Nambucca Valley Council

Other Structures

Other Infrastructure

Asset Management Plan (Concise)

Document Control	Asset Management Plan				
Document ID :					
Rev No	**Date**	**Revision Details**	**Author**	**Reviewe**	**Approve**
1	December, 2021	First Draft	Asset Engineer	Manager Assets	
2	April 2022	Revised for 2023 - 2042	Asset Engineer	Manager Assets	

The entity can choose either template to write/update their plan regardless of their level of asset management maturity and in some cases may even choose to use only the Executive Summary.

The illustrated content is suggested only and users should feel free to omit content as preferred (e.g. where info not currently available).

This Asset Management Plan may be used as a supporting document to inform an overarching Strategic Asset Management Plan.

DISCLAIMER: This draft report has been prepared for educational purposes only as part of undertaking a Professional Certificate in Asset Management Planning. The data and conclusions have not been reviewed for accuracy nor endorsed or adopted by the organisation. DELETE if not Applicable

Contents

1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

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

This asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services generally over a 20-year planning period.

This plan covers the infrastructure assets that provide Other Structures and Other Infrastructure.

1.2 Asset Description

These assets include:

The Other Structures network comprises:

- Bollards, Cemetery Structures, Cultural Articles, Fences & Gates, Light Poles and Lighting, Railing, Seating, Shelters (not picnic), Shade Sales, Signs, Solar Bins, Solid waste management, Other.

The Other Infrastructure network comprises:

- Access ramps & Steps, Boardwalks and Footbridges, Boat ramps and Jetties, Pontoons, Retaining walls, Revetment works, Sea walls, Viewing platforms, other.

These infrastructure assets have significant value estimated at Other Structures $8.8M Other Infrastructure $24.2M.

1.3 Levels of Service

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

The main service consequences of the Planned Budget include:

- Recreational waterfront access
- Control over slope instability
- Waste management

1.4 Future Demand

The main demands for new services are created by:

- Population growth and new development
- Demand for improved access to beaches and reserves
- Natural disasters requiring slope stability treatments and waterfront protection

These will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management.

Demand management practices include non-asset solutions, insuring against risks and managing failures.

- Monitor development applications in new growth areas leading to demand for extended services.
- Monitor demand for changes travel mode and desire for access to an extended pedestrian network including boardwalks, platforms and bridges.
- Monitor the condition and stability of vulnerable slopes and foreshore.

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operation, maintenance, renewal, acquisition, and disposal of assets over the 10-year planning period is $3,781,227 or $378,123 on average per year for Other Structures and $1,965,798 or $196,580 on average per year for Other Infrastructure.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for this period is $3,795,427 or $379,543 on average per year for Other Structures and $1,965,798 or $196,580 on average per year for Other Infrastructure as per the long term financial plan or budget forecast. This is 100% (Other Structures) and is 100% (Other Infrastructure) of the cost to sustain the current level of service at the lowest lifecycle cost.

The infrastructure reality is that only what is funded in the long term financial plan can be provided. The emphasis of the Asset Management Plan is to communicate the consequences that this will have on the service provided and risks, so that decision making is informed.

The anticipated planned budget (Other Structures) leaves a surplus of $1,420 on average per year of the forecast lifecycle costs required to provide services in the AM Plan compared with planned budget currently included in the Long Term Financial Plan. This data is likely skewed by the inclusion of the waste management waste cell No.3 which is nearing its end of life and while identified as an asset will not be renewed. The overall Long Term Financial costs and budget is depicted shown in the figure below.

Forecast Lifecycle Costs and Planned Budget- Other Structures

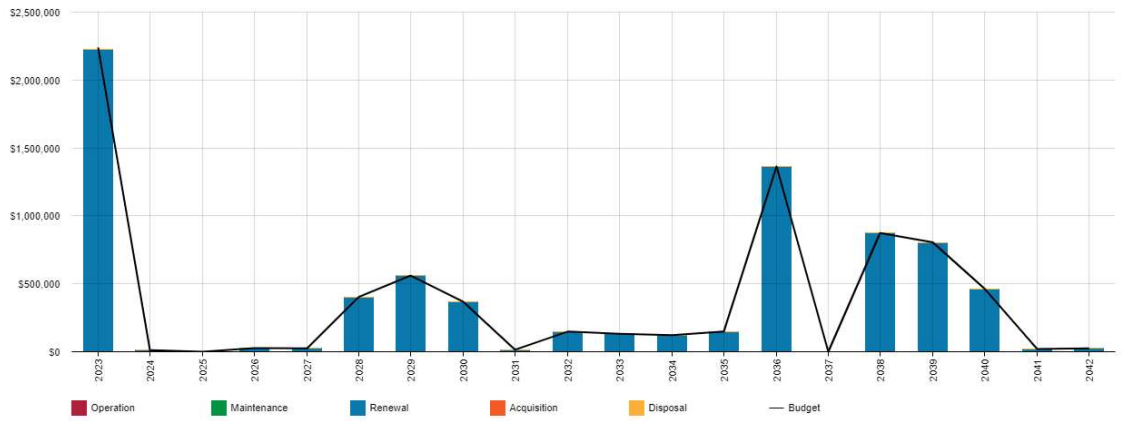


Figure Values are in current (real) dollars.

The anticipated planned budget (Other Infrastructure) leaves a nil balance on an average per year of the forecast lifecycle costs required to provide services in the AM Plan compared with planned budget currently included in the Long Term Financial Plan. This is shown in the figure below.

Forecast Lifecycle Costs and Planned Budget – Other Infrastructure

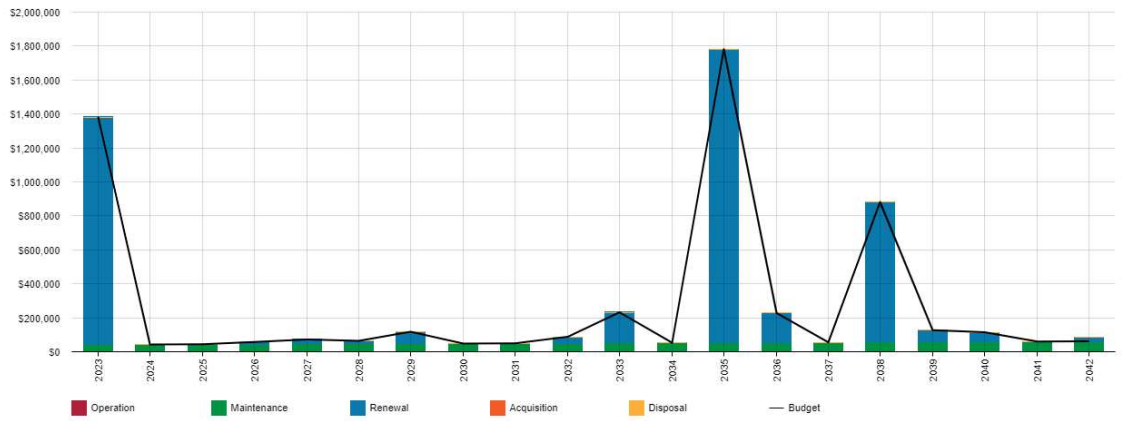


Figure Values are in current (real) dollars.

We plan to provide Other Structures and Other Infrastructure services for the following:

- Operation, maintenance, renewal and upgrade of Other Structures and Other Infrastructure to meet service levels set by in annual budgets.

- Council intends to service and maintain the other structures and other infrastructure whilst reviewing its performance and useful life against its age, within the 10-year planning period.

1.6.2 Managing the Risks

Our present budget levels are sufficient to continue to manage risks in the medium term.

The main risk consequences are:

- Provision of waste services to match population growth and expectations
- Assets remain operational and fit for purpose against age and wear
- Poor quality finish

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

- Monitor growth in the urban areas
- Monitor condition and consequential change to useful life
- Staff training

1.7 Asset Management Practices

Our systems to manage assets include:

- Council uses Civica's Authority Enterprise Software Suite as the financial system
- Council utilises a combination of Excel spread sheets, the Capital Value Record Management component in the Authority corporate software package and the Reflect program

Assets requiring renewal/replacement are identified from either the asset register or an alternative method. These methods are part of the Lifecycle Model.

- Asset Register data is used to forecast the renewal costs this is done using the acquisition year and the useful life, this information is modified using asset condition information with particular reference to remaining useful life.

The Asset Register or Alternate Method was used to forecast the renewal life cycle costs for this asset management plan.

1.8 Monitoring and Improvement Program

The next steps resulting from this asset management plan to improve asset management practices are:

- Reassess asset condition and review useful life
- Establish levels of Service through community consultation
- Further analysis of demand growth factors
- Establish renewal priority ranking criteria
- Further develop asset registers utilising asset management plans
- Develop maintenance response levels of service

2.0 Introduction

2.1 Background

This asset management plan communicates the requirements for the sustainable delivery of services through management of assets, compliance with regulatory requirements, and required funding to provide the appropriate levels of service over the long term planning period.

The asset management plan is to be read with the Council's planning documents. This should include the Asset Management Policy and Asset Management Strategy, where developed, along with other key planning documents:

- Asset Management Policy
- Asset Management Strategy
- Asset Management Plans Summary

Comment on the current status of Asset Management in the Organisation.

The infrastructure assets covered by this asset management plan include Other Structures and Other Infrastructure. For a detailed summary of the assets covered in this asset management plan refer to Table in Section 5.

These assets are used to provide a broad range of services, including:

The Other Structures network comprises:

- Bollards, Cemetery Structures, Cultural Articles, Fences & Gates, Light Poles and Lighting, Railing, Seating, Shelters (not picnic), Shade Sales, Signs, Solar Bins, Solid waste management, Other.

The Other Infrastructure network comprises:

- Access ramps & Steps, Boardwalks and Footbridges, Boat ramps and Jetties, Pontoons, Retaining walls, Revetment works, Sea walls, Viewing platforms, other.

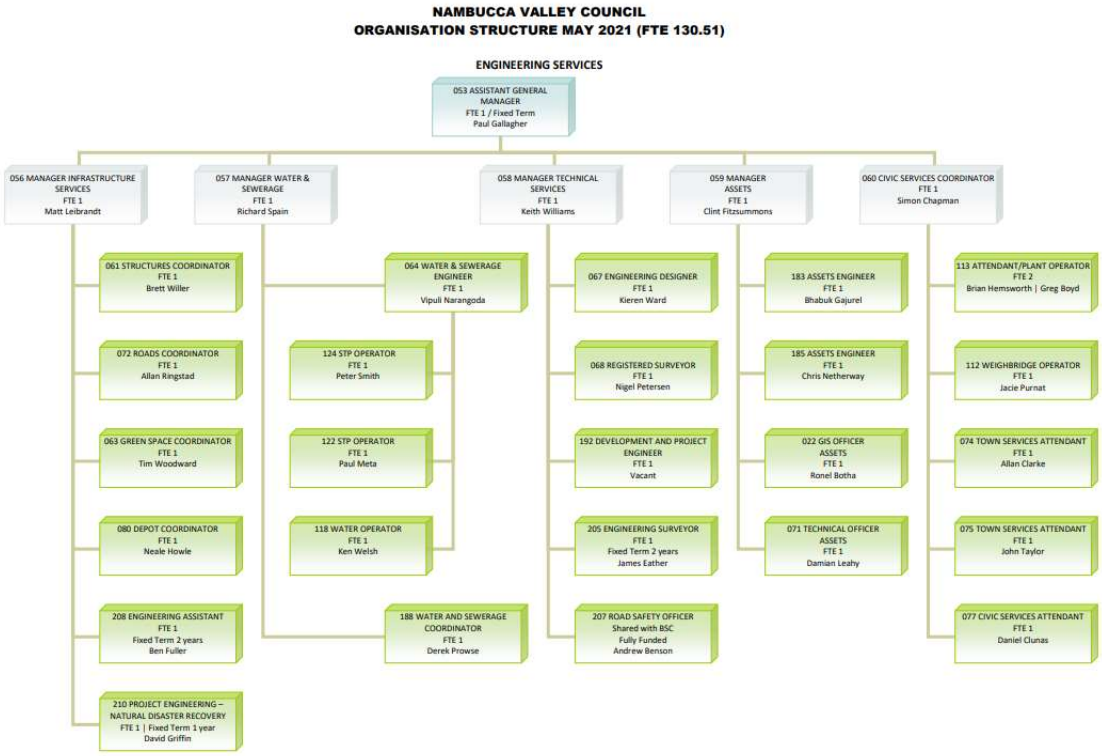
The infrastructure assets included in this plan have a total replacement value of insert Other Structures $8.8M Other Infrastructure $24.2M.

Key stakeholders in the preparation and implementation of this asset management plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	▪ Represent needs of community/shareholders, ▪ Allocate resources to meet planning objectives in providing services while managing risks, ▪ Ensure service sustainable. ▪ Approval of the Asset Management Plan
General Manager	▪ Ensure Asset Management Plan is aligned with the Community Strategic Plan
Assistant General Manager – Engineering Services	▪ Review and endorse for Council adoption ▪ Manage organisational operational activities and future strategic planning direction to ensure sustainability
Manager Assets	▪ Review, recommend and report ▪ Recommend Service Level Standards and input to Long Term Financial Plans ▪ Manage the program of works (Capital and Maintenance)
Assets Section Team	▪ Prepare review and update Asset Management Plans ▪ Ensure asset condition and performance is measured and maintain accurate Unit Rates for the revaluation process ▪ Configure and develop mobile technology to ensure asset data capture is accurate and comprehensive for maintaining asset registers
GIS Officer	▪ Maintain spatial data and provide spatial information, assist in the development and management of mobile web technology
Manager Infrastructure Services	▪ Organise the delivery of maintenance & capital services
Chief Financial Officer	▪ Long Term Financial Plans and operational finance data
Community	▪ End users of the services

Our organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Ownership

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

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

Key elements of the planning framework are

- Levels of service – specifies the services and levels of service to be provided,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Lifecycle management – how to manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices – how we manage provision of the services,
- Monitoring – how the plan will be monitored to ensure objectives are met,
- Asset management improvement plan – how we increase asset management maturity.

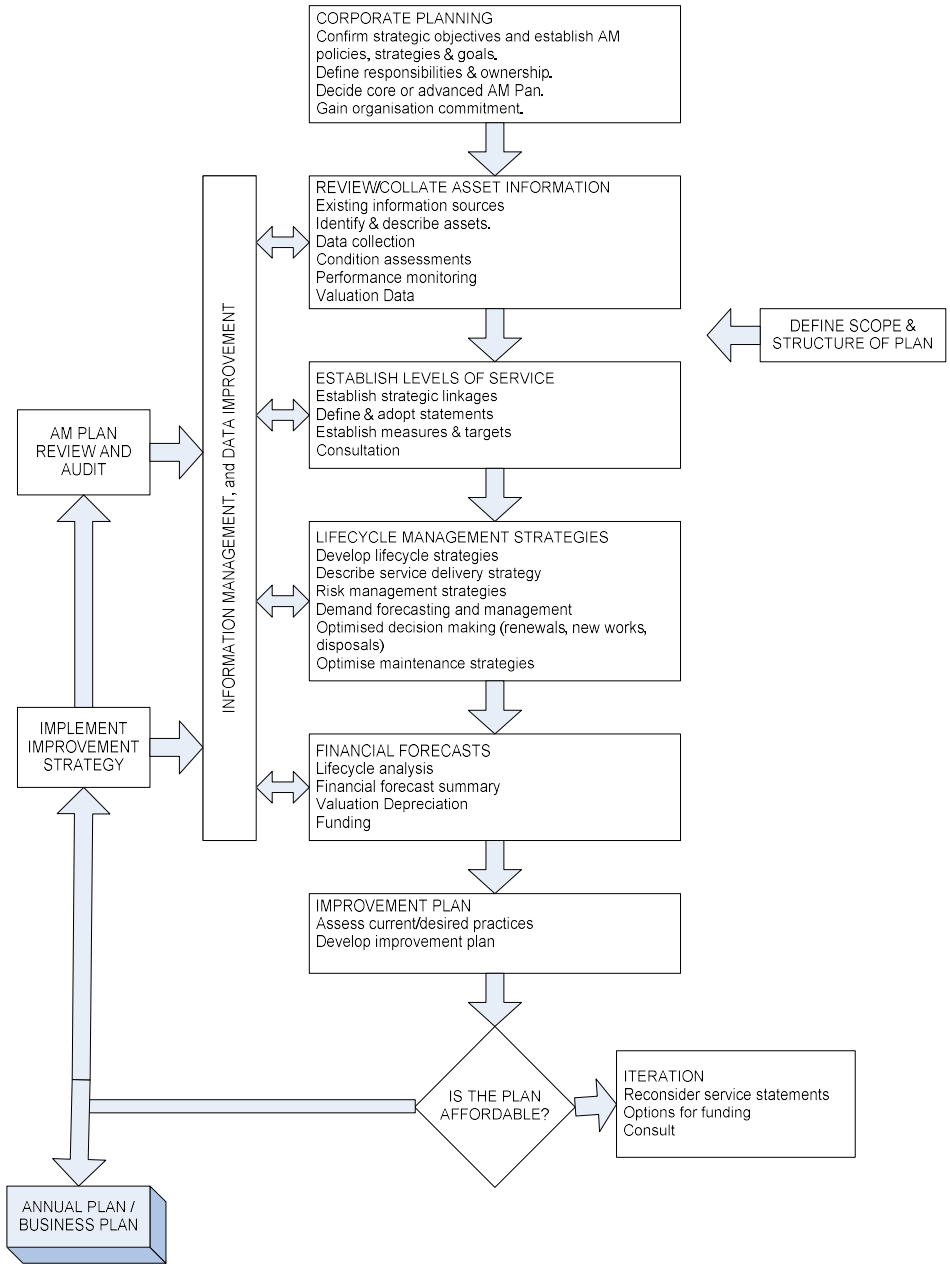
Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 [1]
- ISO 55000[2]

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

Road Map for preparing an Asset Management Plan
Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11

[1] Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2| 13
[2] ISO 55000 Overview, principles and terminology


CORPORATE PLANNING
Confirm strategic objectives and establish AM policies, strategies & goals.
Define responsibilities & ownership.
Decide core or advanced AM Pan.
Gain organisation commitment.
REVIEW/COLLATE ASSET INFORMATION
Existing information sources
Identify & describe assets.
Data collection
Condition assessments
Performance monitoring
Valuation Data
DEFINE SCOPE & STRUCTURE OF PLAN
ESTABLISH LEVELS OF SERVICE
Establish strategic linkages
Define & adopt statements
Establish measures & targets
Consultation
AM PLAN REVIEW AND AUDIT
INFORMATION MANAGEMENT, and DATA IMPROVEMENT
LIFECYCLE MANAGEMENT STRATEGIES
Develop lifecycle strategies
Describe service delivery strategy
Risk management strategies
Demand forecasting and management
Optimised decision making (renewals, new works, disposals)
Optimise maintenance strategies
IMPLEMENT IMPROVEMENT STRATEGY
FINANCIAL FORECASTS
Lifecycle analysis
Financial forecast summary
Valuation Depreciation
Funding
IMPROVEMENT PLAN
Assess current/desired practices
Develop improvement plan
IS THE PLAN AFFORDABLE?
ITERATION
Reconsider service statements
Options for funding
Consult
ANNUAL PLAN / BUSINESS PLAN

3.0 LEVELS OF SERVICE

3.1 Customer Research and Expectations

Nambucca Shire Council Community Survey was undertaken in 2021. Table 3.1 summarises the results from our Customer Satisfaction Survey.

Table 3.1: Customer Satisfaction Survey Levels

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Coastal and beach access			✓		
Waste Management			✓		

3.2 Strategic and Corporate Goals

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

Our vision is:

Nambucca Valley – Living at its best

Our mission is:

The Nambucca Valley will value and protect its natural environment, maintain its assets and infrastructure and develop opportunities for its people

Strategic goals have been set by the Council. The relevant goals and objectives and how these are addressed in this asset management plan are summarised in Table 3.2.

Table 3.2: Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in the AM Plan
Documented Levels of Service	Service levels to be provided and the costs of providing the service	Community consultation
Maintain assets	Provide and maintain assets which meet the needs of the Shire.	Establishing a maintenance and renewal program that ensures provision of adequate levels of service from Other Structures and Other Infrastructure assets.
Appropriate services	To have a community where services reflect the needs of the population.	Taking into account community expectations when setting levels of service for Other Structures and Other Infrastructure assets.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the Other Structures and Other Infrastructure service are outlined in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1993	An Act that 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.
Asset Management Policy	This Policy sets out the principles for managing Council Assets
Roads Act 1993	Defines rite of passage on public roads and rights of property owners adjoining public roads. Confers the authority of the road authority and provides for road classifications.
Fisheries Management Act 1994	Aims to conserve threatened species, populations and ecological communities of fish and marine vegetation whilst promoting ecologically sustainable development, including the conservation of biodiversity.
Environmental Planning and Assessment Act 1997	An Act to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development
Heritage Act 1977	Define state and local heritage significance place, building, work, relic, moveable object or precinct
Native Vegetation Act 2003	Prevent broad scale clearing unless it improves or maintains environmental outcomes.
Biodiversity Conservation Act 2016	An Act to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development
Work Health and Safety Act	Secures and promotes health, safety and welfare of people at work
Australian Accounting Standards	Set out the financial reporting standards relating to, inter alia, the (re)valuation and depreciation of infrastructure assets. Environment
Building Code of Australia	The Code provides the minimum necessary requirements for safety, health, amenity and sustainability in the design

	and construction of new buildings (and new building work in existing buildings)

3.4 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Quality How good is the service … what is the condition or quality of the service?

Function Is it suitable for its intended purpose …. Is it the right service?

Capacity/Use Is the service over or under used … do we need more or less of these assets?

In Table 3.4 under each of the service measures types (Quality, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current funding level.

These are measures of fact related to the service delivery outcome e.g. number of occasions when service is not available, condition %'s of Very Poor, Poor/Average/Good, Very Good and provide a balance in comparison to the customer perception that may be more subjective.

Table 3.4: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Provide well designed and serviceable infrastructure that contribute effectively to the Public domain areas Compliance with all legislation, regulations, and standards	Customer service requests relating to service quality.	20 per year	Service requests are reducing
	Confidence levels		High	High
Function	Provide safe Public domain areas and infrastructure free from hazards	Customer service requests relating to service quality	5 per year	Service requests are reducing
	Confidence levels		High	High
Capacity	Public domain areas are easy to access and are used to their full potential	Customer service requests relating to service quality	1 per year	Service requests are reducing
	Confidence levels		High	High

3.5 Technical Levels of Service

Technical Levels of Service – To deliver the customer values, and impact the achieved Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

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

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[3]

Table 3.6 shows the activities expected to be provided under the current Planned Budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	Other Structures	Planned acquisitions	No acquisitions are planned within the planning period	Subject to review
	Other Infrastructure	Planned acquisitions	Planned works includes special projects e.g. Coast seawall/bleaches.	Subject to review with special works grants
		Budget	$	
Operation	Other Structures	Operational expenditure	No planned operational expenditure in the planning period.	Subject to review

[3] IPWEA, 2015, IIMM, p 2|28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	Other Infrastructure	Operational expenditure	No planned operational expenditure in the planning period.	Subject to review
		Budget	$0	
Maintenance	Other Structures	Maintenance expenditure	No planned maintenance expenditure in the planning period.	Subject to review
	Other Infrastructure	Maintenance expenditure	Allocation for maintenance of boat ramps, beach access and boardwalks	Subject to review
		Budget	$42,200	Increase with CPI
Renewal	Other Structures	Renewal Expenditure	Allocation for renewal to include waste management facilities and sports lighting	Subject to review
	Other Infrastructure	Renewal Expenditure	Allocation for renewals on replacement of failed boardwalk infrastructure	Subject to review
		Budget	$2,223,800 + $1 340,000	
Disposal	The is no disposal plan for Other Structures or Other Infrastructure			

Note: * Current activities related to planned budget.

** Forecast required performance related to forecast lifecycle costs.

It is important to monitor the service levels provided regularly as these will change. The current performance is influenced by work efficiencies and technology, and customer priorities will change over time.

4.0 FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

4.3 Demand Impact and Demand Management Plan

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

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 can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population	Present population of just over 20,000	Forecast population by 2025 is in the order of 22,000	Increase in population will generate new assets and pressure to redevelop older urban areas	Monitoring development applications for changing trends in population growth.
Lifestyle/demographic demands	The public domain facilities provides for current demand from residents and visitors	Population demographic may push for changes to facilities	Pressure of demand may drive planning for renewal and/or expansion	Monitor demand and evaluate facility development options.
Tourism	Total visitors to Nambucca Valley 245,000 (2018)	Projected growth over 10 years (2020 –	Increased demand for public domain facilities e.g. boardwalks, beach access etc.	Develop an Open Space Strategy or Plan Follow the recommendations

		2030) is anticipated to be 5% 257,250 (2030)		outlined in Council's Open Space Strategies and Directions

4.4 Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Additional assets are discussed in Section 5.4.

Acquiring new assets will commit the Council to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the long term financial plan (Refer to Section 5).

4.5 Climate Change and Adaption

The impacts of climate change can have a significant impact on the assets we manage and the services they provide. In the context of the Asset Management Planning process climate change can be considered as both a future demand and a risk.

How climate change will impact on assets can vary significantly depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.

As a minimum we should consider both how to manage our existing assets given the potential climate change impacts, and then also how to create resilience to climate change in any new works or acquisitions.

Opportunities identified to date for management of climate change impacts on existing assets are shown in Table 4.4.

Table 4.4 Managing the Impact of Climate Change on Assets

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Weather events	More severe and frequent flooding and extreme storm events	Damage to Open Space areas and infrastructure Increased instability of slopes leading to slip failures and surface erosion, Additional resources allocated to ensure	Ensure Council's Climate Change Policy is taken into account Ensure Risk guidelines and specifications for Council infrastructure give consideration to projected climate change risks such as flooding and slope stability.

		public safety and repair/replace assets	
Sea level rise	Coastal erosion and depletion of sand from beaches	Loss of public amenity and safe public access to beaches compromised Boat ramps, wharfs and pontoons damaged, dangerous or inaccessible Additional resources allocated to ensure public safety and repair/replace assets	Ensure Risk guidelines and specifications for Council infrastructure give consideration to projected climate change risks such as sea level rise and storm surge Ensure that boat ramps, wharfs and pontoons can accommodate sea level rise, increased storm surge and overland flooding.

Additionally, the way in which we construct new assets should recognise that there is opportunity to build in resilience to climate change impacts. Buildings resilience will have benefits:

- Assets will withstand the impacts of climate change
- Services can be sustained
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint

Table 4.5 summarises some asset climate change resilience opportunities.

Table 4.5 Building Asset Resilience to Climate Change

New Asset Description	Climate Change impact These assets?	Build Resilience in New Works
Structures in coastal and estuarine foreshore areas	Contribute to the preservation and management of marine environment including beach, dune and river bank stabilisation	Consider sea level rise and storm surge impacts when designing or constructing new and replacement structures.
Sports Lighting	Contribute to the production green-house emissions	Flood lighting standards include energy efficient LED technology and smart activation applications to manage operating times.

	through energy consumption	

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this asset management plan.

5.0 LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Council plans to manage and operate the assets at the agreed levels of service (Refer to Section 3) while managing life cycle costs.

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management are a diverse collection not specifically identified with a particular asset type or class.

These assets include:

The Other Structures network comprises:

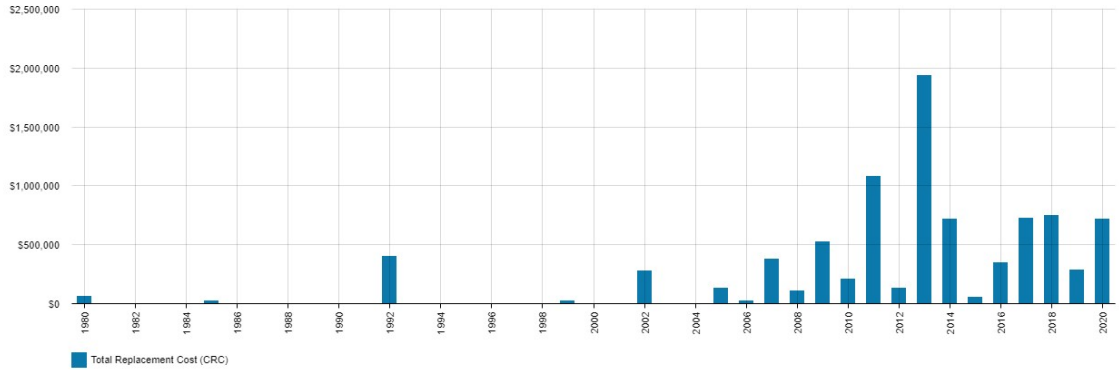
- Bollards, Cemetery Structures, Cultural Articles, Fences & Gates, Light Poles and Lighting, Railing, Seating, Shelters (not picnic), Shade Sales, Signs, Solar Bins, Solid waste management, Other.

The Other Infrastructure network comprises:

- Access ramps & Steps, Boardwalks and Footbridges, Boat ramps and Jetties, Pontoons, Retaining walls, Revetment works, Sea walls, Viewing platforms, other.

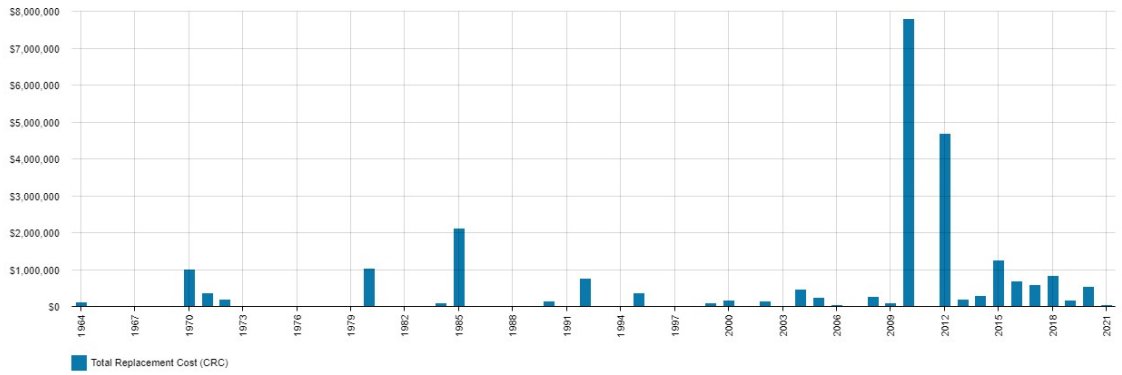
The age profile of the assets included in this AM Plan are shown in Figure 5.1.1.

Figure 5.1.1: Asset Age Profile – Other Structures



All figure values are shown in current (real) dollars.

Figure 5.1.1: Asset Age Profile – Other Infrastructure



All figure values are shown in current (real) dollars.

Add discussion about the age asset profile. Outline how past peaks of investment that may require peaks in renewals in the future. Comment on the overall age versus useful lives of the assets.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. 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
Boat ramps	Slippery, covered in sand or silt, eroded edge drops. Timely though regular scheduled inspection before peak holiday seasons.
Storm damage – slope failures impacting roads, public and private property	Landslides reported by customer requests and post event inspections. Delays in disaster relief submissions and rectification works

The above service deficiencies were identified from Council's Customer Request Management (CRM) system.

5.1.3 Asset condition

Condition is currently monitored through a regular schedule of inspections.

Condition is measured using a 1 – 5 grading system[4] as detailed in Table 5.1.3. It is important that consistent condition grades be used in reporting various assets across an organisation. This supports effective communication. At the detailed level assets may be measured utilising different condition scales, however, for reporting in the AM plan they are all translated to the 1 – 5 grading scale.

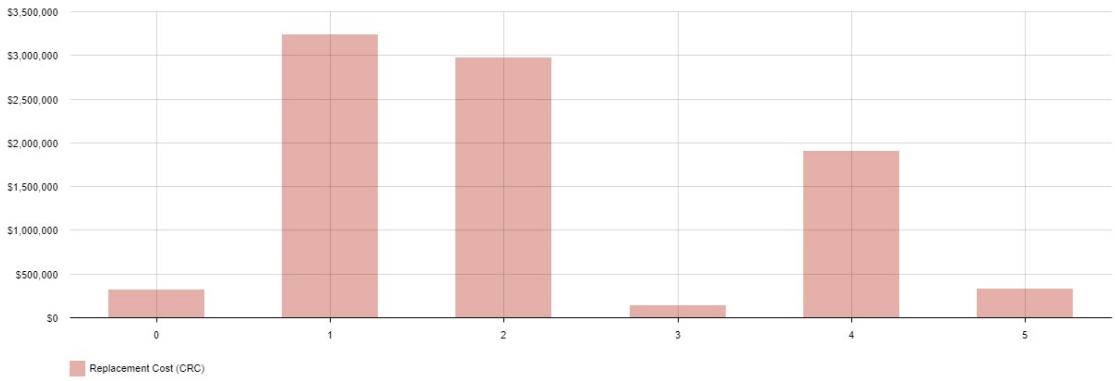
[4] IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

Table 5.1.3: Simple Condition Grading Model

Condition Grading	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

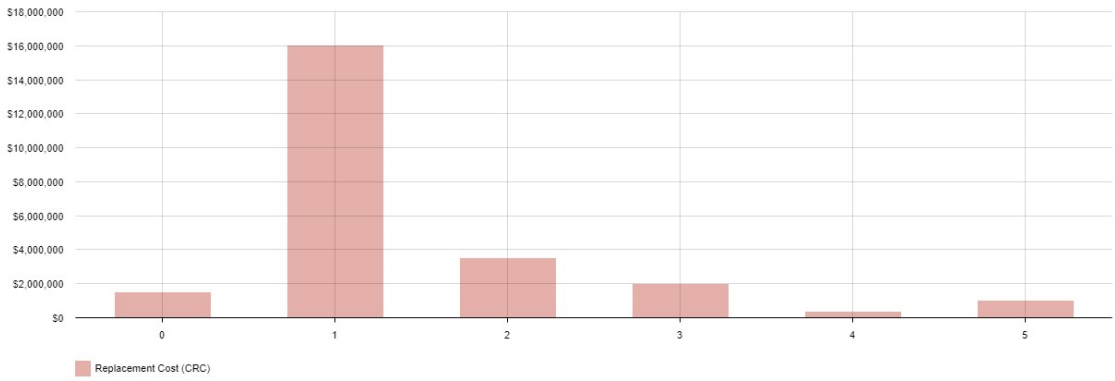
The condition profile of our assets is shown in Figure 5.1.3.

Figure 5.1.3: Asset Condition Profile – Other Structures



All figure values are shown in current (real) dollars.

Figure 5.1.3: Asset Condition Profile – Other Infrastructure



All figure values are shown in current (real) dollars.

5.2 Operations and Maintenance Plan

Operations include regular activities to provide services. Examples of typical operational activities include cleaning, asset inspection, and utility costs.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include boardwalk repairs, boatramp patching, and equipment repairs.

The trend in maintenance budgets are shown in Table 5.2.1.

Table 5.2.1: Maintenance Budget Trends – Other Structures

Year	Maintenance Budget $
2020/21	$0
2021/22	$0
2022/23	$0

Table 5.2.1: Maintenance Budget Trends – Other Infrastructure

Year	Maintenance Budget $
2020/21	$29,696
2021/22	$44,800
2022/23	$42,200

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

Council crew will do an Assessment and prioritise maintenance using experience and judgement of each asset according to the level of risk to the consumer.

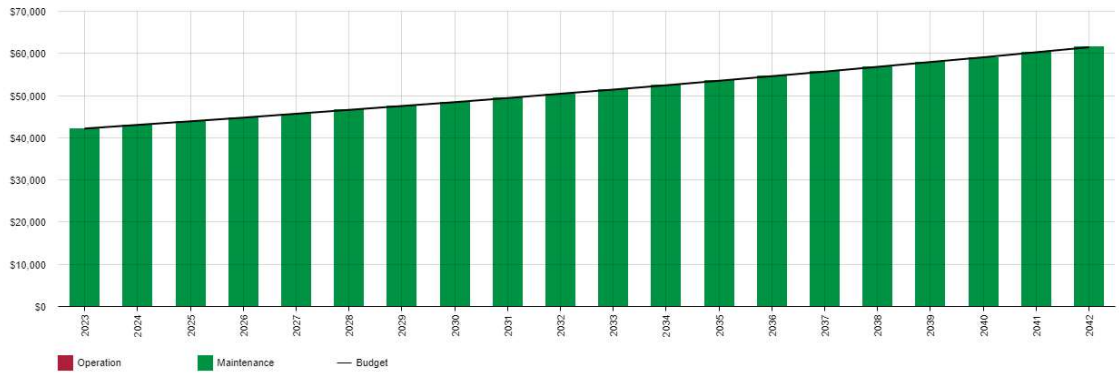
Summary of forecast operations and maintenance costs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Figure 5.2 shows the forecast operations

and maintenance costs relative to the proposed operations and maintenance planned budget.

No funding allocation has been provided for the maintenance of 'Other Structures" assets within the current of proposed budget.

Figure 5.2: Operations and Maintenance Summary – Other Infrastructure



All figure values are shown in current (real) dollars.

No funding allocation has been provided for the operational expenses for 'Other Structures" or "Other Infrastructure" assets within the current of proposed budget.

5.3 Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, 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 considered to be an acquisition resulting in additional future operations and maintenance costs.

Assets requiring renewal are identified from one of two approaches in the Lifecycle Model.

- The first method uses Asset Register data to project the renewal costs (current replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year), or
- The second method uses an alternative approach to estimate the timing and cost of forecast renewal work (i.e. condition modelling system, staff judgement, average network renewals, or other).

The estimates for renewals in this asset management plan were based on the asset register Method.

5.3.1 Renewal ranking criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a bridge that has a 5 t load limit), or

- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playground).[5]

It is possible to prioritise renewals by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have high use and subsequent impact on users would be significant,
- Have higher than expected operational or maintenance costs, and
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.[6]

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.3.1.

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Physical Conditions (eg type of material, structure and width)	50%
Risk and Safety Impact	25%
Environmental Condition including aesthetic	10%
Social conditions (eg. Local/tourist visitor generators)	15%
Total	**100%**

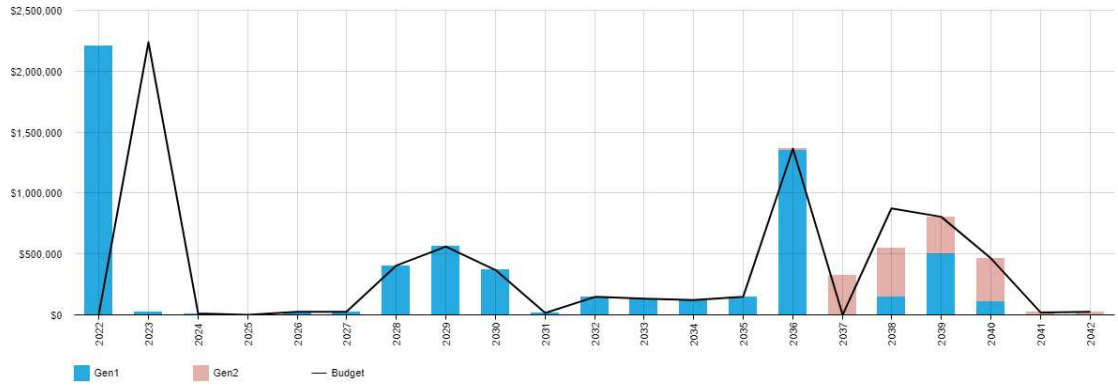
5.4 Summary of future renewal costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.3.2. A detailed summary of the forecast renewal costs is shown in Appendix A.

[5] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

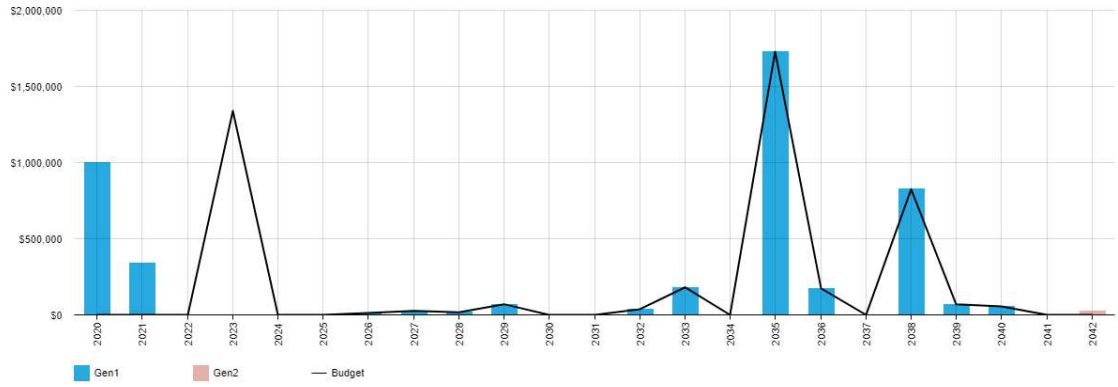
[6] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

Figure 5.3.2: Forecast Renewal Costs – Other Structures



All figure values are shown in current (real) dollars.

Figure 5.3.2: Forecast Renewal Costs – Other Infrastructure



All figure values are shown in current (real) dollars.

5.5 Acquisition Plan

Acquisition reflects are new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets of these types are not typically donated to the Council.

5.5.1 Selection criteria

Proposed upgrade of existing assets, and new assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with

others. Potential upgrade and new works should be reviewed to verify that they are essential to the Entities needs. Proposed upgrade and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. Verified proposals can then be ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.4.1.

Table 5.4.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Addresses slope stability issues	40%
Addresses waste management issues	30%
Availability to external grant funding	25%
Requests received	5%
Total	**100%**

Summary of future asset acquisition costs

When an Entity commits to new assets, they must be prepared to fund future operations, maintenance and renewal costs. They must also account for future depreciation when reviewing long term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by the Entity. There are no long term planned acquisitions for Other Structures or Infrastructure.

Expenditure on new assets and services in the capital works program will be accommodated in the long term financial plan, but only to the extent that there is available funding.

Planned expenditure on acquisition within the Other Structures asset class relates solely to waste management.

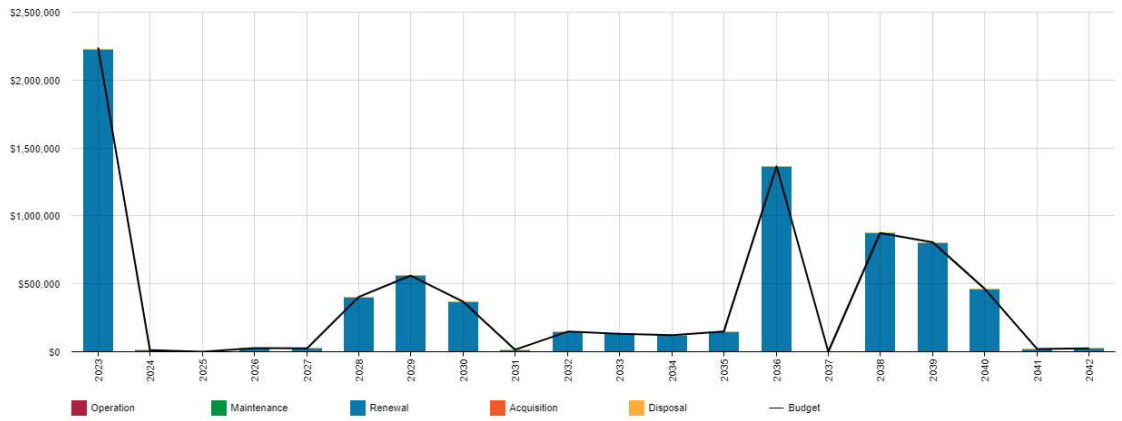
Planned expenditure on acquisition within the Other Infrastructure asset class relates primarily to grant funded beach foreshore works sea walls/bleachers at Main Beach.

Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.4.3. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

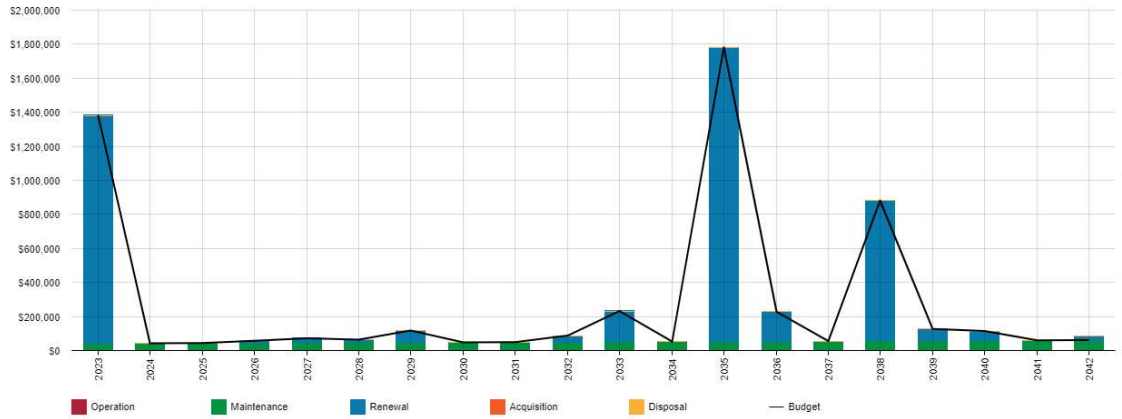
The bars in the graphs represent the forecast costs needed to minimise the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving balance between costs, levels of service and risk to achieve the best value outcome.

Figure 5.4.3: Lifecycle Summary – Other Structures



All figure values are shown in current (real) dollars.

Figure 5.4.3: Lifecycle Summary – Other Infrastructure



All figure values are shown in current (real) dollars.

5.6 Disposal Plan

There is no disposal plan for these assets.

6.0 RISK MANAGEMENT PLANNING

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'[7].

An assessment of risks[8] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery, are summarised in Table 6.1. Failure modes may include physical failure, collapse or essential service interruption.

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Boardwalks & footbridges	Foundation structural failure	Infrastructure closure restricting pedestrian access to the foreshore
Boat ramps	Cracking, dislocation, drop off on edges	Potential vehicle damage closure of boat ramps
Retaining Structures	Foundation failure and landslides	Road closure, property damage and loss.

By identifying critical assets and failure modes an organisation can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

6.2 Risk Assessment

The risk management process used is shown in Figure 6.2 below.

[7] ISO 31000:2009, p 2

[8] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

It is an analysis and problem-solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The process is based on the fundamentals of International Standard ISO 31000:2018.

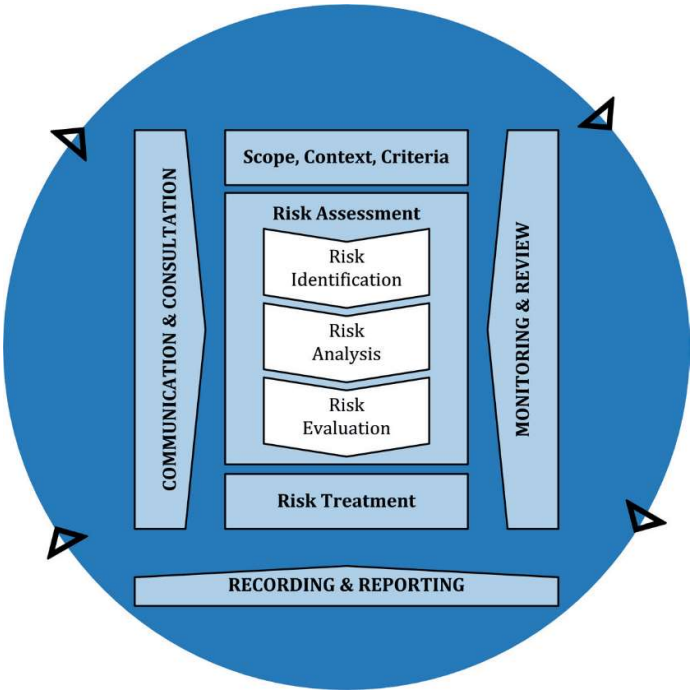


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for non-acceptable risks.

An assessment of risks[9] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan is shown in Table 6.2. It is essential that these critical risks and costs are reported to management and the Council.

Table 6.2: Risks and Treatment Plans

[9] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Other Structures – fences, lighting, seating, shelters, signs, waste collection bins	Vandalism	Medium	Liaise with police, invest in vandal proof measures, carryout defect inspections on high risk assets	Low	Within current budget.
Boardwalks, footbridges, pontoons and jetties	Damage due to marine insect attack and corrosion	Medium	Appropriate design, regular defect inspections. Train staff and develop maintenance intervention levels	Low	Within current budget
Boat ramps	Build-up of slime and sediment can make ramps hazardous	Medium	Regular defects inspections ahead of high use periods and quick response in cleaning	Low	Within current budget.

Note * The residual risk is the risk remaining after the selected risk treatment plan is implemented.

6.3 Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', 1 and to respond to possible disruptions to ensure continuity of service.

Resilience is built on aspects such as response and recovery planning, financial capacity, climate change and crisis leadership.

We do not currently measure our resilience in service delivery. This will be included in future iterations of the asset management plan.

6.4 Service and Risk Trade-Offs

The decisions made in adopting this AM Plan are based on the objective to achieve the optimum benefits from the available resources.

6.4.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Council has not identified any activities that cannot be completed

6.4.2 Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- Not known

6.4.3 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- Not known

These actions and expenditures are considered and included in the forecast costs, and where developed, the Risk Management Plan.

7.0 FINANCIAL SUMMARY

This section contains the financial requirements resulting from the information presented in the previous sections of this asset management plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

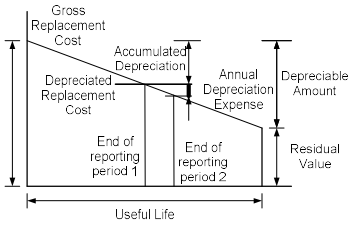
7.1 Financial Statements and Projections

7.1.1 Asset valuations

The best available estimate of the value of assets included in this Asset Management Plan are shown below. The assets are valued at fair value:

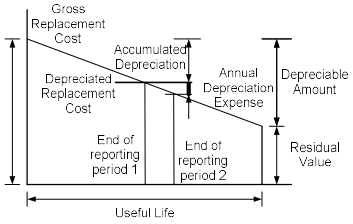
Other Structures:

Current (Gross) Replacement Cost	$8,888,593
Depreciable Amount	$8,888,593
Depreciated Replacement Cost[10]	$5,203,311
Depreciation	$558,940



Other Infrastructure:

Current (Gross) Replacement Cost	$24,224,527
Depreciable Amount	$24,224,527
Depreciated Replacement Cost[11]	$18,159,705
Depreciation	$376,266



7.1.2 Sustainability of service delivery – Other Structures

There are two key indicators of sustainable service delivery that are considered in the asset management plan for this service area. The two indicators are the:

- asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years), and
- medium term forecast costs/proposed budget (over 10 years of the planning period).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[12]	100%

[10] Also reported as Written Down Value, Carrying or Net Book Value.
[11] Also reported as Written Down Value, Carrying or Net Book Value.
[12] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 100% of the funds required for the optimal renewal of assets.

The forecast renewal work along with the proposed renewal budget, and the cumulative shortfall, is illustrated in Appendix D.

Medium term – 10 year financial planning period

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

This forecast work can be compared to the proposed budget over the 10 year period to identify any funding shortfall.

The forecast operations, maintenance and renewal costs over the 10 year planning period is $378,123 on average per year.

The proposed (budget) operations, maintenance and renewal funding is $379,543 on average per year giving a 10 year funding surplus of $1,420 per year. This indicates that 100% of the forecast costs needed to provide the services documented in this asset management plan are accommodated in the proposed budget. This excludes acquired assets.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast costs and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10-year life of the Long Term Financial Plan.

7.1.3 Forecast costs for long term financial plan

Table 7.1.3 shows the forecast costs for the 10 year long term financial plan.

Forecast costs are shown in current dollar real values.

Table 7.1.3: Forecast Costs for Long Term Financial Plan

Year	Forecast Acquisition	Forecast Operation	Forecast Maintenance	Forecast Renewal	Forecast Disposal
2023	$0	$0	$0	$2,223,800	$0
2024	$0	$0	$0	$11,100	$0
2025	$0	$0	$0	$0	$0
2026	$0	$0	$0	$26,000	$0
2027	$0	$0	$0	$25,000	$0
2028	$0	$0	$0	$403,620	$0
2029	$0	$0	$0	$560,560	$0
2030	$0	$0	$0	$368,047	$0
2031	$0	$0	$0	$15,200	$0

Year	Forecast Acquisition	Forecast Operation	Forecast Maintenance	Forecast Renewal	Forecast Disposal
2032	$0	$0	$0	$147,900	$0

7.1.4 Sustainability of service delivery – Other Infrastructure

There are two key indicators of sustainable service delivery that are considered in the asset management plan for this service area. The two indicators are the:

- asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years), and
- medium term forecast costs/proposed budget (over 10 years of the planning period).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[13] 100%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 100% of the funds required for the optimal renewal of assets.

The forecast renewal work along with the proposed renewal budget, and the cumulative shortfall, is illustrated in Appendix D.

Medium term – 10 year financial planning period

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

This forecast work can be compared to the proposed budget over the 10 year period to identify any funding shortfall.

The forecast operations, maintenance and renewal costs over the 10 year planning period is $196,580 on average per year.

The proposed (budget) operations, maintenance and renewal funding is $196,500 on average per year giving a 10 year funding a nil balance per year. This indicates that 100% of the forecast costs needed to provide the services documented in this asset management plan are accommodated in the proposed budget. This excludes acquired assets.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast costs and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10-year life of the Long Term Financial Plan.

7.1.5 Forecast costs for long term financial plan

Table 7.1.3 shows the forecast costs for the 10 year long term financial plan.

[13] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

Forecast costs are shown in 2021 real values.

Table 7.1.3: Forecast Costs for Long Term Financial Plan

Year	Forecast Acquisition	Forecast Operation	Forecast Maintenance	Forecast Renewal	Forecast Disposal
2023	$0	$0	$42,200	$1,340,000	$0
2024	$0	$0	$43,044	$0	$0
2025	$0	$0	$43,905	$0	$0
2026	$0	$0	$44,783	$12,600	$0
2027	$0	$0	$45,679	$26,000	$0
2028	$0	$0	$46,592	$17,500	$0
2029	$0	$0	$47,524	$70,120	$0
2030	$0	$0	$48,475	$0	$0
2031	$0	$0	$49,444	$0	$0
2032	$0	$0	$50,433	$37,500	$0

7.2 Funding Strategy

The proposed funding for assets is outlined in the Entity's budget and long term financial plan.

The financial strategy of the entity determines how funding will be provided, whereas the asset management plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

7.4 Key Assumptions Made in Financial Forecasts

In compiling this asset management plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

Unit rates have been used to calculate Estimated Replacement Cost (ERC) for all assets. These unit rates are based on MEERA, past historic works and have been verified against recently replaced assets. The ERC derived from the unit rates provides a valuation of the asset class based on an averaging of costs. It does not provide an accurate or reliable

estimate on the cost of construction for each individual asset. Such an estimate can only be produced from detailed site investigation and design, on an asset by asset basis.

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on a A - E level scale[14] in accordance with Table 7.5.1.

Table 7.5.1: Data Confidence Grading System

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

The estimated confidence level for and reliability of data used in this AM Plan is considered to be B+.

[14] IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices[15]

8.1.1 Accounting and financial data sources

Council uses Civica's Authority Enterprise Software Suite as the financial system

8.1.2 Asset management data sources

This asset management plan also utilises asset management data. The source of the data is Council's asset register for Other Structures and Other Infrastructure,

8.2 Improvement Plan

It is important that an entity recognise areas of their asset management plan and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this asset management plan is shown in Table 8.2.

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Regular and frequent (yearly) condition assessment and data review of assets to inform maintenance and renewal programs	Asset Engineer	Internal	2023
2	Establish levels of Service through community consultation	Manager Assets	Staff time	Before next AM plan review
3				
4				
5				
6				
7				
8				
9				
10				

[15] ISO 55000 Refers to this the Asset Management System

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, upgrade/new and asset disposal costs and proposed budgets. These forecast costs and proposed budget are incorporated into the long-term financial plan or will be incorporated into the long-term financial plan once completed.

The AM Plan has a maximum life of 4 years and is due for complete revision and updating before 2025. This cycle matches the Council election cycle and IP & R periods.

8.4 Performance Measures

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

- The degree to which the required forecast costs identified in this asset management plan are incorporated into the long term financial plan,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Plan and associated plans,
- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 1.0).

9.0 REFERENCES

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- ISO, 2014, ISO 55000:2014, Overview, principles and terminology
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Nambucca Valley Council Community Strategic Plan 2017 – 2027
- Nambucca Valley Council Annual Financial Plan and Budget.
- Nambucca Valley Council 2023 community Strategic plan

10.0 APPENDICES

Appendix A Acquisition Forecast

Table A1 - Acquisition Forecast Summary – Other Structures

Year	Constructed	Contributed	Growth
2023	$0	$0	$0
2024	$0	$0	$0
2025	$0	$0	$0
2026	$0	$0	$0
2027	$0	$0	$0
2028	$0	$0	$0
2029	$0	$0	$0
2030	$0	$0	$0
2031	$0	$0	$0
2032	$0	$0	$0
2033	$0	$0	$0
2034	$0	$0	$0
2035	$0	$0	$0
2036	$0	$0	$0
2037	$0	$0	$0
2038	$0	$0	$0
2039	$0	$0	$0
2040	$0	$0	$0
2041	$0	$0	$0
2042	$0	$0	$0

Table A2 - Acquisition Forecast Summary – Other infrastructure

Year	Constructed	Contributed	Growth
2023	$0	$0	$0
2024	$0	$0	$0
2025	$0	$0	$0
2026	$0	$0	$0
2027	$0	$0	$0
2028	$0	$0	$0
2029	$0	$0	$0
2030	$0	$0	$0
2031	$0	$0	$0
2032	$0	$0	$0
2033	$0	$0	$0
2034	$0	$0	$0
2035	$0	$0	$0
2036	$0	$0	$0
2037	$0	$0	$0
2038	$0	$0	$0
2039	$0	$0	$0
2040	$0	$0	$0
2041	$0	$0	$0
2042	$0	$0	$0

Appendix B Operation Forecast

There are no operational costs identified for Other Structures or Other Infrastructure assets.

Appendix C Maintenance Forecast

Table C1 - Maintenance Forecast Summary – Other Structures

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2022	$0	$0	$0
2023	$0	$0	$0
2024	$0	$0	$0
2025	$0	$0	$0
2026	$0	$0	$0
2027	$0	$0	$0
2028	$0	$0	$0
2029	$0	$0	$0
2030	$0	$0	$0
2031	$0	$0	$0
2032	$0	$0	$0
2033	$0	$0	$0
2034	$0	$0	$0
2035	$0	$0	$0
2036	$0	$0	$0
2037	$0	$0	$0
2038	$0	$0	$0
2039	$0	$0	$0
2040	$0	$0	$0
2041	$0	$0	$0

Table C2 - Maintenance Forecast Summary – Other Infrastructure

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2023	$42,200	$0	$42,200
2024	$43,044	$0	$43,044
2025	$43,905	$0	$43,905
2026	$44,783	$0	$44,783
2027	$45,679	$0	$45,679
2028	$46,592	$0	$46,592
2029	$47,524	$0	$47,524
2030	$48,475	$0	$48,475
2031	$49,444	$0	$49,444
2032	$50,433	$0	$50,433
2033	$51,442	$0	$51,442
2034	$52,470	$0	$52,470
2035	$53,520	$0	$53,520
2036	$54,590	$0	$54,590
2037	$55,682	$0	$55,682
2038	$56,796	$0	$56,796
2039	$57,932	$0	$57,932
2040	$59,090	$0	$59,090
2041	$60,272	$0	$60,272
2042	$61,477	$0	$61,477

Appendix D Renewal Forecast Summary

Table D1 - Renewal Forecast Summary – Other Structures

Year	Renewal Forecast	Renewal Budget
2023	$2,223,800	$2,223,800
2024	$11,100	$11,100
2025	$0	$0
2026	$26,000	$26,000
2027	$25,000	$25,000
2028	$403,620	$403,620
2029	$560,560	$560,560
2030	$368,047	$368,047
2031	$15,200	$15,200
2032	$147,900	$147,900
2033	$132,300	$132,300
2034	$121,500	$121,500
2035	$149,409	$149,409
2036	$1,363,900	$1,363,900
2037	$0	$0
2038	$873,920	$873,920
2039	$805,440	$805,440
2040	$464,362	$464,362
2041	$20,000	$20,000
2042	$25,000	$25,000

Table D1.1 – 10 year Renewal Forecast Summary – detailed

CVR ID	GIS ID	Asset Name	From	To	Remaining Life	Forecast Renewal	Renewal Cost	Useful Life
350025	19107	Lighting - E J Biffin Playing Fiel	Centenary Par	Nambucca H	-1	2023	$323,000.00	15
350291	29228	Waste Depot (Cell 3)	Garbage Tip R	Wirrimbi	-1	2023	$1,880,000.00	100
355266	11223	Fence - V-Wall - Wellington Dr	V Wall	Nambucca H	0	2023	$20,800.00	15
							$2,223,800.00	
350194	19157	Argents Hill Cemetery - Fencir	North Arm Ro	Argents Hill	1	2024	$11,100.00	15
							$11,100.00	
350066	19171	Tewinga Tennis Court Lighting	Rodeo Drive	Tewinga	3	2026	$20,000.00	15
350110	19219	Shade Sails - Macksville Mem	Patridge Stree	Macksville	3	2026	$6,000.00	10
							$26,000.00	
350193	19156	Bowraville Cemetery - Fencing	Gambayngirr F	Bowraville	4	2027	$14,500.00	15
355313	41411	Fence - Farringdon Playing Fie	Marshell Way	Nambucca H	4	2027	$10,500.00	15
							$25,000.00	
355231	41389	Bollards - Stuart Island - Namb	Stuart Island	Nambucca H	5	2028	$29,600.00	10
355118	19162	Lighting - Missabotti Hall - Mis	Missabotti Ro	Missabotti	5	2028	$20,000.00	20
350212	11064	Nambucca Headland - Fencing	Main Beach Rd	Nambucca H	5	2028	$10,300.00	20
355021	19062	Solar Waste Bins - Bowraville (	High Street	Bowraville	5	2028	$336,000.00	10
350161	11007	Shade Sails - Bowra Street Nar	Bowra Street	Nambucca H	5	2028	$7,720.00	10
							$403,620.00	

CVR ID	GIS ID	Asset Name	From	To	Remaining Life	Forecast Renewal Year	Renewal Cost	Useful Life
350035	10345	Lighting - Macksville Tennis Cc	Patridge Stree	Macksville	6	2029	$83,200.00	15
355000	10748	Shade Sails - Anderson Park - I	Kuta Avenue	Valla Beach	6	2029	$10,640.00	10
355052	19090	Lighting - Gordon Park - Wellir	Wellington Dr	Nambucca H	6	2029	$57,600.00	15
350268	41406	Lighting - V Wall - Wellington	Wellington Dr	Nambucca H	6	2029	$41,400.00	10
355088	10331	Bollards - Macksville Park - Wi	Willis Street	Macksville	6	2029	$13,300.00	10
355117	19160	Fence - Missabotti Hall - Missa	Missabotti Ro	Missabotti	6	2029	$19,600.00	30
355174	11587	Lighting - North Macksville Pla	Casey Road	North Macks	6	2029	$48,000.00	15
355225	19241	LED Lighting - Scotts Head Ten	Adin Street	Scotts Head	6	2029	$48,000.00	10
355251	19115	Lighting - Valla Beach Tennis C	Thompson Str	Valla Beach	6	2029	$60,000.00	15
355247	10816	Fence - Valla Beach Road Valla	Valla Beach Rc	Valla Beach	6	2029	$7,620.00	15
355418	41435	Shade Sail - Bellwood Park	Bellwood Park	Nambucca H	6	2029	$29,200.00	10
355429	41442	Bollard Lighting - V Wall Namb	Wellington Dr	Nambucca H	6	2029	$142,000.00	10
							$560,560.00	
355431	41444	Shipwreck Sculpture - V Wall N	Wellington Dr	Nambucca H	7	2030	$20,000.00	20
355559	41458	Lighting - Macksville Bridge (F	River Street	Macksville	7	2030	$303,335.00	10
355032	11126	Shade Sails - Coronation Oval	Short Street	Nambucca H	7	2030	$2,716.00	10
355586	41462	Solar Bollards x 4 - Gordon Par	Gordon park	Nambucca H	7	2030	$10,100.00	10
355606	41469	Macksville Bridge Information	River Street	Macksville	7	2030	$31,896.00	10
							$368,047.00	

CVR ID	GIS ID	Asset Name	From	To	Remaining Life	Forecast Renewal Year	Renewal Cost	Useful Life
355143	11895	Fence - Nelson Street Nambuc	Nelson Street	Nambucca H	8	2031	$15,200.00	23
							$15,200.00	
355159	11477	Fences - Riverside Drive Namb	Riverside Driv	Nambucca H	9	2032	$47,300.00	25
355240	19169	Fence - Tewinga Tennis Court	Rodeo Drive	Tewinga	9	2032	$17,900.00	30
355572	1	Railing - Ocean Street Scotts H	Ocean Street	Scotts Head	9	2032	$16,000.00	15
355352	7653	External Fence - Sewer Treatm	Sewer Treatm	Scotts Head	9	2032	$28,200.00	30
355059	19132	Fence - Hennessey/Tap Oval -	Coronation St	Bowraville	9	2032	$11,900.00	30
355066	10204	Fence - Lions Park - Ferry Stree	Ferry Street	North Macks	9	2032	$11,800.00	19
350088	19206	Unkya Recreation Reserve Fer	Eungai Creek	Eungai Cree	9	2032	$14,800.00	15
							$147,900.00	
350127	10905	E J Biffin Playing Fields - Fenci	Centenary Par	Nambucca H	10	2033	$18,800.00	20
350177	10384	Dawkins Park Solar Lighting	Princess Stree	Macksville	10	2033	$28,000.00	20
355056	10241	Fence - Gumma Reserve - Bou	Boultons Cros	Gumma	10	2033	$11,100.00	15
355041	10850	Fence - Deep Creek Beach Acc	Ocean View D	Valla Beach	10	2033	$11,900.00	15
355532	41453	Fence - Phillip Hughes Oval - M	Phillip Hughes	Macksville	10	2033	$51,200.00	15
355226	11034	Fence - Shelly Beach - Shelly B	Shelly Beach R	Nambucca H	10	2033	$11,300.00	15
							$132,300.00	

(Note: CVR 350291 has been artificially assigned a construction year of 1922 and a useful life of 100 years (useful life is 8 years) to prevent the asset renewal cycling every eight years.)

Table D2 - Renewal Forecast Summary – Other Infrastructure

Year	Renewal Forecast	Renewal Budget
2023	$1,340,000	$1,340,000
2024	$0	$0
2025	$0	$0
2026	$12,600	$12,600
2027	$26,000	$26,000
2028	$17,500	$17,500
2029	$70,120	$70,120
2030	$0	$0
2031	$0	$0
2032	$37,500	$37,500
2033	$180,700	$180,700
2034	$0	$0
2035	$1,728,400	$1,728,400
2036	$173,700	$173,700
2037	$0	$0
2038	$825,184	$825,184
2039	$68,800	$68,800
2040	$55,741	$55,741
2041	$0	$0
2042	$26,000	$26,000

Table D2.1 – 10 year Renewal Forecast Summary – detailed

CVR ID	GIS ID	Asset Name	From	To	Remaining Life	Forecast Renewal	Renewal Cost	Useful Life
350170	11363	Bellwood Park to Tourist O	NHs Info Ce	Nambucca	-3	2023	$1,000,000	50
350027	19108	Boardwalk (footbridge) - B	Banyandah F	Hyland Par	-2	2023	$340,000	50
							$1,340,000	
355283	19109	Access Steps - Hyland Park	Banyandah F	Hyland Par	3	2026	$12,600	20
							$12,600	
355034	11149	Timber Retaining Wall - Co	Short Street	Nambucca	4	2027	$26,000	15
							$26,000	
350240	11087	Access Ramp - Beilby's Bea	Ulrick Drive	Nambucca	5	2028	$17,500	20
							$17,500	
350218	19218	Boat Ramp - Gumma Reser	Boultons Cr	Gumma	6	2029	$24,200	30
355008	11330	Timber Retaining Wall - An	Riverside Dr	Nambucca	6	2029	$14,300	15
355229	110360	Timber Retaining Wall - Ny	Shelly Beach	Nambucca	6	2029	$6,420	15
355244	11366	Ramp - Tourist Information	NHs Info Ce	Nambucca	6	2029	$25,200	15
							$70,120	
355188	10162	Viewing Platform - River St	River Street	Macksville	9	2032	$37,500	30
							$37,500	
355151	11090	Access Ramp - Pilot Street	Pilot Street	Nambucca	10	2033	$18,000	20
355294	11035	Access Ramp - Nyambaga V	Shelly Beach	Nambucca	10	2033	$10,500	20
355295	11041	Access Steps - Nyambaga V	Shelly Beach	Nambucca	10	2033	$22,200	20
350162	11365	Pontoon - Tourist Informat	NHs Info Ce	Nambucca	10	2033	$130,000	20
							$180,700	

Appendix E Disposal Summary

There is no disposal plan for Other Structures or Other Infrastructure assets.

Appendix F Budget Summary by Lifecycle Activity

Table F1 – Budget Summary by Lifecycle Activity – Other Structures

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2023	$0	$0	$0	$2,223,800	$0	$2,238,000
2024	$0	$0	$0	$11,100	$0	$11,100
2025	$0	$0	$0	$0	$0	$0
2026	$0	$0	$0	$26,000	$0	$26,000
2027	$0	$0	$0	$25,000	$0	$25,000
2028	$0	$0	$0	$403,620	$0	$403,620
2029	$0	$0	$0	$560,560	$0	$560,560
2030	$0	$0	$0	$368,047	$0	$368,047
2031	$0	$0	$0	$15,200	$0	$15,200
2032	$0	$0	$0	$147,900	$0	$147,900
2033	$0	$0	$0	$132,300	$0	$132,300
2034	$0	$0	$0	$121,500	$0	$121,500
2035	$0	$0	$0	$149,409	$0	$149,409
2036	$0	$0	$0	$1,363,900	$0	$1,363,900
2037	$0	$0	$0	$0	$0	$0
2038	$0	$0	$0	$873,920	$0	$873,920
2039	$0	$0	$0	$805,440	$0	$805,440
2040	$0	$0	$0	$464,362	$0	$464,362
2041	$0	$0	$0	$20,000	$0	$20,000
2042	$0	$0	$0	$25,000	$0	$25,000

Table F2 – Budget Summary by Lifecycle Activity – Other Infrastructure

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2023	$0	$0	$42,200	$1,340,000	$0	$1,382,200
2024	$0	$0	$43,044	$0	$0	$43,044
2025	$0	$0	$43,905	$0	$0	$43,905
2026	$0	$0	$44,783	$12,600	$0	$57,383
2027	$0	$0	$45,679	$26,000	$0	$71,679
2028	$0	$0	$46,592	$17,500	$0	$64,092
2029	$0	$0	$47,524	$70,120	$0	$117,644
2030	$0	$0	$48,475	$0	$0	$48,475
2031	$0	$0	$49,444	$0	$0	$49,444
2032	$0	$0	$50,433	$37,500	$0	$87,933
2033	$0	$0	$51,442	$180,700	$0	$232,142
2034	$0	$0	$52,470	$0	$0	$52,470
2035	$0	$0	$53,520	$1,728,400	$0	$1,781,920
2036	$0	$0	$54,590	$173,700	$0	$228,290
2037	$0	$0	$55,682	$0	$0	$55,682
2038	$0	$0	$56,796	$825,184	$0	$881,980
2039	$0	$0	$57,932	$68,800	$0	$126,732
2040	$0	$0	$59,090	$55,741	$0	$114,831
2041	$0	$0	$60,272	$0	$0	$60,272
2042	$0	$0	$61,477	$26,000	$0	$61,477