatment plan
and Caloundra			• Recent expansions of landfill gas collection systems at Nambour and Caloundra • All landfill batters reaching final waste contours have had final capping applied at Nambour and Caloundra
All operational sites	Fire in mulch / garden waste / timber stockpiles	M-32	• Contractor procedure in place to manage stockpiles • Regular temperature monitoring • Stockpile turning as required by temperature results • CCTV, security patrols

5.3 Routine maintenance plan

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

5.3.1 Maintenance plan

Waste and Resource Management land filling contracts have components of planned and reactive maintenance associated with them. This includes landfill batter maintenance, leachate management, stormwater and erosion sediment control.

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance	Unplanned repair work carried out in response to service requests and management/supervisory directions.
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 experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
Cyclic maintenance	Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Maintenance expenditure trends are shown in Table 5.3.1

Table 5.3.1 Maintenance expenditure trends

Year	Maintenance Expenditure		
	Reactive	Planned	Cyclic
2016/17	$ N/A	$ 2,280,509	$ N/A
2017/18	$ N/A	$ 448,684	$ N/A
2018/19	$ N/A	$ 430,581	$ N/A
2019/20	$ N/A	$ 422,443	$ N/A
2020/21	$ N/A	$ 412,828	$ N/A
2021/22	$ N/A	$ 503,464	$ N/A
2022/23	$ N/A	$ 428,289	$ N/A
2023/24	$ N/A	$ 2,870,931	$ N/A
2024/25	$ N/A	$ 695,256	$ N/A
2025/26	$ N/A	$ 734,902	$ N/A

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

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

5.3.2 Standards and specifications

All materials used in the maintenance and repair of the waste assets will comply with all relevant standards, legislation and guidelines. All maintenance work undertaken will be in accordance with:

- Appropriate development and planning regulations
- Australian Standards relating to buildings
- Other appropriate legislation and codes
- Documented occupational health and safety provisions

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 5. Note that all costs are shown in current 2015/2016 dollar values.

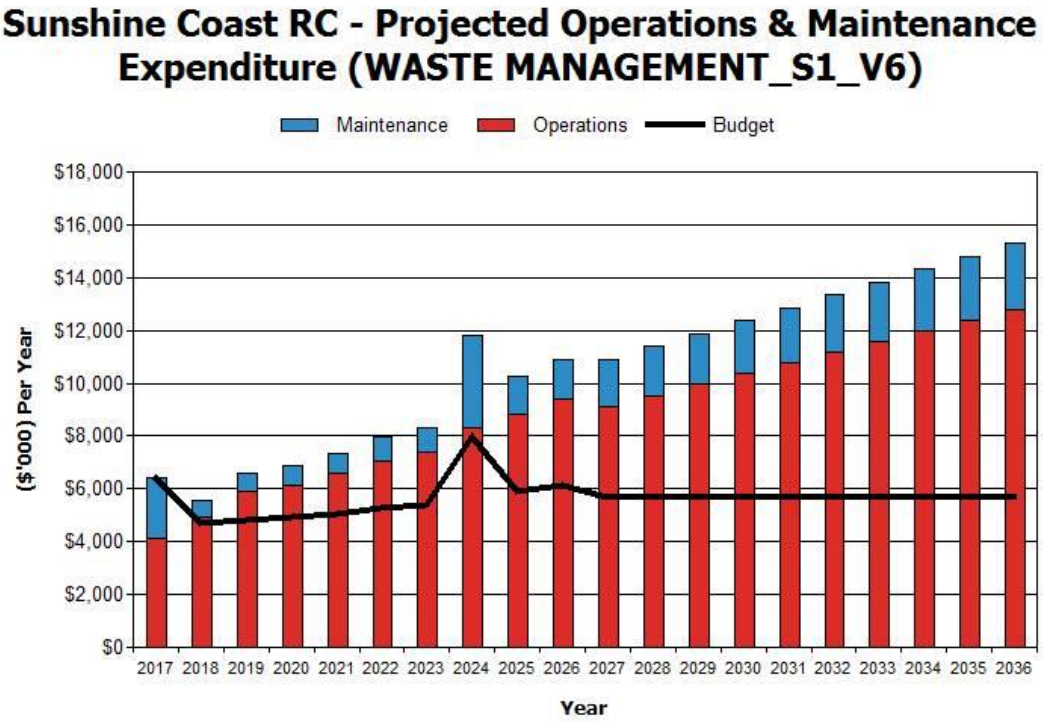


Figure 5 Planned operations and maintenance expenditure

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

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

5.4 Renewal / replacement plan

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

5.4.1 Renewal plan

Assets requiring renewal are identified from estimates of remaining life obtained from council's financial asset register (FAIM). Renewal projects are expected to verify if the assets are still required, the accuracy of remaining life estimate, and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in for council's 10 year Capital Works Program. The priority ranking criteria is detailed in Table 5.4.1.

Table 5.4.1 Renewal priority ranking criteria

Criteria	Weighting
Community / social benefit	16%
Corporate alignment	14%
Risk assessment	14%

Financial considerations	14%
Environmental impacts	14%
Increase in catchment	14%
Contractual obligations	14%
Total	100%

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

5.4.2 Renewal standards

The standards and specifications for renewal works will reflect the best current technologies, national standards and legislative requirements. All renewal work will be carried out in accordance with relevant council policies, Building Codes and landfill license requirements.

5.4.3 Summary of future renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Figure 6. Note that all costs are shown in current 2016/17 dollar values.

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

Renewals are to be funded from council's Capital Works Program and grants where available. This is further discussed in Section 6.2.

5.5 Creation / acquisition / upgrade plan

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

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in council's 10 year Capital Works Program. The priority ranking criteria is detailed below.

Table 5.5.1 New assets priority ranking criteria

Criteria	Weighting
Community / social benefit	16%
Corporate alignment	14%
Risk assessment	14%

Financial considerations	14%
Environmental impacts	14%
Increase in catchment	14%
Contractual obligations	14%
Total	100%

5.5.2 Standards and specifications

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

5.5.3 Summary of future upgrade/new assets expenditure

Planned upgrade/new asset expenditures are summarised in Figure 7. The planned upgrade/new capital works program is shown in Appendix C. All costs are shown in current 2015/2016 dollar values.

Strategically capital projects are planned through:

- Sunshine Coast Waste Strategy 2015-2025
- Waste & Resource Management 10 year Capital works plan
- Regional Infrastructure needs Analysis Plan

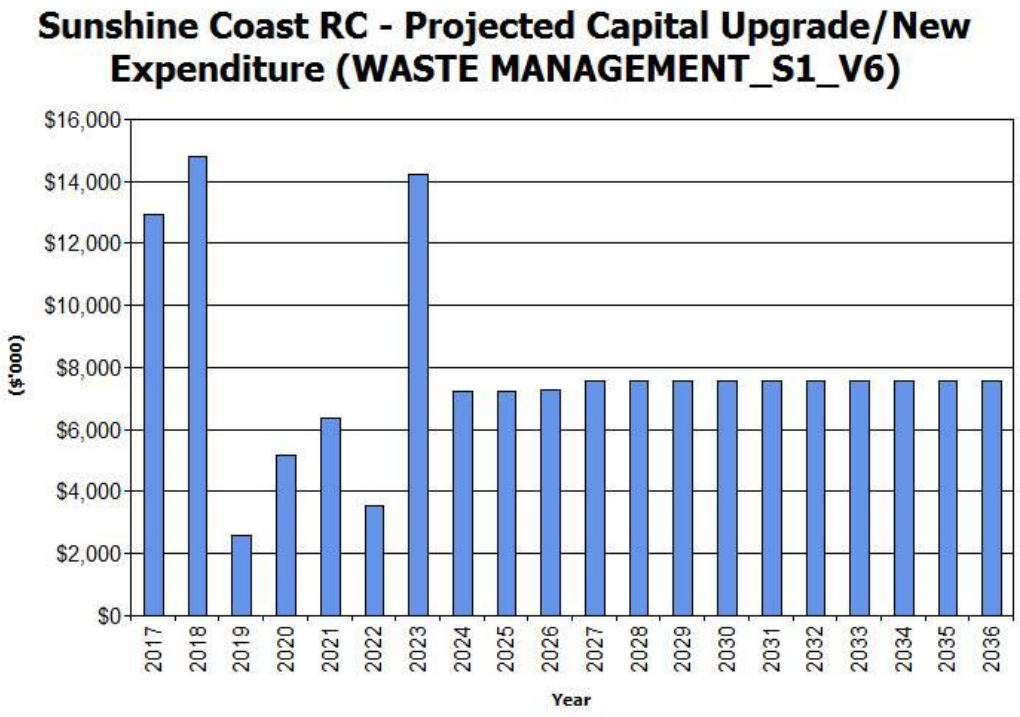


Figure 7 Planned capital upgrade / new asset expenditure

New assets and services are to be funded from WR&M Capital Works Program (Appendix B) and grants where available. This is further discussed in Section 6.2.

5.6 Disposal plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. An asset disposal plan is currently being developed and will form part of future revisions of this asset management plan..

6 Financial summary

This section contains the financial requirements resulting from all the information presented in the previous sections of this Plan.

6.1 Classification Waste Expenses and Assets

The following summary provides an overview of the types of resource outflows that may fall into each expense category.

Capital Expenditure

- Costs associated with the construction of a landfill cell including but not limit to earthworks, landfill liners, clay bunding etc.
- Costs incurred in constructing / installing leachate collection systems and associated monitoring equipment in current and future cells.
- Costs incurred in stripping back what was originally deemed to be final capping from a closed cell in order to utilise the air space above for a new cell, therefore constituting the construction of a new cell.
- Extensions of landfill liners, this may be progressive extension as the landfill contractor increases the area being filled.

Operational Expenditure

- Costs associated with the landfill contract and the utilisation / filling of a cell.
- Costs associated with providing intermediate capping, which is a temporary cover to comply with environmental needs and the intent is that the cell will be reopened at a later date.
- Costs associated with the maintenance of a cell and associated infrastructure currently in use.
- Costs incurred in undertaking environmental / water quality monitoring and vegetation and site maintenance of landfill site currently in use.
- Costs incurred in maintaining leachate drains, monitoring equipment, sewerage of a landfill cell currently in use.

Provision Expenditure

- Final capping where by the cell will not be further utilised and is therefore closed.
- Costs incurred in constructing / retro fitting leachate drains, monitoring equipment, sewerage connections in closed cells, whereby the equipment is not linked or to be used on any current or future cells.
- Costs incurred in undertaking environmental / water quality monitoring and vegetation and site maintenance at closed landfill sites.
- Costs associated with maintaining the capping and any associated infrastructure of closed landfill sites.

6.2 Financial statements and projections

The financial projections are shown in Figure 8 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

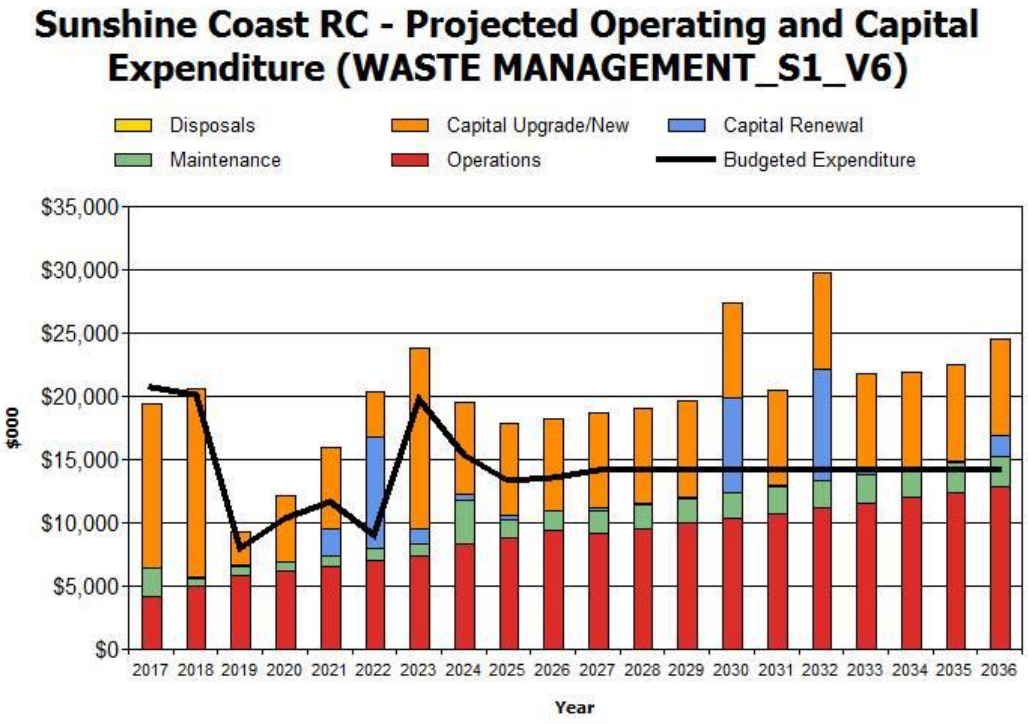


Figure 8 Projected operating and capital expenditure

Note that all costs are shown in current 2016/17 dollar values, and are based on data available from council's financial assets register (FAIM).

6.2.1 Sustainability of service delivery

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

Long term - life cycle cost

Life cycle costs (or whole-of-life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense).

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

Medium term – 10 year financial planning period

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

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

Figure 8 shows the projected asset renewals in the 20 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year one of the planning period as shown in Figure 9. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

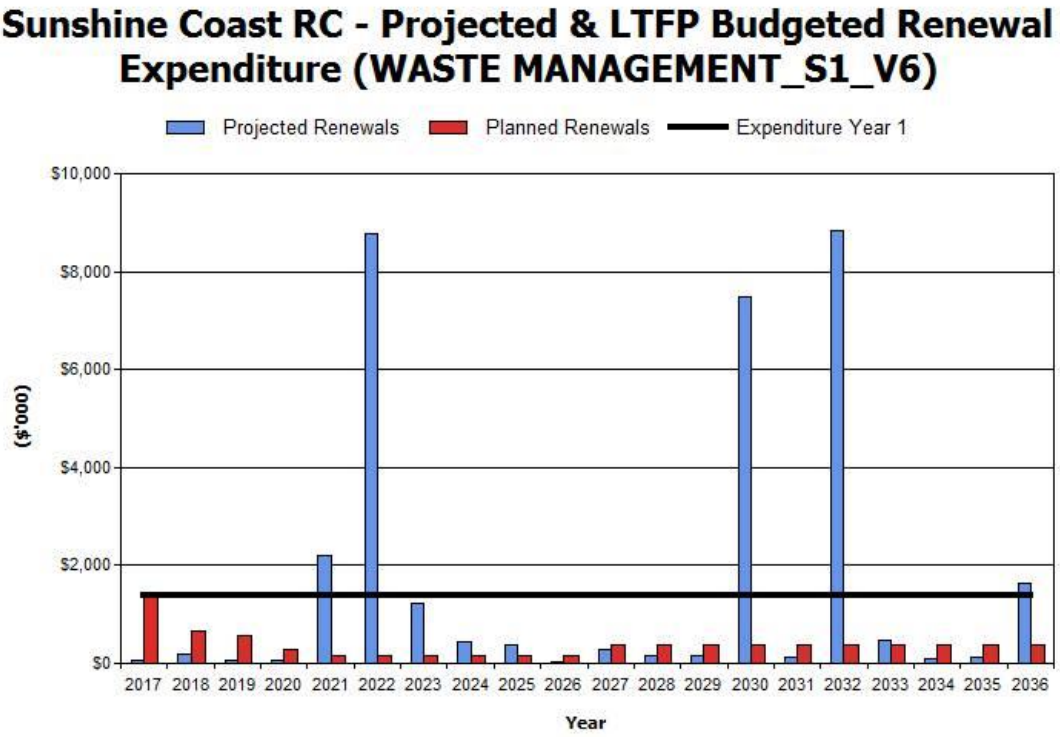


Figure 9 Projected and planned renewals and current renewal expenditure

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

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

6.3 Funding strategy

Projected expenditure identified in Section 6.1 is to be funded from council's operating and capital budgets. The funding strategy is detailed in Waste and Resource Management's 30 year long term financial model.

6.4 Valuation forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by council and from assets constructed by land developers and others and donated to council. Figure 10 shows the projected replacement cost asset values over the planning period in current 2016/17 dollar values.

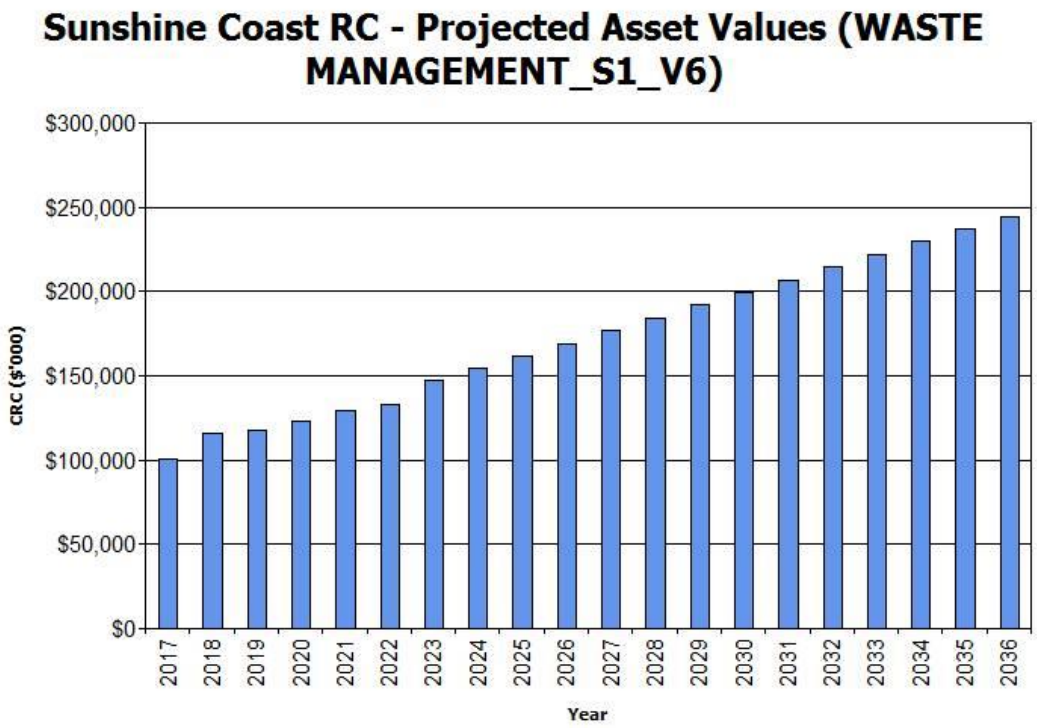


Figure 10 Projected asset values

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

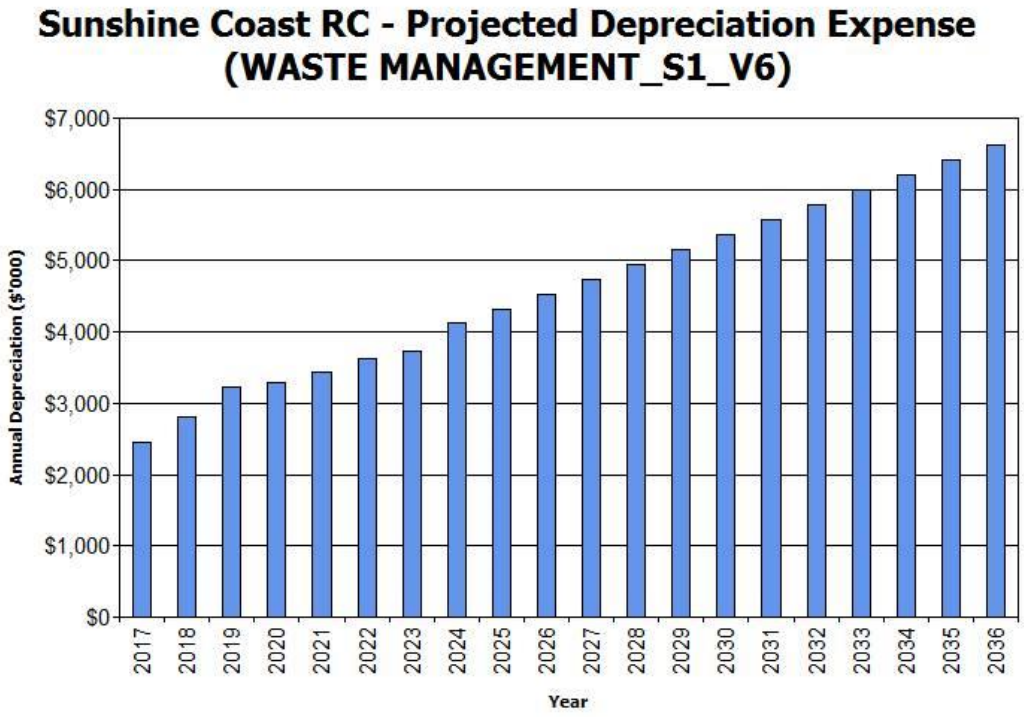


Figure 11 Projected depreciation expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old

assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 12.

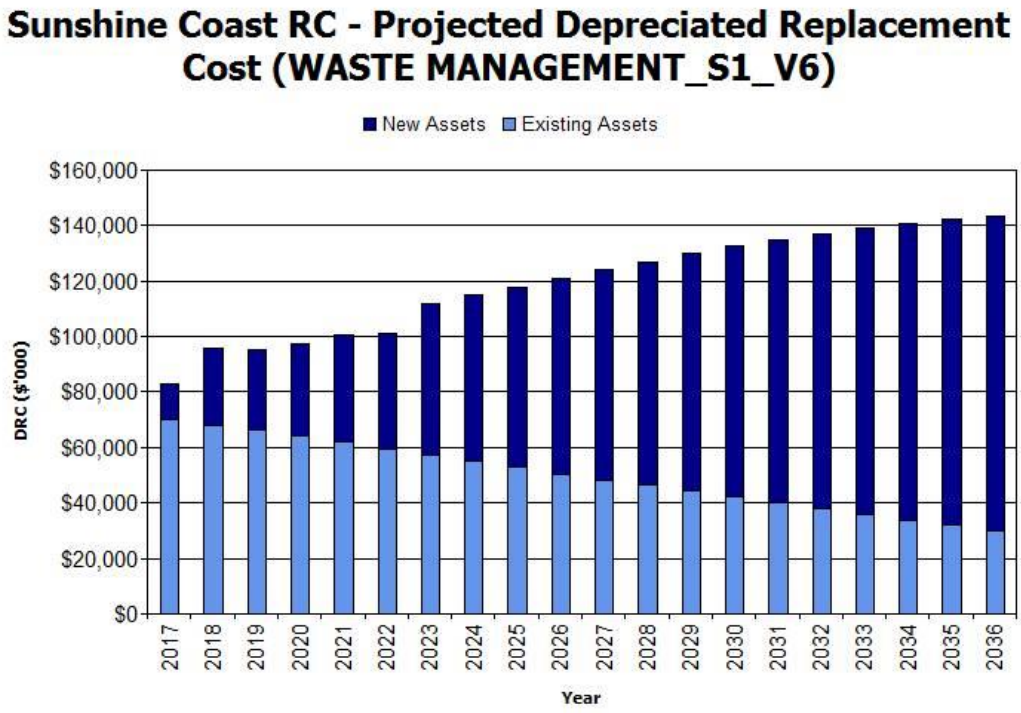


Figure 12 Projected depreciated replacement cost

6.5 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. The key assumptions made in this asset management plan are:

- Waste and Resource Management assets will remain in council ownership throughout the planning period
- All expenditure is stated in dollar values as at 2016/17 with no allowance made for inflation over the planning period
- The value of the assets were adopted from the Finance Asset Information Module (FAIM)

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

- Clarification of asset data and accuracy of captured assets
- Undertaking condition assessments of assets
- Componentisation of assets

The following are recognised as limitations experienced in capturing the financial asset data:

- Accuracy and currency of financial asset information system data (Technology One)
- Review of Chart of Account structure

7 Asset management practices

7.1 Accounting / financial systems

Sunshine Coast Council operates the Technology One system for management of financial information. This system is managed by the Finance and Business Unit. Technology One is interfaced with the Maximo asset management system (see below) to enable the transfer of financial asset information between the two systems.

7.2 Asset management systems

Sunshine Coast Council operates the Maximo asset management system for the management of asset information. The asset management system is linked to the finance system via a software interface.

Asset managers are responsible for maintaining data pertaining to their asset area. Geographical data is held on all assets within ArcGIS to display and edit geographical data.

7.3 Information flow requirements and processes

The key information flows into this asset management plan are:

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

The key information flows from this asset management plan are:

- The assumed Works Program and trends
- The resulting budget, valuation and depreciation projections
- The useful life analysis
- These will impact council's long term financial plan, strategic branch plan, annual budget and departmental business plans and budgets.

7.4 Standards and Guidelines

- International Infrastructure Manual (IIMM 2015)
- International AM Standard ISO 55000
- Asset Management Policy
- Financial Sustainability Plan

8 Plan improvement and monitoring

8.1 Performance measures

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

- The degree to which the required cash flows identified in this asset management plan are incorporated into council's long term financial plan and strategic management plan
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan
- Informed decisions on expenditure allocations with regard to levels of service

8.2 Improvement plan

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

Table 8.2 Improvement plan

Task No	Task	Responsibility	Resources required	Timeline
1.	Review of data integrity	W&RM	Internal	Dec 17
2.	Asset revaluations	SCC & W&RM	Consultant	Jun 30
3.	Condition inspection of Assets & asset validation	SCC & W&RM	Consultant	Dec 17
4.	Review of Asset categories and sub-categories	W&RM	Internal	Dec 17
5.	Further integration with 30 year financial model	W&RM	Internal	Dec 17

8.3 Monitoring and review procedures

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

The Plan has a life of four years and is due for revision and updating within two years of each council election.

Abbreviations

AAAC
Average annual asset consumption

AMP
Asset management plan

ARI
Average recurrence interval

BOD
Biochemical (biological) oxygen demand

CRC
Current replacement cost

CWMS
Community wastewater management systems

DA
Depreciable amount

DoH
Department of Health

EF
Earthworks/formation

IRMP
Infrastructure risk management plan

LCC
Life cycle cost

LCE
Life cycle expenditure

MMS
Maintenance management system

PCI
Pavement condition index

RV
Residual value

SS
Suspended solids

vph
Vehicles per hour

Glossary

Annual service cost (ASC)

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

Asset class

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

Asset condition assessment

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

Asset management

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

Assets

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

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

Average annual asset consumption (AAAC)*

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

Brownfield asset values**

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

Capital expansion expenditure

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

Capital expenditure

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

Capital funding

Funding to pay for capital expenditure.

Capital grants

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

Capital investment expenditure

See capital expenditure definition.

Capital new expenditure

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

Capital renewal expenditure

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

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretional and often does not result in additional revenue unless direct user charges apply. It will increase

operating and maintenance expenditure in the future because of the increase in the council's asset base, e.g. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

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

Class of assets

See asset class definition.

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

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

Current replacement cost (CRC)

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

Current replacement cost 'as new' (CRC)

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

Cyclic maintenance**

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

Depreciable amount

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

Depreciated replacement cost (DRC)

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

Depreciation / amortisation

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

Economic life

See useful life definition.

Expenditure

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

Fair value

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

Greenfield asset values **

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

Heritage asset

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

Impairment loss

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

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives.

They are fixed in place and are often have no market value.

Investment property

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

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

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

Level of service

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

Life cycle cost **

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

Life cycle expenditure **

The life cycle expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year.

Loans / borrowings

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

Maintenance and renewal gap

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

Maintenance and renewal sustainability index

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

Maintenance expenditure

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

Materiality

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

Modern equivalent asset

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

Non-revenue generating investments

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

Operating expenditure

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

Pavement management system

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

Planned maintenance**

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

PMS score

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

Rate of annual asset consumption*

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

Rate of annual asset renewal*

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

Rate of annual asset upgrade*

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

Reactive maintenance

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

Recoverable amount

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

Recurrent expenditure

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

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

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

Renewal

See capital renewal expenditure definition above.

Residual value

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

Revenue generating investments

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

Risk management

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

Section or segment

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

Service potential

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

Service potential remaining*

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

Strategic Management Plan (SMA)**

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

Sub-component

Smaller individual parts that make up a component part.

Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Useful life

Either:

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

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

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

Value in use

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

Source: DVC 2006, Glossary

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

Additional glossary items shown **

References

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

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

Appendices

Appendix A

Beerwah Resource Recovery Centre		
Asset Category	Asset Description	Replacement Value
Buildings	Beerwah Res Rec Ctr_Main Shed	$316,945
Buildings	Beerwah Res Rec Ctr_Main Shed	$675,179
Buildings	Beerwah Res Rec Ctr_Office	$96,494
Buildings	Beerwah Res Rec Ctr_Cat Shed	$13,305
Buildings	Beerwah Res Rec Ctr_Compost Amenity	$22,701
Land	Beerwah_Peachester Road	$213,758
Other Infrastructure	Beerwah Res Rec Ctr_Car Park	$123,390
Other Infrastructure	Beerwah Res Rec Ctr_Hardstand	$38,893
Other Infrastructure	Beerwah Res Rec Ctr_Shade Cloth	$9,830
Other Infrastructure	Beerwah Res Rec Ctr_Fence	$39,157
Other Infrastructure	Beerwah Res Rec Ctr_Tyrewash	$43,538
P&E - General	Beerwah Res Rec Ctr_Storage Containers	$5,727
P&E - General	Beerwah Res Rec Ctr_Water Tanks	$6,810
Total		$1,605,727

Buderim Resource Recovery Centre		
Asset Category	Asset Description	Replacement Value
Buildings	Buderim RRC_Gatehouse Weighbrdge	$38,856
Buildings	Buderim RRC_Workshop	$18,627
Buildings	Buderim RRC_Recycling Shop	$322,324
Buildings	Buderim RRC_First Aid Office	$34,538
Buildings	Buderim RRC_Battery Acid Store Shed	$7,983
Buildings	Buderim RRC_Waste Oil Shed	$13,970
Buildings	Buderim RRC_Primary Sort Area	$1,812,075
Buildings	Buderim RRC_Shop	$810,108
Other Infrastructure	Buderim RRC_Fence Access Rd	$136,581
Other Infrastructure	Buderim RRC_Gravel Roads	$39,206
Other Infrastructure	Buderim RRC_Retaining Walls	$44,799
Other Infrastructure	Buderim RRC_Waste Recycle Area	$382,374
Other Infrastructure	Buderim RRC_Access Road	$451,210
Other Infrastructure	Buderim Transfer Station_Water Tanks	$17,440
Other Infrastructure	Buderim RRC_Stockpile Pad	$721,048
Other Infrastructure	Buderim RRC_Retaining Wall	$25,215
Other Infrastructure	Buderim RRC_Primary Sort Area_Pavement	$271,903
Other Infrastructure	Buderim RRC_Primary Sort Area_Fencing	$42,290
Other Infrastructure	Buderim RRC_Shop_Pavement Base	$162,760
Other Infrastructure	Buderim RRC_Shop_Subbase	$45,736
Other Infrastructure	Buderim RRC_Shop_Surface Asphalt	$136,647
Other Infrastructure	Buderim RRC_Shop_Surface Linemarking	$4,675
Other Infrastructure	Buderim RRC_Shop_Guardrail Safety	$80,074
Other Infrastructure	Buderim RRC_Shop_Pathway	$17,569
Other Infrastructure	Buderim RRC_Shop_Drainage_Subsoil	$21,838
Other Infrastructure	Buderim RRC_Shop_Channel Drains	$1,335
Other Infrastructure	Buderim RRC_Shop_Kerb and Channel	$64,832
Other Infrastructure	Buderim RRC_Shop_Safety Fence	$16,802
Other Infrastructure	Buderim RRC_Shop_Earthworks	$652,369
Other Infrastructure	Buderim RRC_Shop_Field Inlet	$41,008
Other Infrastructure	Buderim RRC_Shop_Gully Pit	$23,884
Other Infrastructure	Buderim RRC_Shop_Headwall	$4,480
Other Infrastructure	Buderim RRC_Shop_Retaining Wall	$157,376
P&E - General	Buderim RRC_Weighbridge	$45,947
P&E - General	Buderim RRC_Gas Plant	$8,440
P&E - General	Buderim RRC_Irrigation	$50,976
P&E - General	Buderim RRC_Security Camera	$6,978
P&E - General	Buderim RRC_Security Camera	$6,978
P&E - General	Buderim RRC_Security Camera	$6,978
P&E - General	Buderim Transfer Station_Honda Generator	$5,676
P&E - General	Buderim RRC_Solar Tracking Units	$54,420
P&E - General	Buderim RRC_Primary Sort Area_Boomgates	$10,056
P&E - General	Buderim RRC_Weighbridge	$368,759
Total		$7,187,143

Caloundra Landfill & Resource Recovery Centre		
Asset Category	Asset Description	Replacement Value
Buildings	Calndra Landfill Res Rec Ctr_Pump Station	$773,512
Buildings	Calndra Landfill Res Rec Ctr_Shed Mach	$36,193
Buildings	Calndra Landfill Res Rec Ctr_Hazard	$31,518
Buildings	Calndra Landfill Res Rec Ctr_Office	$57,564
Buildings	Calndra Landfill Res Rec Ctr_Office	$156,969
Buildings	Calndra Landfill Res Rec Ctr_Shed	$1,007,743
Buildings	Calndra Landfill Res Rec Ctr_Shed Mach	$41,761
Buildings	Calndra Landfill Res Rec Ctr_Office	$301,785
Buildings	Calndra Landfill Res Rec Ctr_Workshop	$185,851
Buildings	Calndra Landfill Res Rec Ctr_Acid Store	$6,051
Buildings	Calndra Landfill Res Rec Ctr_Oil Store	$7,262
Buildings	Calndra Landfill Res Rec Ctr_Acid Store	$6,696
Buildings	Calndra Landfill Res Rec Ctr_Carport	$11,974
Buildings	Calndra Landfill Res Rec Ctr_Roller Door	$13,660
Land	Bells Creek_Pierce Avenue 141-167	$239,869
Other Infrastructure	Calndra Landfill Res Rec Ctr_Int Road	$1,805,804
Other Infrastructure	Calndra Landfill Res Rec Ctr_Bays 4	$279,859
Other Infrastructure	Calndra Landfill Res Rec Ctr_Gazebo	$8,548
Other Infrastructure	Calndra Landfill Res Rec Ctr_Compound	$8,893
Other Infrastructure	Calndra Landfill Res Rec Ctr_Fencing	$102,436
Other Infrastructure	Calndra Landfill Res Rec Ctr_Market	$641,749
Other Infrastructure	Calndra Landfill_Concrete Sorting Pad	$151,290
Other Infrastructure	Calndra Landfill_Leachate_Tanks Pumps	$37,392
Other Infrastructure	Calndra Landfill Res Rec Ctr_Ret Wall	$14,307
Other Infrastructure	Calndra Landfill_Piggy Back Liner	$2,746,411
Other Infrastructure	Calndra Landfill_Construction	$3,358,675
Other Infrastructure	Calndra Landfill Res Rec Ctr_Tank Farm	$366,642
Other Infrastructure	Calndra Landfill Res Rec Ctr_Drive Thru	$13,048
Other Infrastructure	Calndra Landfill Res Rec Ctr_Power	$29,947
Other Infrastructure	Caloundra Landfill_Fencing_Chain Wire	$21,647
Other Infrastructure	Caloundra Landfill and Resource Recovery	$10,089,347
Other Infrastructure	Caloundra Landfill and Resource Recovery	$730,812
Other Infrastructure	Caloundra Landfill and Resource Recovery	$114,189
Other Infrastructure	Caloundra Landfill and Resource Recovery	$17,763
Other Infrastructure	Caloundra Landfill and Resource Recovery	$10,150
Other Infrastructure	Caloundra Landfill and Resource Recovery	$63,439
Other Infrastructure	Caloundra Landfill and Resource Recovery	$126,877
Other Infrastructure	Caloundra Landfill and Resource Recovery	$203,003
Other Infrastructure	Caloundra Landfill and Resource Recovery	$101,502
Other Infrastructure	Caloundra Landfill and Resource Recovery	$4,526,511
Other Infrastructure	Caloundra Landfill and Resource Recovery	$436,175
Other Infrastructure	Caloundra Landfill and Resource Recovery	$811,692
Other Infrastructure	Caloundra Landfill and Resource Recovery	$17,714
Other Infrastructure	Caloundra Landfill and Resource Recovery	$9,023
Other Infrastructure	Caloundra Landfill and Resource Recovery	$189,811
Other Infrastructure	Cal Landfill_Surface_Asphalt_Cell 9 Acce	$55,252
Other Infrastructure	Cal Landfill_Pavement_Base_Cell 9 Access	$32,667
Other Infrastructure	Cal Landfill_Pavement_SubBase_Cell 9 Acc	$37,274
Other Infrastructure	Cal Landfill_Drainage_Subsoil_Cell 9 Acc	$13,428
Other Infrastructure	Cal Landfill_Kerb and Channel_Cell 9 Acc	$23,477
Other Infrastructure	Cal Landfill_Earthworks_Cell 9 Access Ro	$81,548
Other Infrastructure	Cal Landfill_Culvert_Cell 9 Access Road	$17,278
Other Infrastructure	Cal Landfill_Pits_Cell 9 Access Road	$7,328
Other Infrastructure	Caloundra Landfill and Resource Recovery	$1,088,395
Other Infrastructure	Caloundra Landfill and Resource Recovery	$39,212
Other Infrastructure	Caloundra Landfill and Resource Recovery	$26,850
Other Infrastructure	Caloundra Landfill and Resource Recovery	$39,212
Other Infrastructure	Caloundra Landfill and Resource Recovery	$303,780
Other Infrastructure	Caloundra Landfill and Resource Recovery	$857,925
P&E - General	Calndra Landfill Res Rec Ctr_Wbrdg Out	$103,934
P&E - General	Calndra Landfill Res Rec Ctr_Wbrdg In	$103,934
P&E - General	Calndra Landfill Res Rec Ctr_Storage	$5,645
P&E - General	Calndra Landfill Res Rec Ctr_Weather Stn	$7,944
P&E - General	Calndra Landfill Res Rec Ctr_RoRo Bins	$33,354
P&E - General	Caloundra Landfill and Resource Recovery	$30,608
P&E - General	Caloundra Landfill and Resource Recovery	$26,020
Total		$32,848,129

Kenilworth Transfer Station		
Asset Category	Asset Description	Replacement Value
Other Infrastructure	Kenilworth Transfer Station_Fencing	$8,930
P&E - General	Kenilworth Transfer Station_Transfer Bin	$16,204
Total		$25,134

Mapleton Transfer Station		
Asset Category	Asset Description	Replacement Value
Buildings	Mapleton Transfer Station_Building	$8,949
Land	Mapleton_Delicia Road 111_Mapleton Tip	$326,311
Other Infrastructure	Mapleton Transfer Station_Retaining Wall	$14,078
Other Infrastructure	Mapleton Transfer Station_Fencing	$13,749
Other Infrastructure	Mapleton Transfer Station_Batter	$300,987
P&E - General	Mapleton Transfer Station_Transfer Bin	$15,141
P&E - General	Mapleton Transfer Station_Transfer Bin	$15,141
Total		$694,357

Nambour Landfill		
Asset Category	Asset Description	Replacement Value
Buildings	Nambour Res Rec Ctr_Environ Education	$98,951
Buildings	Nambour Res Rec Ctr_Recycling Depot	$1,921,905
Buildings	Nambour Res Rec Ctr_Gatehouse Weighbrdge	$28,356
Buildings	Nambour Res Rec Ctr_Building	$65,626
Buildings	Nambour Res Rec Ctr_Chemical Storage	$8,870
Buildings	Nambour Res Rec Ctr_Waste Oil Shed	$14,414
Buildings	Nambour Res Rec Ctr_Education Ctr Build	$245,073
Buildings	Nambour Landfill_RRC Earthworks	$2,227,608
Buildings	Nambour Landfill_Shed_Bli Bli_Cooney Rd	$199,351
Buildings	Nambour Res Rec Ctr_Toilet	$70,267
Buildings	Bli Bli Future Waste Site_Dwelling	$96,600
Buildings	Bli Bli Future Waste Site_Carport	$8,000
Buildings	Bli Bli Future Waste Site_Gazebo_Bli Bli	$10,000
Buildings	Bli Bli Future Waste Site_Machinery Shed	$30,000
Buildings	Bli Bli Future Waste Site_Garage_Bli Bli	$15,000
Buildings	Bli Bli Future Waste Site_Shed_Bli Bli	$20,000
Buildings	Bli Bli Future Waste Site_Workshop	$20,000
Land	Bli Bli_Cooney Road 66	$3,892,412
Land	Bli Bli_Cooney Road 50_Land Fill Develop	$250,522
Land	Nambour_Cooney Road 26 Archives Building	$950,161
Land	Bli Bli_Cooney Road 18	$2,906,833
Land	Bli Bli_Cooney road 40_Bli Bli Tip	$792,102
Land	Bli Bli_Bli Bli Road 586_Future Waste	$1,428,140
Other Infrastructure	Nambour Res Rec Ctr_Earthworks	$2,861,024
Other Infrastructure	Nambour Res Rec Ctr_Fencing	$49,968
Other Infrastructure	Nambour Res Rec Ctr_Roads	$269,896
Other Infrastructure	Nambour Res Rec Ctr_Fencing	$11,452
Other Infrastructure	Nambour Landfill_Stage 4 Liner_Cell 4	$959,514
Other Infrastructure	Nambour Res Rec Ctr_Tank Shelter Leach	$100,368
Other Infrastructure	Nambour Landfill_Backgr Monitor Bore	$10,405
Other Infrastructure	Nambour Landfill_Boomgates	$12,608
Other Infrastructure	Nambour Landfill_Landfill Cell 5.1	$8,536,710
Other Infrastructure	Nambour Landfill_Landfill Cell 5.2	$6,110,621
Other Infrastructure	Nambour Landfill_Sedimentation_Inflow	$793,658
Other Infrastructure	Nambour Landfill_Sedimentation_HEB	$142,169
Other Infrastructure	Nambour Landfill_Sedimentation_ifod	$27,878
Other Infrastructure	Nambour Landfill_Sedimentation_Turbclear	$8,363
Other Infrastructure	Nambour Landfill_Sedimentation_Decant	$10,725
Other Infrastructure	Nambour Landfill_Sedimentation_Telemetry	$27,878
Other Infrastructure	Nambour Landfill_Sedimentation_Fencing	$12,834
Other Infrastructure	Nambour Landfill_Revetment Wall	$32,904
Other Infrastructure	Nambour Landfill_Access Road_Pavement_Ba	$44,639
Other Infrastructure	Nambour Landfill_Access Road_Surface_Asp	$70,891
P&E - General	Nambour Res Rec Ctr_Material Rec Facilty	$2,929,600
P&E - General	Nambour Res Rec Ctr_CCTV	$15,048
P&E - General	Nambour Res Rec Ctr_Leachate Tank	$158,772
P&E - General	Nambour Landfill_Honda Generator	$5,831
Total		$38,503,948

Sippy Creek Depot		
Asset Category	Asset Description	Replacement Value
Buildings	Sippy Downs Waste Mngmnt_Amenities	$86,455
Buildings	Sippy Downs Waste Mngmnt_Shed	$156,686
Buildings	Sippy Downs Waste Mngmnt_305 Bay She	$219,838
Buildings	Sippy Downs Waste Mngmnt_4 Bay Shed	$230,186
Buildings	Sippy Downs Waste Mngmnt_Admin Build	$329,927
Other Infrastructure	Sippy Downs Waste Mngmnt_Fencing	$23,639
Other Infrastructure	Sippy Downs Waste Mngmnt_Highbay 4	$297,845
Other Infrastructure	Sippy Downs Waste Mngmnt_Internal Rd	$142,237
Total		$1,486,814

Regional Assets		
Asset Category	Asset Description	Replacement Value
P&E - General	Water Monitoring Equipment_GPS Aquameter	$11,719
P&E - General	Water Monitoring Equipment_GPS Aquameter	$5,655
Public Place Bin	Various Regionally	$834,729
Total		$852,103

Sustainability Park		
Asset Category	Asset Description	Replacement Value
Land	Bells Creek_Unnamed Road_Bells Creek Tip	$2,844,442

Witta Resource Recovery Centre		
Asset Category	Asset Description	Replacement Value
Land	Witta_Ansell Road_Witta Tip	$108,093
Other Infrastructure	Witta Transfer Station_Hardstand	$143,305
Other Infrastructure	Witta Transfer Station_Internal Road	$145,946
Other Infrastructure	Witta Transfer Station_Retaining Wall	$19,121
Total		$416,465

Yandina Transfer Station		
Asset Category	Asset Description	Replacement Value
Other Infrastructure	Yandina Transfer Station_Internal Road	$25,406
P&E - General	Yandina Transfer Station_Transfer Bin	$16,454
P&E - General	Yandina Transfer Station_Transfer Bin	$16,454
Total		$58,314

Conondale Landfill		
Asset Category	Asset Description	Replacement Value
Land	Conondale_Appaloosa Drive_Tip	$254,017

Coolum Landfill		
Asset Category	Asset Description	Replacement Value
Other Infrastructure	Coolum Landfill Res Rec Ctr_Access Road	$41,177
Land	Yandina Creek_Toolborough Road 8_Park	$418,966
Land	Yandina Creek_Toolborough Road_Reserve	$305,451
Total		$765,593

Glass House Mountains Landfill		
Asset Category	Asset Description	Replacement Value
Land	Glass House Mts_Mt Beerwah Rd 101-119	$244,019

Appendix B

Waste and Resource Management - Capital Program											
Capital Job	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	Grand Total
Beerwah RRC Stage 2 cooling and ventilation	$47,000										$47,000
Buderim RRC upgrades		$2,500,000									$2,500,000
Caloundra Bio Basin Construction		$400,000									$400,000
Caloundra Bio Basin Design	$75,000										$75,000
Nambour RRC Construct Shop, Workshops					$1,000,000						$1,000,000
Nambour RRC Permanent Ctre Construction		$4,510,000									$4,510,000
Nambour RRC Permanent Ctre Design	$400,000										$400,000
WOR - Unscheduled Improvements to RRC	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$1,000,000
WOR - Unscheduled renewals	$70,000	$70,000	$70,000	$70,000	$70,000	$70,000	$70,000	$70,000	$70,000	$70,000	$700,000
Buderim sealing of road to bulk recycling roundabout construct		$350,000									$350,000
Buderim sealing of road to bulk recycling roundabout design	$35,000										$35,000
WOR staged replacement of 30 cubic metre RORO bins	$100,000	$100,000									$200,000
WOR staged replacement of s oil and chemical sheds	$100,000										$100,000
Sippy Creek Collections Depot car park	$294,000										$294,000
Maroochy PDA Collection Station Design Construct	$3,000,000	$3,000,000									$6,000,000
Buderim Bio Basin Construction		$400,000									$400,000
Buderim Bio Basin Design	$75,000										$75,000
Caloundra Construction of cell 10	$3,500,000										$3,500,000
Caloundra Construction of cell 11				$3,500,000							$3,500,000
Caloundra Construction of cell 12							$3,500,000				$3,500,000
Nambour Cells 5.1, 5.2 cutface liner	$354,172	$365,332	$315,242	$290,760	$117,870	$293,528	$111,641				$1,848,545
Nambour Cells 5.1, 5.2 riser	$72,509	$72,509	$72,509	$48,339	$48,339	$12,085	$12,085				$338,375
Nambour Landfill expansion 18 Cooney	$280,000		$7,050,000	$750,000			$110,000	$5,800,000			$13,990,000
Nambour Sewer connection	$2,700,134										$2,700,134
Development Assessment, Approvals						$1,000,000	$1,000,000	$250,000	$250,000	$250,000	$2,750,000
New Landfill facility								$3,000,000	$7,000,000	$7,000,000	$17,000,000
Site Investigation and Acquisition				$4,000,000	$2,000,000						$6,000,000
WOR Land Acqusition						$3,000,000					$3,000,000
Nambour cell 5.3 construction	$1,450,000										$1,450,000
Caloundra bulk stockpile entrance roundabout construction	$350,000										$350,000
Totals	$13,002,815	$11,867,841	$7,607,751	$8,759,099	$3,336,209	$4,475,613	$4,903,726	$9,220,000	$7,420,000	$7,420,000	$78,013,054

*Current as at 30 June 2016

This Page Intentionally Left Blank

Appendix C

Rehabilitation Costs Forecast

TOTAL REHABILITATION C(	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Buderim	$173,353	$182,581	$187,146	$191,825	$196,620	$193,215	$258,965	$202,996	$208,071	$213,273	$285,849	$224,070	$229,672	$235,414	$241,299	$247,331	$253,515	$259,853
Coolum	$78,797	$683,652	$151,111	$126,603	$129,769	$122,315	$155,833	$128,507	$131,719	$135,012	$172,010	$141,847	$145,394	$149,028	$189,867	$156,573	$160,487	$164,500
Kenilworth	$2,627	$7,969	$4,084	$4,186	$4,291	$4,398	$4,508	$4,621	$4,736	$4,855	$4,976	$5,100	$5,228	-	-	-	-	-
Eumundi	-	$31,984	$16,226	$16,632	$17,047	$17,474	$17,911	$18,358	$18,817	$19,288	$19,770	$8,271	$8,478	$8,690	$8,907	$9,130	$9,358	$9,592
Mapleton	$2,627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Woombye	$2,627	$7,323	$7,506	$7,694	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Duck Hole Creek	$31,519	$19,599	$20,089	$20,592	$11,597	$11,887	$12,184	$12,489	$12,801	$13,121	$13,449	$13,785	$14,130	$14,483	-	-	-	-
Glasshouse	-	$51,152	$17,109	$17,537	$17,975	$18,425	$18,885	$19,357	$19,841	$20,337	$20,846	$21,367	$21,901	$22,449	$23,010	$23,585	$24,175	$24,779
Pierce Av enue	$1,881,394	$1,346,113	-	-	-	-	-	-	-	-	-	-	-	$4,791,637	$89,070	$136,946	$218,352	$143,879
Nambour	$168,100	-	-	-	-	-	-	-	$2,588,280	$144,330	$80,693	$82,711	$155,427	$86,898	$89,070	$213,027	$140,369	$143,879
Landsborough	-	$6,461	$4,415	$4,526	$4,639	$4,755	$4,874	$4,995	$5,120	$5,248	$5,380	$5,514	$5,652	$5,793	$5,938	-	-	-
Witta	-	$16,153	$6,623	$6,788	$6,958	$7,132	$7,310	$7,493	$7,681	$7,873	$8,069	-	-	-	-	-	-	-
TOTAL	**$2,341,043**	**$2,352,989**	**$414,310**	**$396,382**	**$388,896**	**$379,600**	**$480,470**	**$398,817**	**$2,997,067**	**$563,337**	**$611,042**	**$502,666**	**$585,881**	**$5,314,391**	**$647,161**	**$786,591**	**$806,256**	**$746,480**

This Page Intentionally Left Blank

Appendix D

Likelihood	Economic	Consequences: Insignificant None to minimal impact or inconvenience to single business	Minor Inconvenience to a group of businesses in one sector or locally within the SCRC region	Moderate Group of businesses in one sector or locally within the SCRC region put at risk	Major A minor industry or whole sector of the SCRC region put at risk	Catastrophic One or more major industries (eg Tourism, Agriculture, Education, Construction, Manufacturing, Retail, Fishing) within the SCRC region threatened
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Financial (Council)	Consequences: Insignificant Zero $ loss – low (ie.<$100K)	Minor Low to Medium $ loss (ie. $100K-$1M)	Moderate Medium to High $ loss (ie.$1M-$10M)	Major Major $ loss (ie. $10M-$25M)	Catastrophic Huge $ loss (ie. >$25M)
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Legislative (Legal & Statutory)	Consequences: Insignificant None or minimal breaches of contractual or legislative obligations	Minor Breach of contractual or legislative obligations identified – request to comply but no fine imposed	Moderate Significant breach of contractual or legislative obligations leading to imposed fine	Major Major breach of contractual or legislative obligations leading to significant fine and/or imprisonment	Catastrophic Complete contractual failure or Massive legislative breach leading to large fines and possible imprisonment for Council's elected members and/or officers
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Environmental	Consequences: Insignificant None or minimal impact on the environment and/or preferred elements of place	Minor Consequences can be readily absorbed but management effort is still required to minimise impacts Minor impact on preferred elements of place	Moderate Significant event which can be managed under normal procedures Significant impact on some preferred elements of place	Major Critical event that, with proper management, will be endured. Critical impacts on multiple preferred elements of place	Catastrophic Disaster with potential to lead to collapse. Totally incongruent with preferred elements of place
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Community Social	Consequences: Insignificant None to minimal complaints about project – primarily acceptance & approval	Minor Some inconvenience to community	Moderate Considerable disruption or inconvenience to sectors of the community and negative press coverage	Major Public protestation and dislocation. Potential for significant psychological or physical harm to sectors of the community, damage to relationships and loss of support	Catastrophic Civil commotion and riot
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Political	Consequences				
		Insignificant Concerns expressed but not acted upon	Minor Little impact beyond individual Councillor	Moderate Strained relations at Councillor level No change to normal democratic process Internal Councillor disharmony	Major High levels of dysfunctional operations at Councillor level Fragmented, divisive and indecisive decision making	Catastrophic Loss of elected members from office Severed relationships with other partners and agencies
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Workplace & Public Safety	Consequences				
		Insignificant None or very minimal Injuries	Minor Minor injuries resulting in first aid treatment only	Moderate Moderate injuries where medical treatment is required	Major Extensive injuries requiring major medical treatment	Catastrophic Life threatening injuries or death
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Business Activities	Consequences				
		Insignificant None or minimal disruption to business activities	Minor Minor disruption to business activities	Moderate Moderate to significant to business activities	Major Major disruption to business activities	Catastrophic Severe disruption to business activities
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Asset	Consequences				
		Insignificant None or minimal impact on assets. Maybe dealt with routine maintenance	Minor Minor impact on assets managed with minimal efforts. Some restrictions in capability	Moderate Some impact on assets managed with programmed response. Isolated loss of capability	Major Major impact on assets requiring a programmed repair/replacement response. Limited capability	Catastrophic Extensive impact on assets requiring a massive replacement or reconstruction effort. Total loss of capability
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Likelihood	Reputation / Public Image	Consequences				
		Insignificant None or minimal impact on Council's Reputation	Minor Minor Adverse impact on Council's Reputation	Moderate Some impact on Council's Reputation, some sectors of the community losing confidence in Council	Major Major adverse impact on Council's Reputation, large sectors of the community losing confidence on Council	Catastrophic Extensive damage to Council's Reputation resulting in a loss of confidence by the community and other stakeholders
	Almost Certain *is expected to occur at most times (eg several times a year)*	M-28	M-40	H-60	E-88	E-100
	Likely *will probably occur at most times(eg about once per year)*	L-16	M-36	H-56	E-84	E-96
	Possible *might occur at some time(eg once every 5 years)*	L-12	M-32	M-52	H-72	E-92
	Unlikely *could occur at some time(eg once every 5 to 15 years)*	L-8	L-24	M-48	H-68	H-80
	Rare *may occur in rare circumstances(eg unlikely during the next 15 years)*	L-4	L-20	M-44	H-64	H-76

Sunshine Coast COUNCIL

www.sunshinecoast.qld.gov.au
mail@sunshinecoast.qld.gov.au
T 07 5475 7272 **F** 07 5475 7277
Locked Bag 72 Sunshine Coast Mail Centre Qld 4560

72140 05/2017