

# GLEN INNES SEVERN COUNCIL



## SEWERAGE

# ASSET MANAGEMENT PLAN PART 5



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## 1. EXECUTIVE SUMMARY

*Refer to the Corporate Asset Management Plan.*

## 2. INTRODUCTION

### 2.1 BACKGROUND

This asset management plan covers the following infrastructure assets:

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

Asset Type	Quantity	Replacement Value	Accumulated Depreciation
Gravity Mains	95 km	\$ 23,182,421	-\$ 7,431,065
Rising Mains	15 km	\$ 1,374,749	-\$ 192,160
Pump Stations	9	\$ 512,425	-\$ 304,432
Treatment Works	2 Plants	\$ 7,207,509	-\$ 2,815,252
Total	N/A	\$ 32,277,105	-\$ 10,742,908

#### 2.1.1 KEY STAKEHOLDERS

*Refer to Core Asset Management Plan.*

In addition to the Core Asset Management Plan, specific stakeholders in the preparation and implementation of this asset management plan are:

<b>Federal and State Governments and Agencies</b>	Department of Planning, Industry and Environment NSW Environment Protection Authority (EPA) NSW Office of Local Government (OLG) Independent Pricing and Regulatory Tribunal of NSW
<b>Community</b>	Existing customers Future customers

### 2.2 GOALS AND OBJECTIVES OF ASSET MANAGEMENT

Relevant Council goals and objectives and how these are addressed in this asset management plan are:

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

Goal	Objective	How Goal and Objectives are addressed in AMP
<b>IM 3.4.2 - Manage wastewater functions according to adopted service levels.</b>	The wastewater business is managed according to adopted service levels	The AMP sets the overall framework for the management of the wastewater business. It defines the levels of service and describes how these will be attained.
<b>IM 3.4.4 - Implement the Sewer Asset Management Plan and review as necessary.</b>	Ensure annual asset renewal expenditure is targeted to address the infrastructure backlog within the next 10-15 years.	The AMP defines the asset renewal ratios required to meet ongoing asset consumption. It also defines the condition rating of assets and the planned capital renewals program that directly feeds into the annual operational plan and budget.

## 2.3 PLAN FRAMEWORK

*Refer to Core Asset Management Plan.*

## 2.4 CORE AND ADVANCED ASSET MANAGEMENT

*Refer to Core Asset Management Plan.*

## 3. LEVELS OF SERVICE

### 3.1 CUSTOMER RESEARCH AND EXPECTATIONS

Major expectations of the major players are as follows:

#### *EXISTING AND FUTURE CUSTOMERS AND GLEN INNES SEVERN COUNCIL*

- A sewerage treatment system that is acceptable in terms of reliability, quality, quantity and price.
- A scheme that minimises adverse effects on the environment.
- A scheme that does not limit the future development potential of the town.
- An equitable system of charging that customers readily understand.
- Good service in respect to response time for dealing with problems.

#### *THE GENERAL PUBLIC*

- That the sewerage system is safe from a public health perspective and that there is an adequate supply i.e. that no restrictions are in place.

#### *COUNCIL EMPLOYEES*

- A healthy and safe work environment.
- Fair and consistent management practices.
- Opportunity to provide input into current and future work practices and future plans.

#### *DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT (WATER)*

- That future works meet the relevant standards in departmental publications.
- That best-practice management practices are in place, including:
  - Strategic Business Planning;
  - Pricing & Developer Charges (including Liquid Trade Waste Approvals);
  - Annual Performance Reporting; and
  - Integrated Water Cycle Management.

#### *ENVIRONMENT PROTECTION AUTHORITY*

- A scheme that disposes of wastes in a responsible manner and does not cause any harm to the environment.
- That all the necessary licences are secured or renewed. Current licences include:
  - EPA License No 576 (Glen Innes Sewerage Treatment Plant);
 Note: No license is required for Deepwater Common Effluent system.
- That council complies with conditions imposed on any discharge licences.

#### *NSW OFFICE OF LOCAL GOVERNMENT*



- That Council has considered the implications of the National Competition Policy and in particular, competitive neutrality and competitive tendering.

### ***INDEPENDENT PRICING AND REGULATORY TRIBUNAL OF NSW***

- That Council has a system of transparent reporting of costs and services.

## **3.2 LEGISLATIVE REQUIREMENTS**

*Refer to Core Asset Management Plan.*

### ***LOCAL GOVERNMENT ACT (1993)***

- Section 68 - Council approval is required to carry out plumbing works.
- Section 60 - NSW Office of Water approval is required to construct or extend a sewerage treatment facility.
- Regulations - Water, Sewerage and Drainage.

### ***PROTECTION OF THE ENVIRONMENT ACT (1997)***

- Compliance with EPA licence conditions.
- Pollution and Incident Monitoring and Reporting

### ***ENVIRONMENTAL PLANNING AND ASSESSMENT ACT (1979)***

- All proposals, activities, and functions which are investigated, designed, planned, constructed, and operated by Council should be studied at all stages for their environmental impact on the basis of scale, location and performance.
- The findings of environmental studies should be reported initially in Reviews of Environmental Factors (REF) under part 5 of the Act, which indicate the need for further studies, their extent and depth, and the degree of public or other involvement.
- An Environmental Impact Statement (EIS) is a comprehensive report compiled from extensive studies. An EIS is required for:
  - Designated developments (part IV EP&A Act);
  - Projects that significantly affect the environment (part V EP&A Act); and/or
  - When designated by a State Environmental Planning Policy or in an LEP.

### ***PUBLIC HEALTH ACT (1991)***

- Notification of public health related pollution incidents.

### ***WORK HEALTH AND SAFETY ACT (2010)***

- This Act impacts on all operations, including sewerage. Council is required to provide a safe working environment and supply equipment to ensure safety.

### **INDEPENDENT PRICING AND REGULATORY TRIBUNAL ACT (1992)**

- The Act empowers the Independent Pricing and Regulatory Tribunal (IPART). The tribunal sets principles and guidelines related to charging for water supply and sewerage. These include:
  - Charges must reflect the cost (user-pays); and
  - Charges must be transparent.

### **3.3 CURRENT LEVELS OF SERVICE**

*Refer to Core Asset Management Plan.*

### **3.4 DESIRED LEVELS OF SERVICE**

*Refer to Core Asset Management Plan.*

Table 3.4a: Community Levels of Service

KEY PERFORMANCE INDICATOR	COMMUNITY LEVEL OF SERVICE	PERFORMANCE MEASUREMENT PROCESS	TARGET PERFORMANCE	CURRENT PERFORMANCE
<b>SAFETY</b>	Ensure public safety around high risk assets such as pump stations, wastewater treatment plants, storage lagoons and manholes.	Reported hazards from Customer Service requests.	< 10 reported hazards pa	Nil reports
		Number of injuries.	Zero	Nil reports
<b>QUALITY</b>	Ensure minimal odours from effluent pump stations and wastewater treatment plants.	Reported hazards from Customer Service requests.	< 10 customer service requests per year	Nil reports
<b>QUANTITY</b>	Satisfactory provision of sewerage collection and treatment assets to cater for long term growth.	Review sewerage/effluent inflows. Infrastructure network assessment every 3 years.	Audit undertaken every 3 years.	Audit is undertaken annually during performance monitoring reporting
	Minimise stormwater ingress into sewerage / effluent collection systems.	Identification of potential stormwater ingress locations. Undertake CCTV inspections.	CCTV inspection on network conducted to prioritise renewal program.	CCTV inspections have been undertaken on the oldest 40% of underground assets.

<b>RELIABILITY</b>	Sewerage/ effluent disposal system to operate without blockages.	Reported hazards from Customer Service requests.	< 100 reported hazards pa.	9 occurrences
<b>RESPONSIVENESS</b>	Maintenance staff to respond to pump station high level alarms and gravity drain blockages within a given timeframe.	Response to emergency situations within one (1) hour of the alarm being raised.	90% of alarms to be respond to within one (1) hour of notification.	Nil occurrences
<b>COST</b>	Within annual budget allocations. Service charges to represent good value for service.	Job Costing System.  Service charges identified for future years in 10-year long term financial plan.	Total expenditure for wastewater business to be less than 102% of annual operational budget and within 5% of annual capital budget.  Annual service charges in accordance with NSW Best Practice guidelines.	Total expenditure for wastewater business to be less than 102% of annual operational budget and within 5% of annual capital budget.  Annual service charges in accordance with NSW Best Practice guidelines.
<b>LEGISLATIVE COMPLIANCE</b>	Compliance.	All schemes to comply with the Protection of the Environment Operations Act and NSW Health approvals.	All schemes to comply with relevant legislation and conditions of EPA licence 576.	100% compliance is achieved.

<b>FUNCTION</b>	Ensure sewerage / effluent collection, treatment and reuse systems meet user requirements and cater for residential growth.	All reticulation, pump station, treatment and storage infrastructure to cater for loadings during peak events.	All network infrastructure designed in accordance with Australian Standards	All network infrastructure is designed in accordance with Australian Standards
<b>SUSTAINABILITY</b>	Facilities are managed for future generations.	Master planning.  Long-Term Financial Plan.	Asset renewal ratio exceeds 1.0  Asset maintenance ratio is 1.0.	Asset renewal ratio is 2%.  Asset maintenance ratio is 1.0.

Table 3.4b: Technical Levels of Service

KEY PERFORMANCE INDICATOR	COMMUNITY LEVEL OF SERVICE	PERFORMANCE MEASUREMENT PROCESS	TARGET PERFORMANCE	CURRENT PERFORMANCE
<b>QUALITY</b>	Treated sewerage to comply with relevant standards.	NATA accredited laboratory to test samples.	Compliance with effluent standards required by EPA licence 576.	100% compliance with effluent standards required by EPA licence 576.
<b>QUANTITY</b>	Collection, treatment, storage and reticulation infrastructure to cater for current number of domestic connections plus an allowance for projected long-term growth.	Network Analysis undertaken on infrastructure.	100% of network having adequate capacity to cater for three (3) times the average dry weather flow.	100% of network has adequate capacity to cater for seven (7) times the average dry weather flow.
<b>SAFETY</b>	Sewerage network free of preventable hazards & deficiencies.	WorkCover & insurance claims for personal injury or property damage.	Zero claims pa.	One claim received for personal injury or property damage

## 4. FUTURE DEMAND

### 4.1 DEMAND FORECAST

*Refer to Core Asset Management Plan.*

#### 4.1.2 DEMAND FACTORS

To enable fair and planned distribution of funding throughout the Council area, some of the factors influencing the prioritising of works are:

- Changing community expectations and demographics.
- Known areas of systems capacity limitations.
- Systems and processes with high maintenance demands.
- Development at the boundaries of the sewerage zones.

In the relevant asset classes, some issues which may influence future asset provision are:

- Resident expectations may be raised for the provision of sewerage reticulation outside the existing sewerage zones and village areas.
- There will be an increased need to renew infrastructure in older land divisions.

More concentration on water re-use initiatives will occur.

Refer to Council's Demand Management Plan for details.

### 4.2 CHANGES IN TECHNOLOGY

Further development of Geographic Information Systems (GIS) will improve the management of sewerage infrastructure, particularly the coordination of maintenance activities, through enhanced data collection, analysis and dissemination systems.

### 4.3 DEMAND MANAGEMENT PLAN

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

Opportunities identified to date for demand management are shown in Table 4.6. Further opportunities will be developed in future revisions of the AMP.

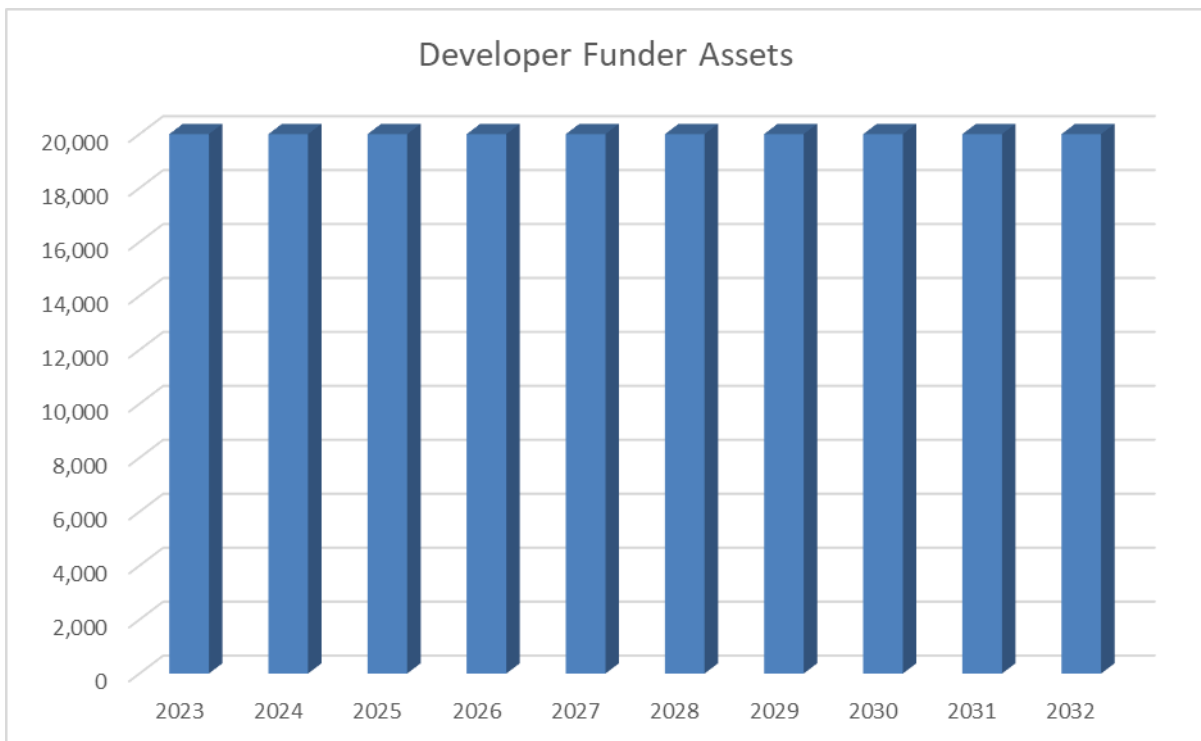
**Table 4.3: Demand Management Plan Summary**

SERVICE ACTIVITY	DEMAND MANAGEMENT PLAN
<p><b>Development of new residential subdivisions currently not serviced by a CWMS</b></p>	<p>Assessment is undertaken for each major development to determine capacity of downstream pump stations and treatment/storage facilities. Upgrades are funded through developer contributions to comply with adopted engineering standards.</p>
<p><b>Future Capital Works</b></p>	<p>A review of a 10-year long term financial plan is undertaken at the beginning of each financial year to determine upgrade projects to meet asset utilisation.</p>

**4.4 NEW ASSETS FROM GROWTH**

The new assets required to meet growth will be acquired from land developments and constructed by Council. The new asset values are summarised in Fig 4.4.

**Fig 4.4: New Assets from Growth**



**4.4.1 ASSUMPTIONS USED IN PROJECTED ASSET GROWTH**

*Refer to Core Asset Management Plan.*



## 5. LIFECYCLE MANAGEMENT PLAN

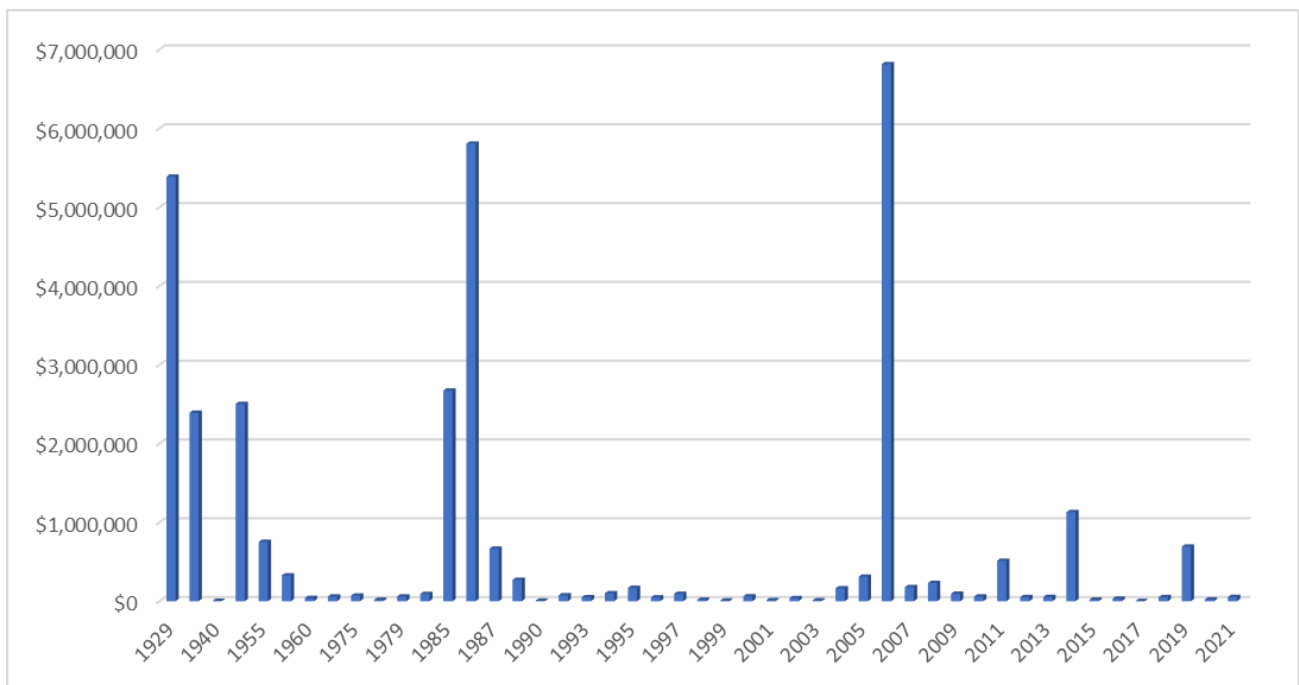
The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs.

### 5.1 BACKGROUND DATA

#### 5.1.1 PHYSICAL PARAMETERS

The age profile of Council’s assets is shown below.

**Fig 5.1.1: Asset Age Profile**



#### 5.1.2 ASSET CAPACITY AND PERFORMANCE.

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

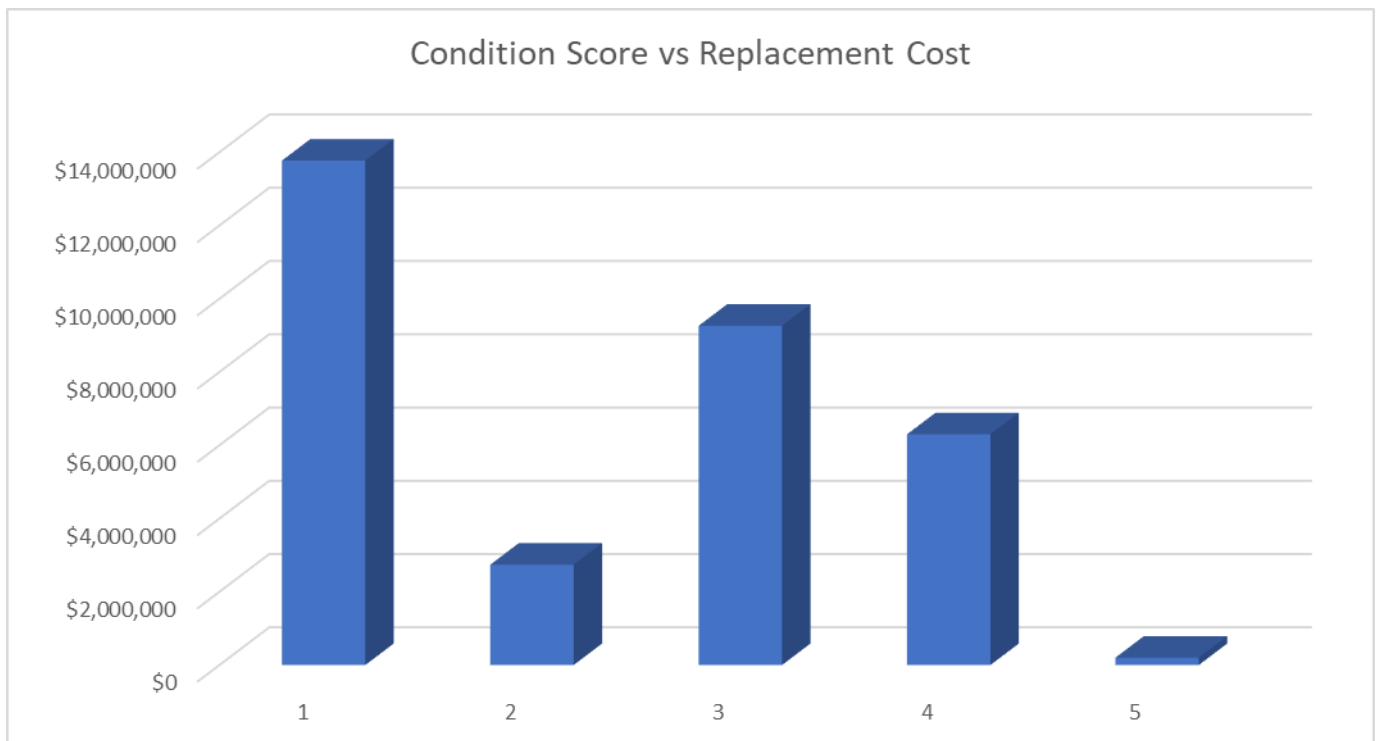
**Table 5.1.2: Known Service Performance Deficiencies**

LOCATION	SERVICE DEFICIENCY
Sewerage Mains	Ingress of stormwater

The above service deficiency is being progressively addressed by mains relining each year.

## 5.1.3 ASSET CONDITION

Fig 5.1.3: Asset Condition Profile



Condition is measured using a 1 – 5 rating system.<sup>1</sup>

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

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

#### 5.1.4 ASSET VALUATIONS

The value of assets covered by this asset management plan is summarised below. Assets were last revalued in 2019 and will be revalued at 30 June 2024. Assets are valued at Greenfield rates.

**Table 5.1.4a: Asset Summary**

Asset Type	Quantity	Replacement Value	Annual Depreciation
Gravity Mains	95 km	\$ 23,182,421	-\$ 257,582
Rising Mains	15 km	\$ 1,374,749	-\$ 15,275
Pump Stations	9	\$ 512,425	-\$ 15,290
Treatment Works	2 Plants	\$ 7,207,509	-\$ 195,518
Total	N/A	\$ 32,277,105	-\$ 483,665

Sustainability reporting reports the rate of annual asset consumption for the asset category as a whole and compares this to asset renewal, upgrade and expansion, as shown in Table 5.4 below:

**Table 5.1.4b: Financial Reporting Ratios**

FINANCIAL REPORTING CRITERION SEWERAGE INFRASTRUCTURE, %	
Asset Consumption Rate	1%
Asset Renewal Rate	2%
Asset Upgrade Expansion Rate	0%

## 5.2 RISK MANAGEMENT PLAN

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' (VH) - requiring immediate corrective action and 'High' (H) – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.2.

Table 5.2: Critical Risks and Treatment Plans

ASSET AT RISK	WHAT CAN HAPPEN	RISK RATING (VH, H)	RISK TREATMENT PLAN
<b>Glen Innes Sewerage Treatment Plant</b>	Hydraulic overload.	VH	Reduce stormwater infiltration by maintaining a sewer main relining program.
<b>Pumping Stations, General</b>	Power outages resulting in overflows.	H	Enact the Pollution Incident Response Management Plan (PIRMP).

### 5.3 ROUTINE MAINTENANCE PLAN

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

#### 5.3.1 MAINTENANCE PLAN

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

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

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Note that amounts shown have been extracted from Council's Annual Budget for each year and are stated in that year's dollars. Thus, unless planned maintenance expenditures show a progressive increase in line with construction inflation (commonly 5 or more percent pa), then actual expenditures will be insufficient.

The structure of Council's present Budget account lines does not permit the disaggregation of maintenance expenditure down the levels of 'reactive', 'planned' or 'cyclic'.

Planned maintenance work is not distinguished from unplanned maintenance work in council's current finance system.

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

### 5.3.2 STANDARDS AND SPECIFICATIONS

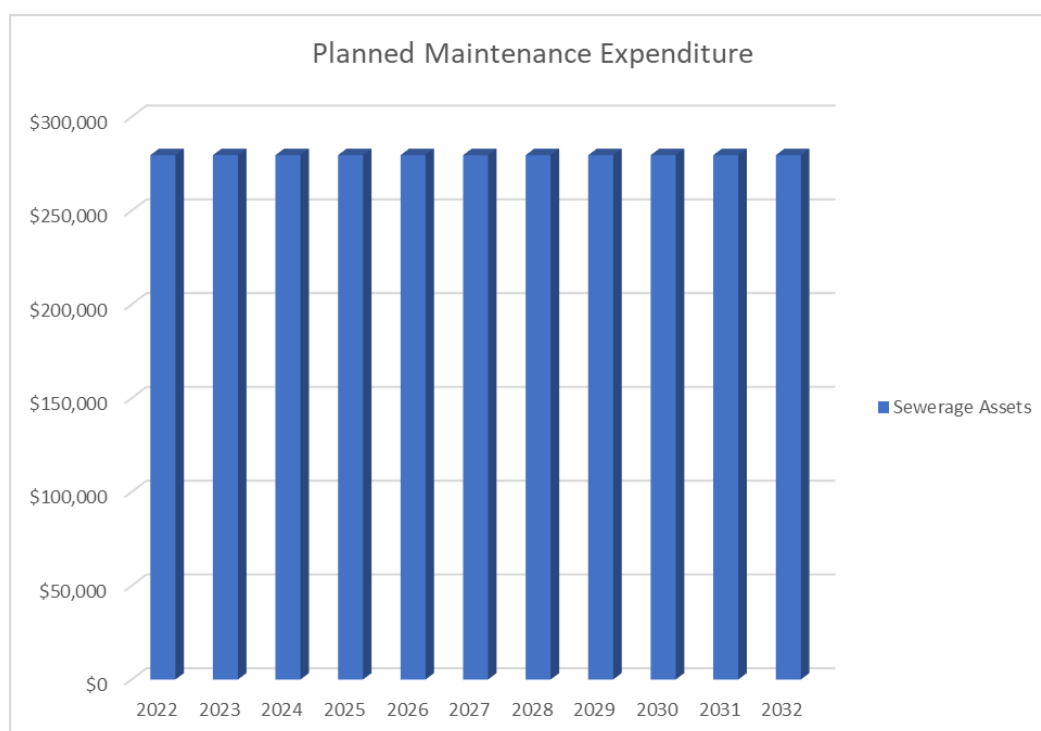
Maintenance work is carried out in accordance with the following Standards and Specifications.

- Maintenance work is carried out in accordance with sound industry practices and requirements set down by manufacturers of proprietary products.
- AusSpec & Natspec.

### 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 Fig 5.3.3. Note that all costs are shown in current dollar values.

**Fig 5.3.3: Planned Maintenance Expenditure**



Maintenance is funded from Council's Operating Budget. 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

Asset renewals are targeted at restoring the integrity of the sewer mains reticulation network. Most mains were constructed in 1930 and are subject to considerable levels of stormwater ingress through cracks and joint failures. The priority ranking is determined by CCTV inspection performed by contracted resources. CCTV inspection is prioritised to cover the oldest mains, and those mains that have been affected by sewer blockages. This information is detailed in table 5.4.1.

**Table 5.4.1: Renewal Priority Ranking Criteria**

CRITERIA	WEIGHTING
<b>Pump replacement at pumping stations</b>	Pump stations are fitted with a duty/standby arrangement that allows pumps to run to failure prior to renewal.
<b>Component replacement at treatment plants</b>	Treatment plant assets are still within expected life. Assets are only renewed if early failure occurs.
<b>Deterioration of pipes</b>	Pipes (mains) are routinely inspected using CCTV performed by contract suppliers. Inspections are undertaken on the most at risk mains, being those that are older or have experienced sewer blockages.
<b>Deterioration of manholes</b>	Manhole renewal is considered secondary to mains renewal until the backlog of low condition mains are relined or replaced.

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. Primarily this involves relining sewer mains using proprietary products as supplied by contractors who specialise in this field.

### 5.4.2 RENEWAL STANDARDS

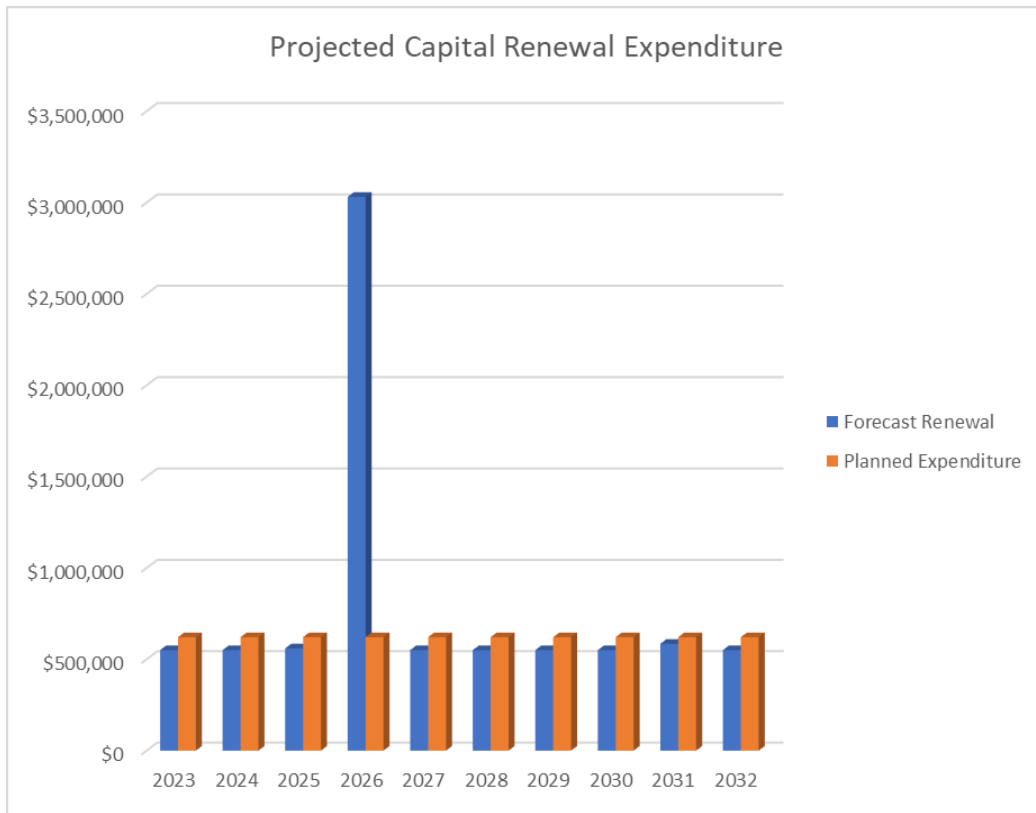
Renewal work is carried out in accordance with the following Standards and Specifications.

- Manufacturers' requirements for the installation of propriety and precast / prefabricated products.
- Relevant Australian Standards.
- AusSpec & Natspec.

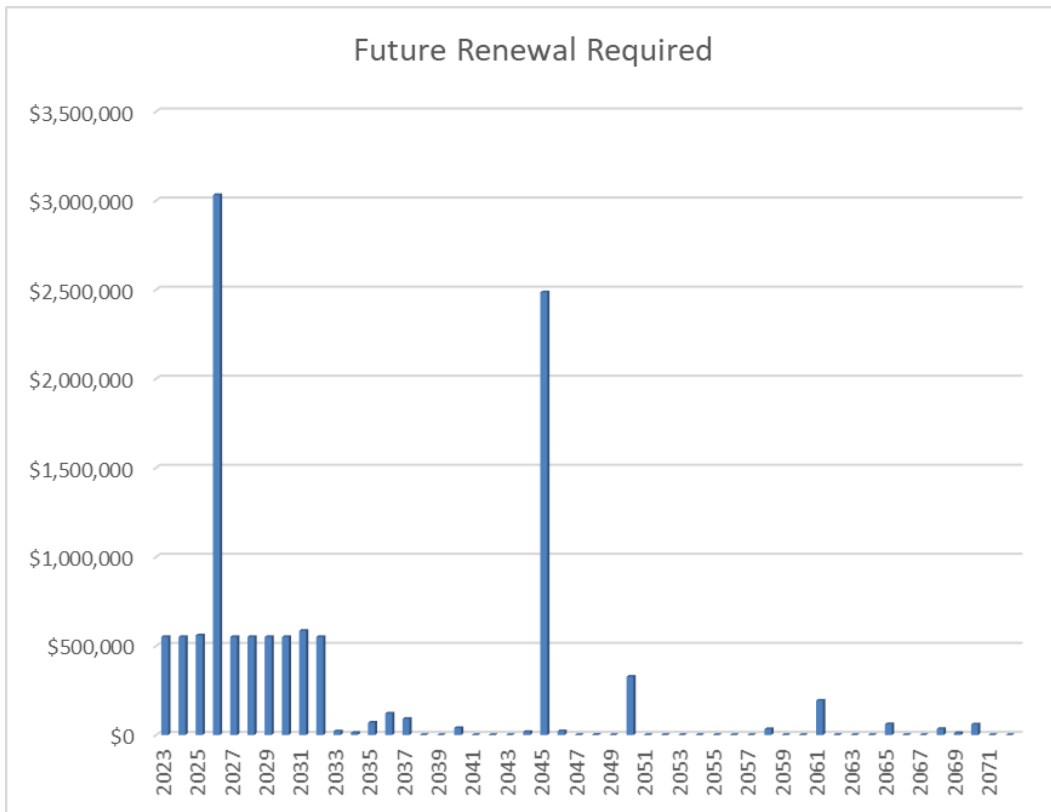
### 5.4.3 SUMMARY OF FUTURE RENEWAL EXPENDITURE

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Fig 5.4.3a. Note that all costs are shown in current dollar values.

**Fig 5.4.3a: Projected Capital Renewal Expenditure**



**Fig 5.4.3b: 50-Year Future Renewal**



Renewals are to be funded from reserves and cash profits from the sewer fund where available. This is further discussed in Section 6.2.

## 5.5 CREATION/ACQUISITION/UPGRADE PLAN

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

### 5.5.1 SELECTION CRITERIA

New assets and upgrade/expansion of existing assets are requested and paid for by private developers.

### 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

Refer to Section 4.4.

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

## 5.6 DISPOSAL PLAN

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. For underground assets the normal practice is to leave assets in situ unless there is a requirement to remove them for some other purpose. Assets identified for possible decommissioning and disposal are shown in Table 5.6. These assets will be further reinvestigated to determine the required levels of service and to see what options are available for alternate service delivery, if any.

**Table 5.6: Assets identified for Disposal**

ASSET	REASON FOR DISPOSAL	TIMING	CASHFLOW FROM DISPOSAL
Various	End of service life.	As per sewer mains rehabilitation program.	Nil.



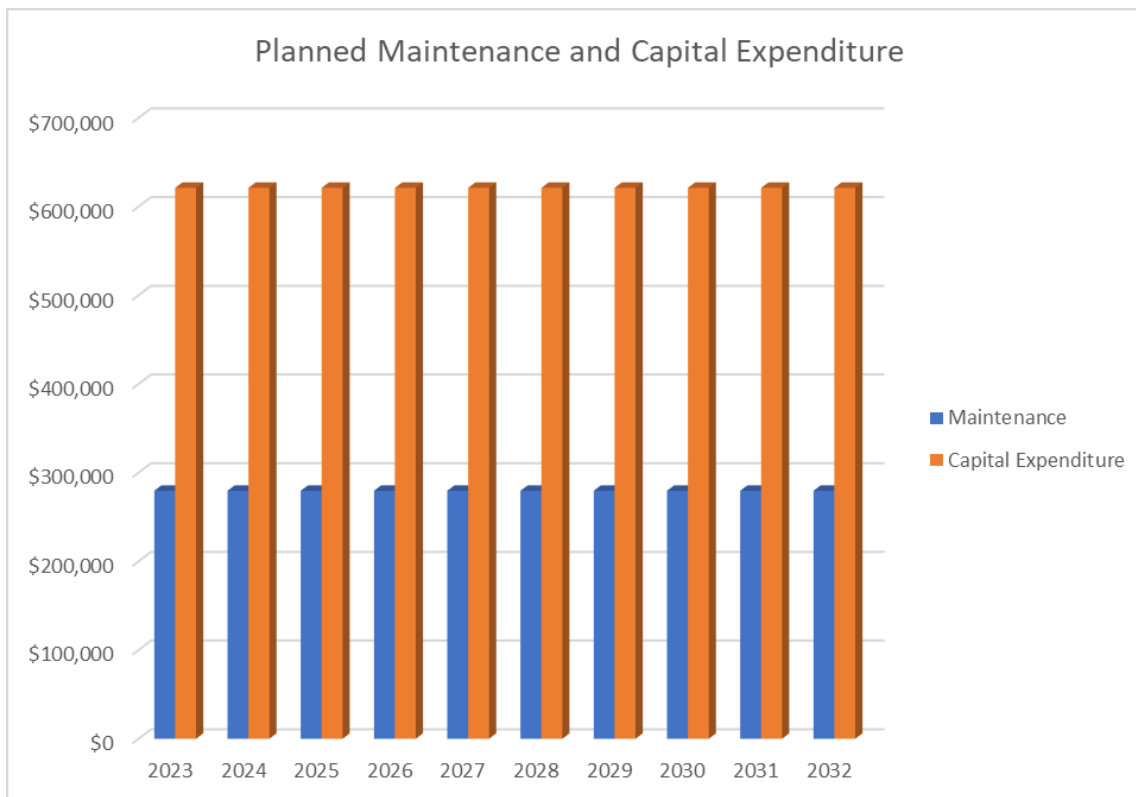
## 6. FINANCIAL SUMMARY

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

### 6.1 FINANCIAL STATEMENTS AND PROJECTIONS

The financial projections are shown in Fig 6.1 for planned maintenance and capital expenditure (renewal and upgrade/expansion/new assets).

**Fig 6.1: Planned Maintenance and Capital Expenditure**



Note that all costs are shown in current dollar values.

#### 6.1.1 SUSTAINABILITY OF SERVICE DELIVERY

There are two (2) 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). The annual average life cycle cost for the services covered ((forecasted 10-year average) in this asset management plan is \$763,000.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure (forecasted 10-year average) is \$901,000.

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 sewer asset management 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.

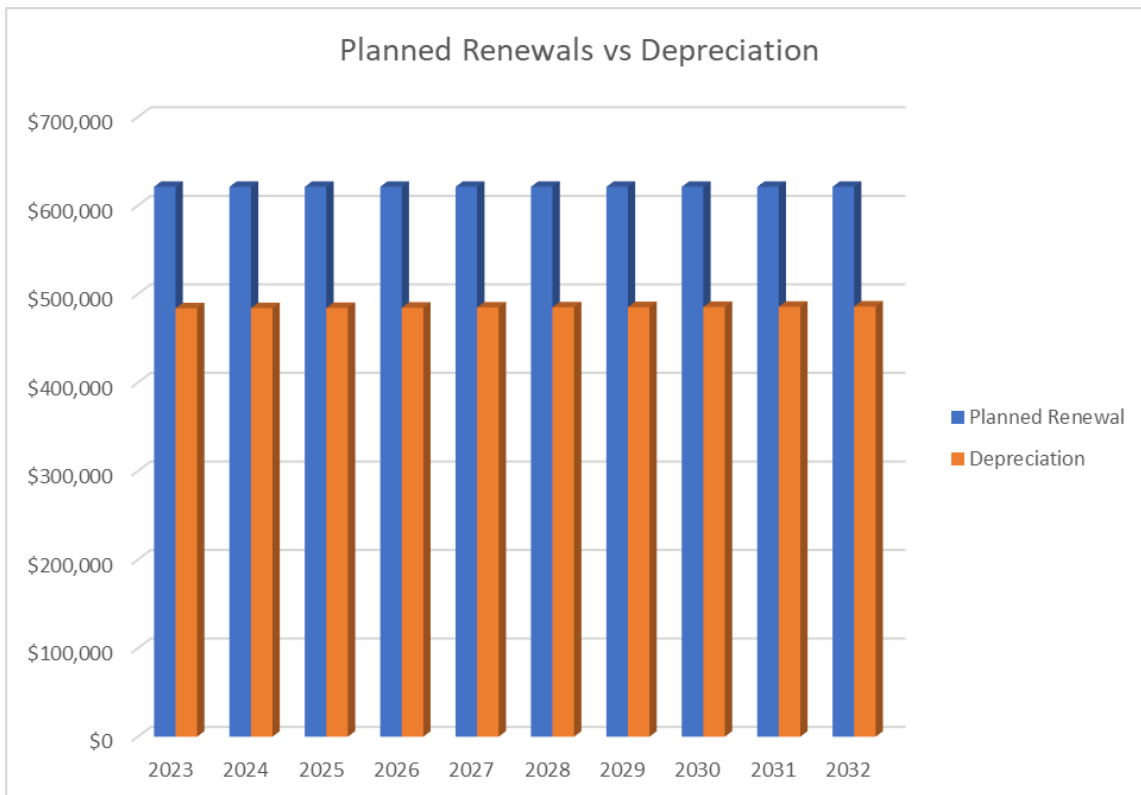
The current level on income ensures that the business unit is operating on a sustainable basis with a current \$137,000 surplus. The life cycle sustainability index is 118%.

Medium term – 10 Year Financial Planning Period

Funding for the remainder of the delivery program will be adequate to keep pace with asset consumption using the previous financial modelling that is contained in the asset register. These will be reviewed, and it is hoped that actual costs will prove to be much lower than have been adopted in the past. The current iteration of this plan provides accurate modelling as project history accumulates and costs with associated variables become more accurately known.

Council will manage the ‘gap’ by developing this asset management plan to provide guidance on future service levels and resources required to provide these services.

**Fig 6.1.1: Planned Renewals vs Depreciation**



## 6.2 FUNDING STRATEGY

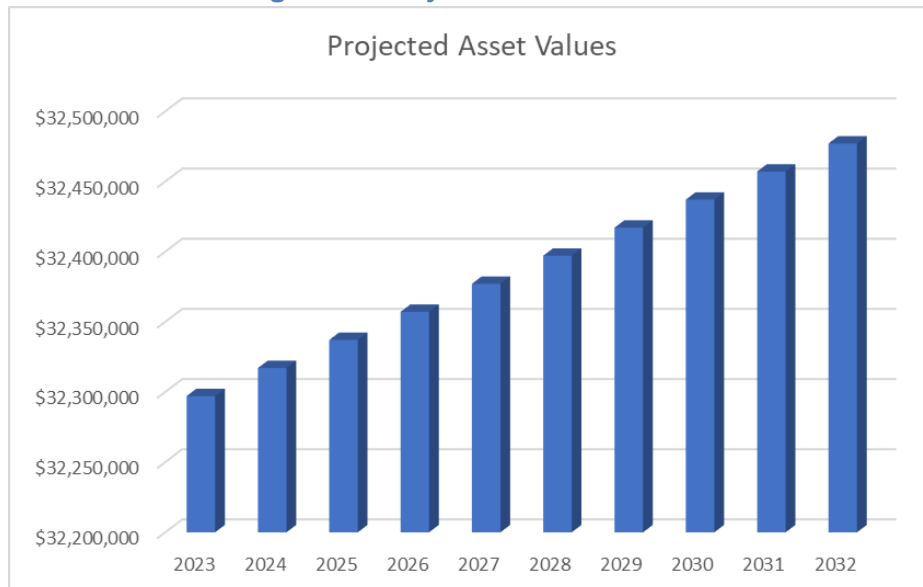
Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in Council's 10-year long-term financial plan.

Achieving the financial strategy will require an ongoing commitment to fund the increasing demand for asset renewals. Renewal costs may outpace increased revenue from development growth.

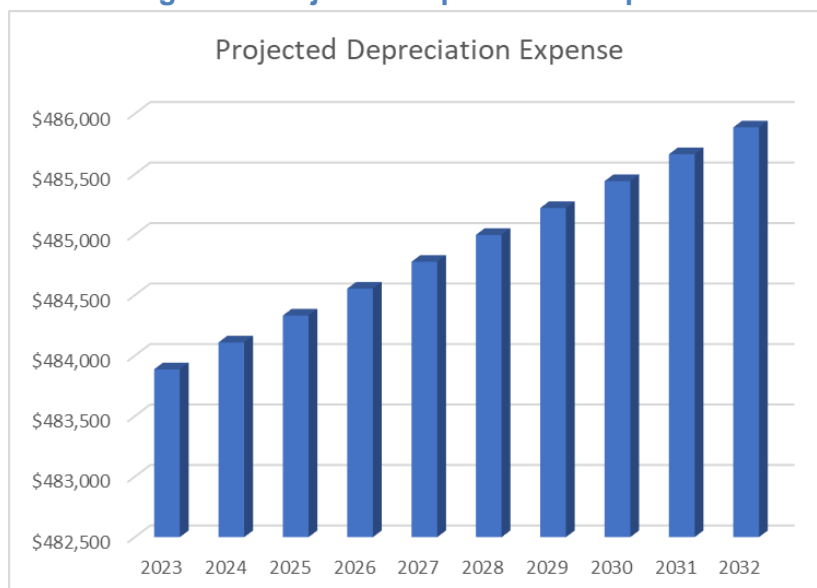
## 6.3 VALUATION FORECASTS

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Fig 6.3a shows the projected replacement cost asset values over the planning period in current dollar values.

**Fig 6.3a: Projected Asset Values**



Depreciation expense values are forecast in line with asset values as shown in Fig 6.3b.

**Fig 6.3b: Projected Depreciation Expense**

#### 6.4 KEY ASSUMPTIONS MADE IN FINANCIAL FORECASTS

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

**Table 6.4: Key Assumptions**

PARAMETER	DOCUMENT SECTION	ASSUMPTION
<b>Asset Values</b>	Core Asset Management Plan, Section 5.	GIS – recorded quantities and reviewed unit rates, at June 30 of previous year.
<b>Depreciation</b>	Core Asset Management Plan, Section 7.	Depreciation curve method as AASB116 with reviewed useful lives applicable as at June 30 of previous year.
<b>Levels of service</b>	Section 3 above	Present levels maintained or enhanced.
<b>Demand</b>	Section 4 above	Renewals using current relining technology, uniform population and asset stock growth, to 2030.

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<b>Maintenance and Renewal Expenditure</b>	Section 5 above	Similar pattern to previous years, with regular increases to recognise larger asset stock.
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Maintenance costs for sewerage assets will typically increase to allow for the increase in total asset value (reflecting the higher costs associated with managing a larger asset stock). Again, asset values are predicted to increase over the reporting period. Maintenance costs will need to be closely monitored to ensure that sufficient funds are available to optimise long-term expenditure and not create a backlog.

## **7. ASSET MANAGEMENT PRACTICES**

### **7.1 ACCOUNTING/FINANCIAL SYSTEMS**

*Refer to Core Asset Management Plan.*

### **7.2 ASSET MANAGEMENT SYSTEMS**

*Refer to Core Asset Management Plan.*

### **7.3 INFORMATION FLOW REQUIREMENTS AND PROCESSES**

*Refer to Core Asset Management Plan.*

### **7.4 STANDARDS AND GUIDELINES**

*Refer to Core Asset Management Plan.*

### **7.5 DATA CONFIDENCE LEVEL**

Data confidence levels for this AMP are rated as B or C.

## 8. PLAN IMPROVEMENT AND MONITORING

### 8.1 PERFORMANCE MEASURES

*Refer to Core Asset Management Plan.*

### 8.2 IMPROVEMENT PLAN

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

**Table 8.2: Improvement Plan**

TASK NO	TASK	RESPONSIBILITY	RESOURCES REQUIRED	TIMELINE
1.	20 Year Upgrade / Expansion Program – develop program, with emphasis on the first 10 years of the reporting period.	Director of Infrastructure Services	Completed	Review annually
2.	Undertake yearly condition assessments of the sewerage network with the aim for 100% coverage every five (5) years.	Director of Infrastructure Services	Yes	Annually
3.	Develop priority ranking system for sewer upgrade program.	Director of Infrastructure Services	Yes	Completed
4.	Undertake an annual review of this Asset Management plan.	Manager of Asset Services	Staff time	Annually reported to December meeting of Council.
5.	Separate maintenance expenditure into reactive and proactive lines.	Chief Financial Officer	Yes.	As new finance system is implemented.

### **8.3 MONITORING AND REVIEW PROCEDURES**

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*Refer to Core Asset Management Plan.*



## REFERENCES

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*Refer to Core Asset Management Plan.*