

ASSET MANAGEMENT PLAN

Yorke Peninsula Council Water Infrastructure



Document Control Asset Management Plan

Document ID :

Rev No	Date	Revision Details	Author	Reviewer	Approver
1	November 2020	Initial draft for staff review	MM	TG, GS, DG	
2	November 2020	Draft for Public Consultation	MM		Council
3	February 2021	Updated Appendix D and included Table D3.1 - Proposed Renewal (Capital Works) Forecast 2021 to 2030	MM		
4	March 2021	Adopted by Council – 043/2021	MM		Council

© Copyright 2019 – All rights reserved The Institute of Public Works Engineering Australasia

Contents

1.0	EXECUTIVE SUMMARY	5
1.1	The Purpose of the Plan	5
1.2	Asset Description	5
1.3	Levels of Service	5
1.4	Future Demand	5
1.5	Lifecycle Management Plan	5
1.6	Financial Summary	5
1.7	Asset Management Practices	7
1.8	Monitoring and Improvement Program	7
2.0	Introduction	8
2.1	Background	8
2.2	Goals and Objectives of Asset Ownership	9
3.0	LEVELS OF SERVICE	10
3.1	Customer Research and Expectations	10
3.2	Strategic and Corporate Goals	10
3.3	Legislative Requirements	10
3.4	Customer Values	11
3.5	Customer Levels of Service	12
3.6	Technical Levels of Service	13
4.0	FUTURE DEMAND	15
4.1	Demand Drivers	15
4.2	Demand Forecasts	15
4.3	Demand Impact and Demand Management Plan	15
4.4	Asset Programs to meet Demand	15
4.5	Climate Change and Adaption	15
5.0	LIFECYCLE MANAGEMENT PLAN	17
5.1	Background Data	17
5.2	Operations and Maintenance Plan	18
5.3	Renewal Plan	20
5.4	Summary of future renewal costs	21
5.5	Acquisition Plan	22
5.6	Disposal Plan	24

6.0	RISK N	MANAGEMENT PLANNING	25
6.1	Critica	l Assets	25
6.2	Risk A	ssessment	25
6.3	Infrast	ructure Resilience Approach	27
6.4	Service	e and Risk Trade-Offs	28
7.0	FINAN	CIAL SUMMARY	29
7.1	Financ	cial Statements and Projections	29
7.2	Fundir	ng Strategy	30
7.3	Valuat	ion Forecasts	30
7.4	Key As	sumptions Made in Financial Forecasts	31
7.5	Foreca	ast Reliability and Confidence	31
8.0	PLAN	IMPROVEMENT AND MONITORING	33
8.1	Status	of Asset Management Practices	33
8.2	Improvement Plan		
8.3	Monitoring and Review Procedures		33
8.4	Perfor	mance Measures	34
9.0	REFER	ENCES	35
10.0	APPEN	IDICES	36
Append	A xib	Acquisition Forecast	36
Append	dix B	Operation Forecast	37
Append	dix C	Maintenance Forecast	38
Append	dix D	Renewal Forecast Summary	39
Append	dix E	Disposal Summary	56
Append	dix F	Budget Summary by Lifecycle Activity	57
Append	dix G	Water Network Maps	58

1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

Asset management planning is a comprehensive process ensuring delivery of services from infrastructure is financially sustainable.

This Asset Management Plan (AMP) details information about infrastructure assets with 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 over the 20 year planning period. The AMP will link to a Long-Term Financial Plan (LTFP) which typically considers a 10 year planning period.

This plan covers the infrastructure assets that provide Water Infrastructure.

1.2 Asset Description

The Water network comprises:

- Water Pipes
- Water Nodes
- Water Pumping, Storage and Treatment Assets

The above infrastructure assets have significant total renewal value estimated at \$4,655,135.

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 are:

Unable to renew all assets at the optimum time

1.4 Future Demand

The main demands for new services are created by:

- New Development / Connections
- Tourism
- Regulatory Changes

These demands will be approached using a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand. Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this AMP includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the AMP may be prepared for a range of time periods, it typically informs a LTFP period of 10 years. Therefore, a summary output from the AMP is the forecast of 10 year total outlays, which for Water is estimated as \$3,117,813 or \$311,781 on average per year.

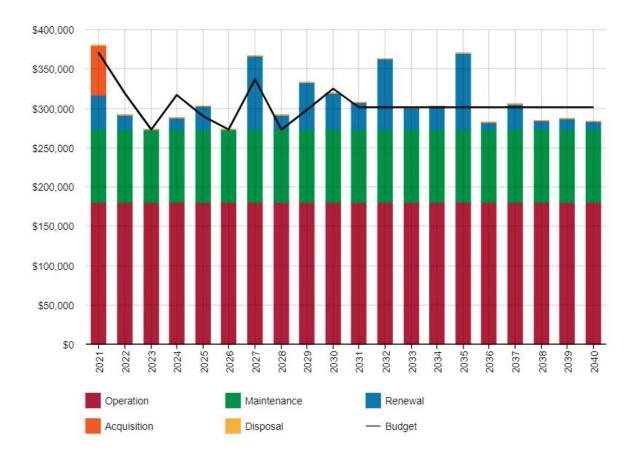
1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10 year period is \$3,076,000 or \$307,600 on average per year as per the LTFP or Planned Budget. This is 98.66% 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 LTFP can be provided. The Informed decision making depends on the AMP emphasising the consequences of Planned Budgets on the service levels provided and risks.

The anticipated Planned Budget for Water Infrastructure leaves a shortfall of \$4,181 on average per year of the forecast lifecycle costs required to provide services in the AMP compared with the Planned Budget currently included in the LTFP. This is shown in the figure below.



Forecast Lifecycle Costs and Planned Budgets

Figure Values are in current dollars.

We plan to provide Water services for the following:

 Operation, maintenance, renewal and upgrade of Water assets to meet service levels set by Council in annual budgets.

1.6.2 What we cannot do

We currently do **not** allocate enough budget to sustain these services at the proposed standard or to provide all new services being sought. Works and services that cannot be provided under present funding levels are:

Renew all Water assets when required

1.6.3 Managing the Risks

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

The main risk consequences are:

- Failure to maintain the existing Water network to a safe and serviceable standard
- Failure to undertake inspections of the existing Water network

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

- Ensuring sufficient funding to maintain the Water network at an appropriate level
- Prioritise all works required
- Document all inspections and complaints

1.7 Asset Management Practices

Our systems to manage assets include:

- Authority (enterprise resource planning system)
- Conquest (asset management system)

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

- If Asset Register data is used to forecast the renewal costs this is done using the acquisition year and the useful life,
- Alternatively, an estimate of renewal lifecycle costs is projected from external condition modelling systems (such as Pavement Management Systems) and may be supplemented with, or based on, expert knowledge.

The Water Asset Register was used to forecast the renewal life cycle costs for this AMP.

1.8 Monitoring and Improvement Program

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

- Continual review of Asset Register
- Development of agreed Levels of Service in consultation with the community
- Increased definition of performance standards through customer engagement to assess expectations
- Improvement to Risk identification and management
- Develop 3-5 Year Capital Renewal Program
- Continual collection and review of condition data

2.0 Introduction

2.1 Background

This AMP 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 AMP is to be read with Council planning documents. This should include the Asset Management Policy and Asset Management Strategy, where developed, along with other key planning documents:

- Yorke Peninsula Council Strategic Management Plan 2021-2025
- Yorke Peninsula Council Long Term Financial Plan 2021-2030
- Yorke Peninsula Council Annual Business Plan and Budget
- Yorke Peninsula Council Potable Water Infrastructure Asset Valuation & Methodology 1 July 2019

The infrastructure assets covered by this AMP include pipes, water meters, storage and treatment assets in the townships of Balgowan, Black Point, Hardwicke Bay and Marion Bay. For a detailed summary of the assets covered in this AMP refer to Table in Section 5.

These assets are used to provide potable Water to the above communities.

The infrastructure assets included in this plan have a total replacement value of \$4,655,135.

Key stakeholders in the preparation and implementation of this AMP are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Community	The main stakeholders in the AMP and the key beneficiaries of the services are the community. It is the community who contribute funding through payment of rates and communicate their satisfaction (or otherwise) with services through contact with Council.
Councillors	Represent needs of community/shareholders
	Allocate resources to meet planning objectives in providing services while managing risks
	Ensure service sustainable
Corporate Management Team	Endorse the development of AMPs and provide resources required to complete this task. Set high-level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and be prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and LTFP.
Staff	Manage the infrastructure with resources provided by Council within the allocated budget.

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 LTFP 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 2015¹
- ISO 55000²

9

¹ Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2 | 13

² ISO 55000 Overview, principles and terminology

3.0 LEVELS OF SERVICE

3.1 Customer Research and Expectations

The Council has not carried out any research on customer expectations. This will be investigated for future updates of the AMP.

3.2 Strategic and Corporate Goals

This AMP is prepared under the direction of the Council vision, mission, goals and objectives.

Our vision is:

"Prosperous, diverse and uniquely spectacular – Yorke Peninsula"

Our mission is:

- We will foster a climate where Yorke Peninsula can thrive as a prosperous network of multigenerational communities.
- We will deliver services that enhances the Peninsula's reputation as a vibrant, easily accessible coastal and food production region.
- We will celebrate and protect our unique and pristine environment.
- We will continue to support our diversity of sustainable industries and lifestyles.

Strategic goals have been set by the Council. The relevant goals and objectives and how these are addressed in this AMP 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 AMP
Community Connected through infrastructure	Develop and deliver on AMPs for all asset classes	Water AMP developed and adopted by Council.
	Explore Provision of new infrastructure	New infrastructure provided as required
Valued and Restored Environment	Deliver projects and services that have direct environmental benefits	Reduced water and electricity consumption by Council
Responsible Governance and Leadership	Openness and transparency of reporting Council's performance	Asset renewal funding ratio
	Effective leadership and informed decision making	Net financial liabilities ratio
	Meet all legislative requirements and compliance with Council's internal controls	

3.3 Legislative Requirements

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

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by AMPs for sustainable service delivery.
SA Public Health Act and Regulations	Promote and to provide for the protection of the health of the public of South Australia and to reduce the incidence of preventable illness, injury and disability.
Environment Protection Act and Regulations	Provides for the protection of the environment.
Water Industry Act and Regulations	To facilitate planning in connection with water demand and supply.
Work Health and Safety Act and Regulations	To provide for the health, safety and welfare of persons at work.
Australian Drinking Water Guidelines	An authoritative reference to the community and the water supply industry on what defines safe, good quality water, how it can be achieved and how it can be assured.
Office of the Technical Regulator	Monitors compliance with legislation and applicable technical standards in the electricity, gas and water industries.

3.4 Customer Values

Service levels are defined in three ways:

- customer values
- customer levels of service
- technical levels of service

Customer Values indicate:

- what aspects of the service is important to the customer?
- whether they see value in what is currently provided and
- the likely trend over time based on the current budget provision

Table 3.4: Customer Values

Service Objective:					
Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget		
Provision of potable water to meet community and industry standards	Customer Requests and Community Feedback	Moderate number of Customer Requests and Community Feedback	Not anticipated to change		

3.5 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 3.5 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 3.5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Provide a restricted potable water supply	Customer feedback and community satisfaction	Monitored through Customer Service Requests, correspondence, etc.	Not anticipated to change
	Confidence levels		High	High
Function	Water network is appropriately maintained Meets relevant legislative requirements	Customer feedback and community satisfaction Complies with legislative requirements	Monitored through Customer Service Requests, correspondence, etc. <50 Complies with legislative requirements	Not anticipated to change
	Confidence levels		High	High
Capacity	Water network has the capacity to accept current and projected usage for each township	New developments can connect to the Water network	Less than 20 new connections per year in total for all schemes Each scheme has capacity for new connections	Not anticipated to change
	Confidence levels		High	High

3.6 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. replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new storage tank).
- Operation the regular activities to provide services such as regular inspections of the water network.
- **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. pipe repairs).
- Renewal the activities that return the service capability of an asset up to that which it had originally provided (e.g. pipeline or treatment plant component replacement).

Departmental staff 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 AMP.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **	
TECHNICAL LEV	TECHNICAL LEVELS OF SERVICE				
Acquisition	Upgrade of Water assets are identified through design and new technology	Identified assets to be upgraded are included in annual budget discussion and budget	Planned upgrade work is undertaken as per current upgrade program and budget	Developed program for upgrade of Water assets	
		Budget	Budget – Current (reviewed annually)	Budget – Current (reviewed annually)	
Operation	Water network meets user and regulatory requirements	Inspections of network	Quarterly inspections and repairs of network in line with water meter reading. Quarterly water quality testing. Annual backflow prevention device inspections.	Current Performance	
		Budget	Budget – Current (reviewed annually)	Budget – Current (reviewed annually)	
Maintenance	Water network is well maintained and meets customer and legislative requirements	Regular maintenance program and Customer Service Requests completed in a	Planned maintenance is undertaken as and where required. Customer Service Requests are actioned in a timeframe	Current Performance	

³ IPWEA, 2015, IIMM, p 2 | 28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
		reasonable timeframe	determined by their priority.	
		Budget	Budget – Current (reviewed annually)	Budget – Current (reviewed annually)
Renewal	Renewal of Water assets as required and at the optimum timeframe	Assets renewed as per current renewal program and budget	Planned renewal work is undertaken as per current renewal program and budget	Developed asset renewal program Established Renewal Priority Ranking Criteria
		Budget	Budget – Current (reviewed annually)	Budget – Current (reviewed annually)
Disposal	Disposal of assets no longer required	As identified by staff or from community request	As identified by staff or from community request	As identified by staff or from community request
		Budget	Budget – identified during annual budget process	Budget – identified during annual budget process

Note: * Current activities related to Planned Budget.

 $\begin{tabular}{ll} ** & Forecast required performance related to forecast lifecycle costs. \end{tabular}$

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, 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 AMP.

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
New Development / Connections	Growth through new houses and small land division connections	Expected to continue	Impact on existing supply and storage capacity	Planning, priority and budget considerations for upgrade and maintenance of storage systems
Tourism	Increased demand on some township services during peak holiday periods	Expected to continue	Impact on existing supply and storage capacity	Planning, priority and budget considerations for upgrade and maintenance of storage systems
Regular changes to Water standards and guidelines	Regulatory standards are managed by the Infrastructure Manager	Additional operational and reporting requirements	Additional operational and reporting costs	Costs to be monitored and considered during annual budget planning process

Table 4.3: Demand Management Plan

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 LTFP (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.

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

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

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 AMP are shown in Table 5.1.1.

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

Table 5.1.1: Assets covered by this Plan

Asset Category	Dimension	Replacement Value
Water Pipe	Connection (5320m) Main (26326m) Water Line (1487m) Salt Water Line (1339m)	\$3,068,088
Water Nodes	Air Valve (25) End Cap (12) Fire Hydrant (1) Fire Plug (51) Gate Valve (7) Reducer (13) Seat Gate Valve (4) Stop Valve (26) Water Meter (821)	\$ 337,855
Pumping, Treatment & Storage	Pumps (11) Tanks (18) Treatment Plant	\$1,249,192

TOTAL \$4,655,135

Figure 5.1.1: Asset Age Profile

All figure values are shown in current day dollars.

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
Balgowan, Black Point and Hardwicke Bay Water Schemes	Lack of SA Water supply during peak load periods
Balgowan	Inferior tapping saddles initially installed. Continue program to replace with stainless steel saddles.
Marion Bay	Corrosive nature of desalinated water on infrastructure. Current location of the beach well.
All schemes	Network leakage. Program regular inspections and continual monitoring.

The above service deficiencies were identified from inspections, maintenance records, staff knowledge and customer feedback.

5.1.3 Asset condition

Condition of Water assets is monitored by Council staff but a full condition profile has not yet been developed for the entire Water network. Council currently undertake regular inspections of the network and this will be used to develop a condition profile in a future reiteration of this plan.

Condition is measured using a 1-5 grading system⁴ 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 AMP they are all translated to the 1-5 grading scale.

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 will be shown in a future reiteration of this plan.

5.2 Operations and Maintenance Plan

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

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

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 pipe repairs, asphalt patching, and equipment repairs.

The trend in operations / maintenance budgets are shown in Table 5.2.1.

Table 5.2.1: Operations / Maintenance Budget Trends

Year	Total Operations / Maintenance Budget \$ *
2018/19	\$239,000
2019/20	\$284,000
2020/21	\$273,000
2021/22	\$275,000

Note * 2021/22 Estimated budget

Operations and 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 AMP and service risks considered in the Infrastructure Risk Management Plan.

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

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The service hierarchy is shown in Table 5.2.2.

Table 5.2.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Nodes	Conveyance of water from storage to user
Pipes	Conveyance of water from storage to user
Pumping, Treatment and Storage	Conveyance of water from source to user Treatment of water to a standard suitable for drinking in accordance with regulatory standards

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.

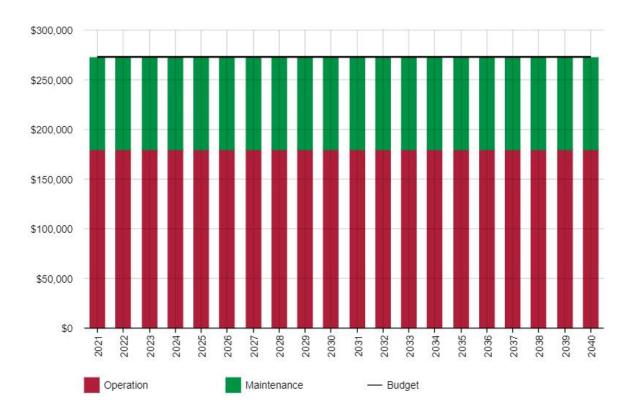


Figure 5.2: Operations and Maintenance Summary

All figure values are shown in current day dollars.

It is anticipated that the operations and maintenance costs will remain constant over the forecast period, with these costs increasing if new assets are constructed or gifted to the Council.

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 typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives were last reviewed on 1 July 2019.⁵

⁵ Yorke Peninsula Council Potable Water Infrastructure Asset Valuation & Methodology 1 July 2019

Table 5.3: Useful Lives of Assets

Asset (Sub)Category	Useful life
Nodes	25 to 60 years
Pipes	60 to 100 years
Pumping, Storage and Treatment	10 to 50 years

The estimates for renewals in this AMP were based on the asset register.

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. tank storage capacity), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. water quality). 6

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.⁷

The ranking criteria, used as a guide, to assist Council determine priority of identified renewal and replacement proposals is detailed in Table 5.3.1.

Table 5.3.1: Renewal Priority Ranking Criteria Guide

Criteria
Breakages
Condition
Water Quality Standard
Available Budget

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 5.4.1. A detailed summary of the forecast renewal costs is shown in Appendix D.

⁶ IPWEA, 2015, IIMM, Sec 3.4.4, p 3 | 91.

⁷ Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3 | 97.

Figure 5.4.1: Forecast Renewal Costs

All figure values are shown in current day dollars.

The forecast renewal requirements for the first 6 years of the plan are lower than current proposed budget allocation in the LTFP, however this changes with years 7 to 9 being under funded.

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 may also be 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 ranking criteria, used as a guide, to assist Council determine priority of identified acquisition/upgrade proposals is detailed in Table 5.4.1.

Criteria

Cost benefit analysis

Service Deficiency

Environmental

Usage

Available Budget

Table 5.5.1: Acquired Assets Priority Ranking Criteria Guide

Summary of future asset acquisition costs

When Council 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 Council.

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

Newly identified upgrade/new projects will be presented to Council for consideration during the budget process each year. Council has budgeted \$63,000 for the construction of new assets in the 2020/21 financial year

Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.5.3. 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.

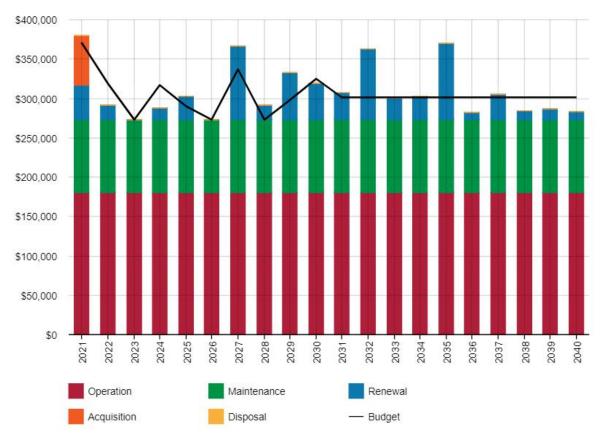


Figure 5.5.3: Lifecycle Summary

All figure values are shown in current day dollars.

The current planned budget is not sufficient to replace all assets that are due for renewal and consideration should be taken during annual budget deliberations and review of the LTFP to accommodate additional funding to address this shortfall.

5.6 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposing of the assets are also outlined in Table 5.6. Any costs or revenue gained from asset disposals is included in the LTFP.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Costs	Operations & Maintenance Annual Savings
No assets currently identified for disposal				

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'⁸.

An assessment of risks⁹ 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.

Critical Asset(s) **Failure Mode Impact** Water Supply Storage Tanks No storage Unable to supply water to No supply customer Pump Failure No supply Potential impact on supply of water to consumer Pipe Break Potential impact on supply of No supply water to consumer

Table 6.1 Critical Assets

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.

External party digging through

6.2 Risk Assessment

External Party Damage to Pipes

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

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.

pipes.

-

Potential impact on supply of

water to consumer

⁸ ISO 31000:2009, p 2

⁹ Yorke Peninsula Council Strategic Management Plan 2021-2025, PO091 Risk Management Policy, Strategic Risk Register & Organisational Risk Register

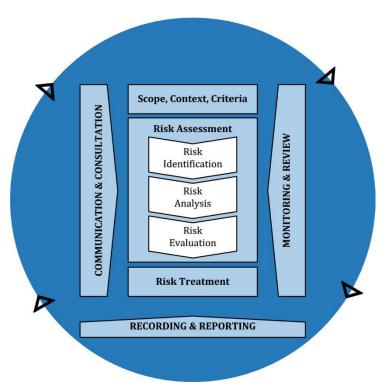


Fig 6.2 Risk Management Process – Abridged Source: ISO 31000:2018, Figure 1, p9

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 risks¹⁰ 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 Council.

-

¹⁰ Risks and Treatment have been identified but not assessed, this will be undertaken as part of Council's Risk Management program

Table 6.2: Risks and Treatment Plans¹⁰

Service or Asset at Risk	What can Happen	Risk Rating (E, H, M & L)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Water Supply	No SA Water supply		Water supply is restricted and not guaranteed by Council		Current Budget
Water Storage Tanks	No storage No supply		Water supply is restricted and not guaranteed by Council		Current Budget
Pump Failure	No supply		Telemetry monitoring of systems. Backup pumps available. Staff on call		Current Budget
Pipe Break	No supply		Regular maintenance		Current Budget
External Party Damage to Pipes	External party digging through pipes		Dial Before You Dig (DBYD) Member — notified when external parties intend to undertake excavation works on Council roads, footpaths or land. External parties required to complete SF039 Application to Carry Out Work on Council's Roads or Footpaths prior to laying underground services.		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 AMP.

6.4 Service and Risk Trade-Offs

The decisions made in adopting this AMP 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:

Upgrade all Water assets when required

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 all assets will be renewed at the optimum time
- Deterioration of assets

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:

Water supply to customers may be impacted

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 AMP. 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 AMP are shown below. The assets are valued at Current Replacement Cost (CRC) of an asset minus any accumulated depreciation and impairment losses:

Current (Gross) Replacement Cost \$4,655,135

Depreciable Amount \$4,655,135

Depreciated Replacement Cost \$4,655,135

Depreciated Replacement Cost \$2,3363,834

Depreciation \$81,105

7.1.2 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AMP 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 Ratio¹² 87%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 87% 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 AMP 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 \$305,841 on average per year.

The proposed (budget) operations, maintenance and renewal funding is \$301,300 on average per year giving a 10 year funding shortfall of \$4,181 per year. This indicates that 99% of the forecast costs needed to provide the services documented in this AMP are accommodated in the proposed budget. This excludes acquired assets.

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.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to achieve a financial indicator of approximately 1.0 for the first years of the AMP and ideally over the 10 year life of the LTFP.

7.1.3 Forecast Costs (outlays) for the long-term financial plan

Table 7.1.3 shows the forecast costs (outlays) for the 10 year LTFP.

Forecast costs are shown in 2021 dollar values.

Table 7.1.3: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Forecast Acquisition	Forecast Operation	Forecast Maintenance	Forecast Renewal	Forecast Disposal
2021	\$63,000	\$180,000	\$93,000	\$44,313	\$0
2022	\$0	\$180,000	\$93,000	\$18,263	\$0
2023	\$0	\$180,000	\$93,000	\$0	\$0
2024	\$0	\$180,000	\$93,000	\$14,580	\$0
2025	\$0	\$180,000	\$93,000	\$30,290	\$0
2026	\$0	\$180,000	\$93,000	\$0	\$0
2027	\$0	\$180,000	\$93,000	\$93,993	\$0
2028	\$0	\$180,000	\$93,000	\$18,278	\$0
2029	\$0	\$180,000	\$93,000	\$59,421	\$0
2030	\$0	\$180,000	\$93,000	\$45,675	\$0
2031	\$0	\$180,000	\$93,000	\$34,577	\$0
2032	\$0	\$180,000	\$93,000	\$90,475	\$0
2033	\$0	\$180,000	\$93,000	\$27,050	\$0
2034	\$0	\$180,000	\$93,000	\$30,272	\$0
2035	\$0	\$180,000	\$93,000	\$97,135	\$0
2036	\$0	\$180,000	\$93,000	\$9,030	\$0
2037	\$0	\$180,000	\$93,000	\$32,127	\$0
2038	\$0	\$180,000	\$93,000	\$11,772	\$0
2039	\$0	\$180,000	\$93,000	\$14,122	\$0
2040	\$0	\$180,000	\$93,000	\$10,471	\$0

7.2 Funding Strategy

The proposed funding for assets is outlined in the Council's budget and LTFP.

The financial strategy of the Council determines how funding will be provided, whereas the AMP 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 to the service.

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

Key assumptions made in this AMP are:

- The current operations and maintenance budgets are adequate to manage the Water network
- Current day dollars have been used
- Asset Register is reliable
- Renewal forecasts have been made by professional judgement
- Legislative compliance will remain constant

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AMP 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 scale¹³ 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 $\pm2\%$
B. Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate \pm 10%
C. Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated \pm 25%
D. Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy \pm 40%
E. Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AMP is shown in Table 7.5.2.

_

¹³ IPWEA, 2015, IIMM, Table 2.4.6, p 2 | 71.

Table 7.5.2: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Reliable	
Growth projections	Reliable	
Acquisition forecast	Uncertain	Current knowledge of future upgrade of assets. Forecast is also dependent on annual budget process and the success of future grant applications
Operation forecast	Reliable	Current and previous budget information
Maintenance forecast	Reliable	Current and previous budget information
Renewal forecast - Asset values	Reliable	Generated from CONQUEST. Data reviewed and updated annually. Valuation 1 July 2019
- Asset useful lives	Reliable	Generated from CONQUEST. Data reviewed and updated annually. Valuation 1 July 2019
- Condition modelling	Unknown	
Disposal forecast	Reliable	

The estimated confidence level for and reliability of data used in this AMP is considered to be Reliable.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices¹⁴

8.1.1 Accounting and financial data sources

This AMP utilises accounting and financial data. The source of the data is Authority from Civica.

8.1.2 Asset management data sources

This AMP also utilises asset management data. The source of the data is Conquest.

8.2 Improvement Plan

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

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Continual review of Asset Register	Asset Manager / Infrastructure Manager	In house	Ongoing
2	Development of agreed Levels of Service in consultation with the community	Director Assets & Infrastructure	In house	Ongoing
3	Increased definition of performance standards through customer engagement to assess expectations	Director Assets & Infrastructure	In house	Ongoing
4	Improvement to Risk Identification	Director Assets & Infrastructure	In house	Ongoing
5	Develop 3-5 Year Capital Renewal Program	Asset Manager / Infrastructure Manager	In house	Ongoing
6	Continual collection and review of condition data	Asset Manager / Infrastructure Manager	In house or Budget	Ongoing

8.3 Monitoring and Review Procedures

This AMP 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 AMP will be reviewed and updated bi-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 LTFP or will be incorporated into the LTFP once completed.

The AMP has a maximum life of 4 years and is due for complete revision and updating within two years of each Council election.

¹⁴ ISO 55000 Refers to this the Asset Management System

8.4 Performance Measures

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

- The degree to which the required forecast costs identified in this AMP are incorporated into the LTFP.
- 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 AMP.
- 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).
- The Asset Renewal Funding Ration (previously Asset Sustainability Ratio Per LGA 'Financial Sustainability' Information Paper No. 9: Financial Indicators Revised May 2015) is to achieve capital outlays on renewing/replacing assets at greater than 90% but less than 110% of the level proposed in the AMP.

9.0 REFERENCES

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus
- IPWEA, 2015, 2nd edn., 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMM
- IPWEA, 2015, 3rd edn., 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2012 LTFP Practice Note 6 PN Long-Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney
- ISO, 2018, ISO 31000:2018, Risk management Guidelines
- Yorke Peninsula Council Strategic Management Plan 2021-2025
- Yorke Peninsula Council Annual Business Plan and Budget
- Yorke Peninsula Council Long Term Financial Plan 2021-2030
- Yorke Peninsula Council Potable Water Infrastructure Asset Valuation and Methodology 1 July 2019

10.0 APPENDICES

Appendix A Acquisition Forecast

Newly identified upgrade/new projects will be presented to Council for consideration during the budget process each year. Council has budgeted \$63,000 for the construction of new assets in the 2020/21 financial year.

Appendix B Operation Forecast

Operation costs are expected to remain constant for the foreseeable future. Forecast costs are shown in 2020/21 dollar values.

Table B2 - Operation Forecast Summary

Year	Operation Forecast	Additional Operation Forecast	Total Operation Forecast
2021	\$180,000	\$0	\$180,000
2022	\$180,000	\$0	\$180,000
2023	\$180,000	\$0	\$180,000
2024	\$180,000	\$0	\$180,000
2025	\$180,000	\$0	\$180,000
2026	\$180,000	\$0	\$180,000
2027	\$180,000	\$0	\$180,000
2028	\$180,000	\$0	\$180,000
2029	\$180,000	\$0	\$180,000
2030	\$180,000	\$0	\$180,000
2031	\$180,000	\$0	\$180,000
2032	\$180,000	\$0	\$180,000
2033	\$180,000	\$0	\$180,000
2034	\$180,000	\$0	\$180,000
2035	\$180,000	\$0	\$180,000
2036	\$180,000	\$0	\$180,000
2037	\$180,000	\$0	\$180,000
2038	\$180,000	\$0	\$180,000
2039	\$180,000	\$0	\$180,000
2040	\$180,000	\$0	\$180,000

Appendix C Maintenance Forecast

Maintenance costs are expected to remain constant for the foreseeable future. Forecast costs are shown in 2020/21 dollar values.

Table C2 - Maintenance Forecast Summary

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2021	\$93,000	\$0	\$93,000
2022	\$93,000	\$0	\$93,000
2023	\$93,000	\$0	\$93,000
2024	\$93,000	\$0	\$93,000
2025	\$93,000	\$0	\$93,000
2026	\$93,000	\$0	\$93,000
2027	\$93,000	\$0	\$93,000
2028	\$93,000	\$0	\$93,000
2029	\$93,000	\$0	\$93,000
2030	\$93,000	\$0	\$93,000
2031	\$93,000	\$0	\$93,000
2032	\$93,000	\$0	\$93,000
2033	\$93,000	\$0	\$93,000
2034	\$93,000	\$0	\$93,000
2035	\$93,000	\$0	\$93,000
2036	\$93,000	\$0	\$93,000
2037	\$93,000	\$0	\$93,000
2038	\$93,000	\$0	\$93,000
2039	\$93,000	\$0	\$93,000
2040	\$93,000	\$0	\$93,000

Appendix D Renewal Forecast Summary

The Yorke Peninsula Council recommends the renewal of assets at the optimum time and based on their current condition. The renewal forecast shows a shortfall in funding with the current planed budget. Forecast costs are shown in 2020/21 dollar values.

Table D3 - Renewal Forecast Summary

Year	Renewal Forecast	Current LTFP Renewal Budget*	Annual Renewal Budget Shortfall	Cumulative Renewal Budget Shortfall
2021	\$44,313	\$35,000	-\$9,313	-\$9,313
2022	\$18,263	\$46,000	\$27,737	\$18,424
2023	\$0	\$0	\$0	\$18,424
2024	\$14,580	\$44,000	\$29,420	\$47,844
2025	\$30,290	\$17,000	-\$13,290	\$34,554
2026	\$0	\$0	\$0	\$34,554
2027	\$93,993	\$64,000	-\$29,993	\$4,561
2028	\$18,278	\$0	-\$18,278	-\$13,717
2029	\$59,421	\$25,000	-\$34,421	-\$48,138
2030	\$45,675	\$52,000	\$6,325	-\$41,813
2031	\$34,577	\$28,300	-\$6,277	-\$48,090
2032	\$90,475	\$28,300	-\$62,175	-\$110,265
2033	\$27,050	\$28,300	\$1,250	-\$109,015
2034	\$30,272	\$28,300	-\$1,972	-\$110,987
2035	\$97,135	\$28,300	-\$68,835	-\$179,822
2036	\$9,030	\$28,300	\$19,270	-\$160,552
2037	\$32,127	\$28,300	-\$3,827	-\$164,379
2038	\$11,772	\$28,300	\$16,528	-\$147,851
2039	\$14,122	\$28,300	\$14,178	-\$133,673
2040	\$10,471	\$28,300	\$17,829	-\$115,844

Note * Years 2031-2040 are the average of the first 10 years Current LTFP Renewal Budget figures

Table D3.1 – Proposed Renewal (Capital Works) Forecast 2021 to 2030

Asset ID	Category	Asset Name	From	То	Year
29532.0	159kL Concrete Tank	Black Point Water Supply System Balancing Tank 1	St Vincent Highway	Black Point	2021
29618.0	Energy Recovery Turbine	Marion Bay Salt Water Desalination Plant Energy Recovery Turbine	Moores Drive	Marion Bay	2022
29628.0	Dosing System Analyser	Marion Bay Salt Water Desalination Plant Hypochlorite Dosing System Analyser	Moores Drive	Marion Bay	2022
29565.0	Transfer Pump 3kW	Hardwicke Bay Water Scheme Main Transfer Pump 3	Moores Drive	Hardwicke Bay	2024
29563.0	Transfer Pump 3kW	Hardwicke Bay Water Scheme Main Transfer Pump 1	Moores Drive	Hardwicke Bay	2024
29568.0	Tank Filling Control System	Hardwicke Bay Water Scheme Tank Filling Control System	Moores Drive	Hardwicke Bay	2024
29488.0	Water Meter	Water Meter (PW-N-00936) in Black Point Drive	Black Point Drive	Black Point	2025
29251.0	Water Meter	Water Meter (PW-N-00759) in Black Point Drive	Black Point Drive	Black Point	2025
29252.0	Water Meter	Water Meter (PW-N-00760) in Black Point Drive	Black Point Drive	Black Point	2025
29253.0	Water Meter	Water Meter (PW-N-00761) in Black Point Drive	Black Point Drive	Black Point	2025
29364.0	Water Meter	Water Meter (PW-N-00795) in Black Point Drive	Black Point Drive	Black Point	2025
29254.0	Water Meter	Water Meter (PW-N-00762) in Black Point Drive	Black Point Drive	Black Point	2025
29255.0	Water Meter	Water Meter (PW-N-00763) in Black Point Drive	Black Point Drive	Black Point	2025
29268.0	Water Meter	Water Meter (PW-N-00790) in Black Point Drive	Black Point Drive	Black Point	2025
29271.0	Water Meter	Water Meter (PW-N-00806) in Black Point Drive	Black Point Drive	Black Point	2025
29285.0	Water Meter	Water Meter (PW-N-00833) in Black Point Drive	Black Point Drive	Black Point	2025
29286.0	Water Meter	Water Meter (PW-N-00834) in Black Point Drive	Black Point Drive	Black Point	2025
29287.0	Water Meter	Water Meter (PW-N-00835) in Black Point Drive	Black Point Drive	Black Point	2025
29288.0	Water Meter	Water Meter (PW-N-00836) in Black Point Drive	Black Point Drive	Black Point	2025
29269.0	Water Meter	Water Meter (PW-N-00804) in Black Point Drive	Black Point Drive	Black Point	2025
29270.0	Water Meter	Water Meter (PW-N-00805) in Black Point Drive	Black Point Drive	Black Point	2025
29366.0	Water Meter	Water Meter (PW-N-00797) in Black Point Drive	Black Point Drive	Black Point	2025
29373.0	Water Meter	Water Meter (PW-N-00817) in Black Point Drive	Black Point Drive	Black Point	2025
29375.0	Water Meter	Water Meter (PW-N-00819) in Black Point Drive	Black Point Drive	Black Point	2025

Asset ID	Category	Asset Name	From	То	Year
29352.0	Water Meter	Water Meter (PW-N-00770) in Black Point Drive	Black Point Drive	Black Point	2025
29353.0	Water Meter	Water Meter (PW-N-00771) in Black Point Drive	Black Point Drive	Black Point	2025
29354.0	Water Meter	Water Meter (PW-N-00772) in Black Point Drive	Black Point Drive	Black Point	2025
29355.0	Water Meter	Water Meter (PW-N-00773) in Black Point Drive	Black Point Drive	Black Point	2025
29272.0	Water Meter	Water Meter (PW-N-00807) in Black Point Drive	Black Point Drive	Black Point	2025
29258.0	Water Meter	Water Meter (PW-N-00780) in Black Point Drive	Black Point Drive	Black Point	2025
29265.0	Water Meter	Water Meter (PW-N-00787) in Black Point Drive	Black Point Drive	Black Point	2025
29267.0	Water Meter	Water Meter (PW-N-00789) in Black Point Drive	Black Point Drive	Black Point	2025
29274.0	Water Meter	Water Meter (PW-N-00809) in Black Point Drive	Black Point Drive	Black Point	2025
29276.0	Water Meter	Water Meter (PW-N-00811) in Black Point Drive	Black Point Drive	Black Point	2025
29281.0	Water Meter	Water Meter (PW-N-00816) in Black Point Drive	Black Point Drive	Black Point	2025
29283.0	Water Meter	Water Meter (PW-N-00831) in Black Point Drive	Black Point Drive	Black Point	2025
29290.0	Water Meter	Water Meter (PW-N-00838) in Black Point Drive	Black Point Drive	Black Point	2025
29292.0	Water Meter	Water Meter (PW-N-00840) in Black Point Drive	Black Point Drive	Black Point	2025
29368.0	Water Meter	Water Meter (PW-N-00799) in Black Point Drive	Black Point Drive	Black Point	2025
29369.0	Water Meter	Water Meter (PW-N-00800) in Black Point Drive	Black Point Drive	Black Point	2025
29370.0	Water Meter	Water Meter (PW-N-00801) in Black Point Drive	Black Point Drive	Black Point	2025
29371.0	Water Meter	Water Meter (PW-N-00802) in Black Point Drive	Black Point Drive	Black Point	2025
29372.0	Water Meter	Water Meter (PW-N-00803) in Black Point Drive	Black Point Drive	Black Point	2025
29342.0	Water Meter	Water Meter (PW-N-00746) in Harvey Crescent	Harvey Crescent	Black Point	2025
29349.0	Water Meter	Water Meter (PW-N-00766) in Black Point Drive	Black Point Drive	Black Point	2025
29351.0	Water Meter	Water Meter (PW-N-00769) in Black Point Drive	Black Point Drive	Black Point	2025
29356.0	Water Meter	Water Meter (PW-N-00774) in Black Point Drive	Black Point Drive	Black Point	2025
29358.0	Water Meter	Water Meter (PW-N-00776) in Black Point Drive	Black Point Drive	Black Point	2025
29365.0	Water Meter	Water Meter (PW-N-00796) in Black Point Drive	Black Point Drive	Black Point	2025
29367.0	Water Meter	Water Meter (PW-N-00798) in Black Point Drive	Black Point Drive	Black Point	2025
29374.0	Water Meter	Water Meter (PW-N-00818) in Black Point Drive	Black Point Drive	Black Point	2025
29376.0	Water Meter	Water Meter (PW-N-00820) in Black Point Drive	Black Point Drive	Black Point	2025
29277.0	Water Meter	Water Meter (PW-N-00812) in Black Point Drive	Black Point Drive	Black Point	2025
29278.0	Water Meter	Water Meter (PW-N-00813) in Black Point Drive	Black Point Drive	Black Point	2025

Asset ID	Category	Asset Name	From	То	Year
29279.0	Water Meter	Water Meter (PW-N-00814) in Black Point Drive	Black Point Drive	Black Point	2025
29280.0	Water Meter	Water Meter (PW-N-00815) in Black Point Drive	Black Point Drive	Black Point	2025
29293.0	Water Meter	Water Meter (PW-N-00841) in Black Point Drive	Black Point Drive	Black Point	2025
29294.0	Water Meter	Water Meter (PW-N-00842) in Black Point Drive	Black Point Drive	Black Point	2025
29343.0	Water Meter	Water Meter (PW-N-00747) in Harvey Crescent	Harvey Crescent	Black Point	2025
29344.0	Water Meter	Water Meter (PW-N-00748) in Harvey Crescent	Harvey Crescent	Black Point	2025
29345.0	Water Meter	Water Meter (PW-N-00749) in Harvey Crescent	Harvey Crescent	Black Point	2025
29346.0	Water Meter	Water Meter (PW-N-00750) in Harvey Crescent	Harvey Crescent	Black Point	2025
29347.0	Water Meter	Water Meter (PW-N-00764) in Black Point Drive	Black Point Drive	Black Point	2025
29360.0	Water Meter	Water Meter (PW-N-00791) in Black Point Drive	Black Point Drive	Black Point	2025
29361.0	Water Meter	Water Meter (PW-N-00792) in Black Point Drive	Black Point Drive	Black Point	2025
29362.0	Water Meter	Water Meter (PW-N-00793) in Black Point Drive	Black Point Drive	Black Point	2025
29363.0	Water Meter	Water Meter (PW-N-00794) in Black Point Drive	Black Point Drive	Black Point	2025
29377.0	Water Meter	Water Meter (PW-N-00821) in Black Point Drive	Black Point Drive	Black Point	2025
29381.0	Water Meter	Water Meter (PW-N-00825) in Black Point Drive	Black Point Drive	Black Point	2025
29383.0	Water Meter	Water Meter (PW-N-00827) in Black Point Drive	Black Point Drive	Black Point	2025
29390.0	Water Meter	Water Meter (PW-N-00847) in Black Point Drive	Black Point Drive	Black Point	2025
29392.0	Water Meter	Water Meter (PW-N-00849) in Black Point Drive	Black Point Drive	Black Point	2025
29399.0	Water Meter	Water Meter (PW-N-00856) in Black Point Drive	Black Point Drive	Black Point	2025
29401.0	Water Meter	Water Meter (PW-N-00858) in Black Point Drive	Black Point Drive	Black Point	2025
29406.0	Water Meter	Water Meter (PW-N-00863) in Black Point Drive	Black Point Drive	Black Point	2025
29408.0	Water Meter	Water Meter (PW-N-00865) in Black Point Drive	Black Point Drive	Black Point	2025
29415.0	Water Meter	Water Meter (PW-N-00887) in Black Point Drive	Black Point Drive	Black Point	2025
29417.0	Water Meter	Water Meter (PW-N-00889) in Black Point Drive	Black Point Drive	Black Point	2025
29424.0	Water Meter	Water Meter (PW-N-00896) in Black Point Drive	Black Point Drive	Black Point	2025
29378.0	Water Meter	Water Meter (PW-N-00822) in Black Point Drive	Black Point Drive	Black Point	2025
29379.0	Water Meter	Water Meter (PW-N-00823) in Black Point Drive	Black Point Drive	Black Point	2025
29380.0	Water Meter	Water Meter (PW-N-00824) in Black Point Drive	Black Point Drive	Black Point	2025
29394.0	Water Meter	Water Meter (PW-N-00851) in Black Point Drive	Black Point Drive	Black Point	2025
29426.0	Water Meter	Water Meter (PW-N-00911) in Black Point Drive	Black Point Drive	Black Point	2025

Asset ID	Category	Asset Name	From	То	Year
29431.0	Water Meter	Water Meter (PW-N-00918) in Black Point Drive	Black Point Drive	Black Point	2025
29433.0	Water Meter	Water Meter (PW-N-00920) in Black Point Drive	Black Point Drive	Black Point	2025
29395.0	Water Meter	Water Meter (PW-N-00852) in Black Point Drive	Black Point Drive	Black Point	2025
29396.0	Water Meter	Water Meter (PW-N-00853) in Black Point Drive	Black Point Drive	Black Point	2025
29397.0	Water Meter	Water Meter (PW-N-00854) in Black Point Drive	Black Point Drive	Black Point	2025
29410.0	Water Meter	Water Meter (PW-N-00868) in Black Point Drive	Black Point Drive	Black Point	2025
29411.0	Water Meter	Water Meter (PW-N-00870) in Black Point Drive	Black Point Drive	Black Point	2025
29412.0	Water Meter	Water Meter (PW-N-00884) in Black Point Drive	Black Point Drive	Black Point	2025
29413.0	Water Meter	Water Meter (PW-N-00885) in Black Point Drive	Black Point Drive	Black Point	2025
29427.0	Water Meter	Water Meter (PW-N-00913) in Black Point Drive	Black Point Drive	Black Point	2025
29428.0	Water Meter	Water Meter (PW-N-00914) in Black Point Drive	Black Point Drive	Black Point	2025
29429.0	Water Meter	Water Meter (PW-N-00915) in Black Point Drive	Black Point Drive	Black Point	2025
29430.0	Water Meter	Water Meter (PW-N-00916) in Black Point Drive	Black Point Drive	Black Point	2025
29460.0	Water Meter	Water Meter (PW-N-00872) in Black Point Drive	Black Point Drive	Black Point	2025
29461.0	Water Meter	Water Meter (PW-N-00873) in Black Point Drive	Black Point Drive	Black Point	2025
29462.0	Water Meter	Water Meter (PW-N-00874) in Black Point Drive	Black Point Drive	Black Point	2025
29382.0	Water Meter	Water Meter (PW-N-00826) in Black Point Drive	Black Point Drive	Black Point	2025
29384.0	Water Meter	Water Meter (PW-N-00828) in Black Point Drive	Black Point Drive	Black Point	2025
29389.0	Water Meter	Water Meter (PW-N-00846) in Black Point Drive	Black Point Drive	Black Point	2025
29391.0	Water Meter	Water Meter (PW-N-00848) in Black Point Drive	Black Point Drive	Black Point	2025
29393.0	Water Meter	Water Meter (PW-N-00850) in Black Point Drive	Black Point Drive	Black Point	2025
29398.0	Water Meter	Water Meter (PW-N-00855) in Black Point Drive	Black Point Drive	Black Point	2025
29400.0	Water Meter	Water Meter (PW-N-00857) in Black Point Drive	Black Point Drive	Black Point	2025
29407.0	Water Meter	Water Meter (PW-N-00864) in Black Point Drive	Black Point Drive	Black Point	2025
29409.0	Water Meter	Water Meter (PW-N-00866) in Black Point Drive	Black Point Drive	Black Point	2025
29414.0	Water Meter	Water Meter (PW-N-00886) in Black Point Drive	Black Point Drive	Black Point	2025
29416.0	Water Meter	Water Meter (PW-N-00888) in Black Point Drive	Black Point Drive	Black Point	2025
29418.0	Water Meter	Water Meter (PW-N-00890) in Black Point Drive	Black Point Drive	Black Point	2025
29423.0	Water Meter	Water Meter (PW-N-00895) in Black Point Drive	Black Point Drive	Black Point	2025
29459.0	Water Meter	Water Meter (PW-N-00871) in Black Point Drive	Black Point Drive	Black Point	2025

Asset ID	Category	Asset Name	From	То	Year
29388.0	Water Meter	Water Meter (PW-N-00845) in Black Point Drive	Black Point Drive	Black Point	2025
29402.0	Water Meter	Water Meter (PW-N-00859) in Black Point Drive	Black Point Drive	Black Point	2025
29403.0	Water Meter	Water Meter (PW-N-00860) in Black Point Drive	Black Point Drive	Black Point	2025
29404.0	Water Meter	Water Meter (PW-N-00861) in Black Point Drive	Black Point Drive	Black Point	2025
29405.0	Water Meter	Water Meter (PW-N-00862) in Black Point Drive	Black Point Drive	Black Point	2025
29419.0	Water Meter	Water Meter (PW-N-00891) in Black Point Drive	Black Point Drive	Black Point	2025
29420.0	Water Meter	Water Meter (PW-N-00892) in Black Point Drive	Black Point Drive	Black Point	2025
29421.0	Water Meter	Water Meter (PW-N-00893) in Black Point Drive	Black Point Drive	Black Point	2025
29422.0	Water Meter	Water Meter (PW-N-00894) in Black Point Drive	Black Point Drive	Black Point	2025
29385.0	Water Meter	Water Meter (PW-N-00829) in Black Point Drive	Black Point Drive	Black Point	2025
29386.0	Water Meter	Water Meter (PW-N-00843) in Black Point Drive	Black Point Drive	Black Point	2025
29387.0	Water Meter	Water Meter (PW-N-00844) in Black Point Drive	Black Point Drive	Black Point	2025
29425.0	Water Meter	Water Meter (PW-N-00910) in Black Point Drive	Black Point Drive	Black Point	2025
29432.0	Water Meter	Water Meter (PW-N-00919) in Black Point Drive	Black Point Drive	Black Point	2025
29465.0	Water Meter	Water Meter (PW-N-00877) in Black Point Drive	Black Point Drive	Black Point	2025
29467.0	Water Meter	Water Meter (PW-N-00879) in Black Point Drive	Black Point Drive	Black Point	2025
29463.0	Water Meter	Water Meter (PW-N-00875) in Black Point Drive	Black Point Drive	Black Point	2025
29464.0	Water Meter	Water Meter (PW-N-00876) in Black Point Drive	Black Point Drive	Black Point	2025
29473.0	Water Meter	Water Meter (PW-N-00898) in Black Point Drive	Black Point Drive	Black Point	2025
29475.0	Water Meter	Water Meter (PW-N-00900) in Black Point Drive	Black Point Drive	Black Point	2025
29482.0	Water Meter	Water Meter (PW-N-00907) in Black Point Drive	Black Point Drive	Black Point	2025
29469.0	Water Meter	Water Meter (PW-N-00881) in Black Point Drive	Black Point Drive	Black Point	2025
29470.0	Water Meter	Water Meter (PW-N-00882) in Black Point Drive	Black Point Drive	Black Point	2025
29471.0	Water Meter	Water Meter (PW-N-00883) in Black Point Drive	Black Point Drive	Black Point	2025
29472.0	Water Meter	Water Meter (PW-N-00897) in Black Point Drive	Black Point Drive	Black Point	2025
29474.0	Water Meter	Water Meter (PW-N-00899) in Black Point Drive	Black Point Drive	Black Point	2025
29259.0	Water Meter	Water Meter (PW-N-00781) in Black Point Drive	Black Point Drive	Black Point	2025
29264.0	Water Meter	Water Meter (PW-N-00786) in Black Point Drive	Black Point Drive	Black Point	2025
29266.0	Water Meter	Water Meter (PW-N-00788) in Black Point Drive	Black Point Drive	Black Point	2025
29273.0	Water Meter	Water Meter (PW-N-00808) in Black Point Drive	Black Point Drive	Black Point	2025

Asset ID	Category	Asset Name	From	То	Year
29477.0	Water Meter	Water Meter (PW-N-00902) in Black Point Drive	Black Point Drive	Black Point	2025
29478.0	Water Meter	Water Meter (PW-N-00903) in Black Point Drive	Black Point Drive	Black Point	2025
29479.0	Water Meter	Water Meter (PW-N-00904) in Black Point Drive	Black Point Drive	Black Point	2025
29480.0	Water Meter	Water Meter (PW-N-00905) in Black Point Drive	Black Point Drive	Black Point	2025
29243.0	Water Meter	Water Meter (PW-N-00751) in Harvey Crescent	Harvey Crescent	Black Point	2025
29244.0	Water Meter	Water Meter (PW-N-00752) in Harvey Crescent	Harvey Crescent	Black Point	2025
29245.0	Water Meter	Water Meter (PW-N-00753) in Harvey Crescent	Harvey Crescent	Black Point	2025
29246.0	Water Meter	Water Meter (PW-N-00754) in Harvey Crescent	Harvey Crescent	Black Point	2025
29260.0	Water Meter	Water Meter (PW-N-00782) in Black Point Drive	Black Point Drive	Black Point	2025
29261.0	Water Meter	Water Meter (PW-N-00783) in Black Point Drive	Black Point Drive	Black Point	2025
29262.0	Water Meter	Water Meter (PW-N-00784) in Black Point Drive	Black Point Drive	Black Point	2025
29263.0	Water Meter	Water Meter (PW-N-00785) in Black Point Drive	Black Point Drive	Black Point	2025
29466.0	Water Meter	Water Meter (PW-N-00878) in Black Point Drive	Black Point Drive	Black Point	2025
29468.0	Water Meter	Water Meter (PW-N-00880) in Black Point Drive	Black Point Drive	Black Point	2025
29247.0	Water Meter	Water Meter (PW-N-00755) in Harvey Crescent	Harvey Crescent	Black Point	2025
29249.0	Water Meter	Water Meter (PW-N-00757) in Black Point Drive	Black Point Drive	Black Point	2025
29256.0	Water Meter	Water Meter (PW-N-00778) in Black Point Drive	Black Point Drive	Black Point	2025
29248.0	Water Meter	Water Meter (PW-N-00756) in Black Point Drive	Black Point Drive	Black Point	2025
29250.0	Water Meter	Water Meter (PW-N-00758) in Black Point Drive	Black Point Drive	Black Point	2025
29257.0	Water Meter	Water Meter (PW-N-00779) in Black Point Drive	Black Point Drive	Black Point	2025
29476.0	Water Meter	Water Meter (PW-N-00901) in Black Point Drive	Black Point Drive	Black Point	2025
29481.0	Water Meter	Water Meter (PW-N-00906) in Black Point Drive	Black Point Drive	Black Point	2025
29483.0	Water Meter	Water Meter (PW-N-00908) in Black Point Drive	Black Point Drive	Black Point	2025
28597.0	Air Valve	Air Valve (PW-N-00034) in Black Point Drive	Black Point Drive	Black Point	2025
28615.0	Air Valve	Air Valve (PW-N-00052) in St Vincent Highway	St Vincent Highway	Black Point	2025
28616.0	Air Valve	Air Valve (PW-N-00053) in Black Bobs Road	Black Bobs Road	Black Point	2025
28617.0	Air Valve	Air Valve (PW-N-00054) in Black Bobs Road	Black Bobs Road	Black Point	2025
28618.0	Air Valve	Air Valve (PW-N-00055) in Pine Point Road	Pine Point Road	Black Point	2025
28619.0	Air Valve	Air Valve (PW-N-00056) in Pine Point Road	Pine Point Road	Black Point	2025
37189.0	HMI Unit	Hardwicke Bay Water Scheme HMI Unit	Moores Drive	Hardwicke Bay	2025

Asset ID	Category	Asset Name	From	То	Year
37193.0	HMI Unit	Marion Bay Salt Water Desalination Plant Pressure Pump and Tank Level HMI Unit	Moores Drive	Marion Bay	2025
29275.0	Water Meter	Water Meter (PW-N-00810) in Black Point Drive	Black Point Drive	Black Point	2025
29282.0	Water Meter	Water Meter (PW-N-00830) in Black Point Drive	Black Point Drive	Black Point	2025
29284.0	Water Meter	Water Meter (PW-N-00832) in Black Point Drive	Black Point Drive	Black Point	2025
29289.0	Water Meter	Water Meter (PW-N-00837) in Black Point Drive	Black Point Drive	Black Point	2025
29291.0	Water Meter	Water Meter (PW-N-00839) in Black Point Drive	Black Point Drive	Black Point	2025
29341.0	Water Meter	Water Meter (PW-N-00745) in Harvey Crescent	Harvey Crescent	Black Point	2025
29348.0	Water Meter	Water Meter (PW-N-00765) in Black Point Drive	Black Point Drive	Black Point	2025
29350.0	Water Meter	Water Meter (PW-N-00767) in Black Point Drive	Black Point Drive	Black Point	2025
29357.0	Water Meter	Water Meter (PW-N-00775) in Black Point Drive	Black Point Drive	Black Point	2025
29359.0	Water Meter	Water Meter (PW-N-00777) in Black Point Drive	Black Point Drive	Black Point	2025
37191.0	HMI Unit	Marion Bay Salt Water Desalination Plant Main Plant HMI Unit	Moores Drive	Marion Bay	2027
29609.0	Submersible Bore Pump	Marion Bay Salt Water Desalination Plant Beach Well Bore Pump 1	Moores Drive	Marion Bay	2027
29610.0	Submersible Bore Pump	Marion Bay Salt Water Desalination Plant Beach Well Bore Pump 2	Moores Drive	Marion Bay	2027
29626.0	Feed Pump 30kW	Marion Bay Salt Water Desalination Plant High Pressure Feed Pump	Moores Drive	Marion Bay	2027
29625.0	50mm Pressure Gauge	Marion Bay Salt Water Desalination Plant Gauges 50mm	Moores Drive	Marion Bay	2027
29621.0	25mm Gate Valve	Marion Bay Salt Water Desalination Plant Gate Valves 25mm PE	Moores Drive	Marion Bay	2027
29622.0	25mm Gate Valve	Marion Bay Salt Water Desalination Plant Gate Valves 25mm PVC	Moores Drive	Marion Bay	2027
29623.0	50mm Gate Valve	Marion Bay Salt Water Desalination Plant Gate Valves 50mm PVC	Moores Drive	Marion Bay	2027
29487.0	Water Meter	Water Meter (PW-N-00935) in Black Point Drive	Black Point Drive	Black Point	2027
29485.0	Water Meter	Water Meter (PW-N-00933) in Black Point Drive	Black Point Drive	Black Point	2027
29486.0	Water Meter	Water Meter (PW-N-00934) in Black Point Drive	Black Point Drive	Black Point	2027

Asset ID	Category	Asset Name	From	То	Year
29484.0	Water Meter	Water Meter (PW-N-00932) in Black Point Drive	Black Point Drive	Black Point	2027
29434.0	Water Meter	Water Meter (PW-N-00921) in Black Point Drive	Black Point Drive	Black Point	2027
29435.0	Water Meter	Water Meter (PW-N-00926) in Black Point Drive	Black Point Drive	Black Point	2027
29436.0	Water Meter	Water Meter (PW-N-00928) in Black Point Drive	Black Point Drive	Black Point	2027
29607.0	25mm Air Release Valve	Marion Bay Salt Water Desalination Plant Air Release Valve	Moores Drive	Marion Bay	2027
29630.0	Multimedia Filter	Marion Bay Salt Water Desalination Plant Multimedia Filter	Moores Drive	Marion Bay	2027
29631.0	Level Regulator	Marion Bay Salt Water Desalination Plant Plant Start Up Level Regulators	Moores Drive	Marion Bay	2027
29620.0	50mm Flowmeter	Marion Bay Salt Water Desalination Plant Flowmeter 50mm	Moores Drive	Marion Bay	2027
29613.0	Cartridge Filter	Marion Bay Salt Water Desalination Plant Cartridge Filter 1 micron	Moores Drive	Marion Bay	2027
29614.0	Cartridge Filter	Marion Bay Salt Water Desalination Plant Cartridge Filter 5 micron	Moores Drive	Marion Bay	2027
29628.0	Dosing System Analyser	Marion Bay Salt Water Desalination Plant Hypochlorite Dosing System Analyser	Moores Drive	Marion Bay	2028
29635.0	Water Distributor	Marion Bay Salt Water Desalination Plant Water Distributor	Moores Drive	Marion Bay	2028
29557.0	80mm Flowmeter	Hardwicke Bay Water Scheme Flowmeter 80mm	Moores Drive	Hardwicke Bay	2029
29567.0	50mm Solenoid Valve	Hardwicke Bay Water Scheme Solenoid Valve 50mm	Moores Drive	Hardwicke Bay	2029
29556.0	50mm Filter	Hardwicke Bay Water Scheme Filter 50mm	Moores Drive	Hardwicke Bay	2029
29562.0	Level Regulator	Hardwicke Bay Water Scheme Level Regulators	Moores Drive	Hardwicke Bay	2029
29561.0	75mm Pressure Gauge	Hardwicke Bay Water Scheme Gauges 75mm	Moores Drive	Hardwicke Bay	2029
29559.0	50mm Gate Valve	Hardwicke Bay Water Scheme Gate Valves 50mm	Moores Drive	Hardwicke Bay	2029
29560.0	80mm Gate Valve	Hardwicke Bay Water Scheme Gate Valves 80mm	Moores Drive	Hardwicke Bay	2029
29566.0	Pressure Vessel 80L	Hardwicke Bay Water Scheme Pressure Vessel	Moores Drive	Hardwicke Bay	2029
29627.0	Hypochlorite Dosing System	Marion Bay Salt Water Desalination Plant Hypochlorite Dosing System	Moores Drive	Marion Bay	2029

Asset ID	Category	Asset Name	From	То	Year
29553.0	Electrical Fittings Type	Hardwicke Bay Water Scheme Building Facilities	Moores Drive	Hardwicke Bay	2029
29554.0	Switchboard	Hardwicke Bay Water Scheme Switchboard	Moores Drive	Hardwicke Bay	2029
37188.0	PLC Controls	Hardwicke Bay Water Scheme PLC Controls	Moores Drive	Hardwicke Bay	2029
29558.0	25mm Gate Valve	Hardwicke Bay Water Scheme Gate Valves 25mm	Moores Drive	Hardwicke Bay	2029
29555.0	40mm Filter	Hardwicke Bay Water Scheme Filter 40mm	Moores Drive	Hardwicke Bay	2029
28749.0	Water Meter	Water Meter (PW-N-00194) in Main Street	Main Street	Balgowan	2030
28755.0	Water Meter	Water Meter (PW-N-00200) in Main Street	Main Street	Balgowan	2030
28757.0	Water Meter	Water Meter (PW-N-00202) in Main Street	Main Street	Balgowan	2030
28764.0	Water Meter	Water Meter (PW-N-00209) in Main Street	Main Street	Balgowan	2030
28766.0	Water Meter	Water Meter (PW-N-00211) in Main Street	Main Street	Balgowan	2030
28771.0	Water Meter	Water Meter (PW-N-00216) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28773.0	Water Meter	Water Meter (PW-N-00218) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28780.0	Water Meter	Water Meter (PW-N-00225) in Maye Terrace	Maye Terrace	Balgowan	2030
28782.0	Water Meter	Water Meter (PW-N-00227) in Maye Terrace	Maye Terrace	Balgowan	2030
28789.0	Water Meter	Water Meter (PW-N-00234) in First Street	First Street	Balgowan	2030
28791.0	Water Meter	Water Meter (PW-N-00236) in First Street	First Street	Balgowan	2030
28796.0	Water Meter	Water Meter (PW-N-00241) in First Street	First Street	Balgowan	2030
28798.0	Water Meter	Water Meter (PW-N-00243) in First Street	First Street	Balgowan	2030
28805.0	Water Meter	Water Meter (PW-N-00250) in Fifth Street	Fifth Street	Balgowan	2030
28807.0	Water Meter	Water Meter (PW-N-00252) in Fifth Street	Fifth Street	Balgowan	2030
28814.0	Water Meter	Water Meter (PW-N-00259) in High Street	High Street	Balgowan	2030
28754.0	Water Meter	Water Meter (PW-N-00199) in Main Street	Main Street	Balgowan	2030
28756.0	Water Meter	Water Meter (PW-N-00201) in Main Street	Main Street	Balgowan	2030
28763.0	Water Meter	Water Meter (PW-N-00208) in Main Street	Main Street	Balgowan	2030
28765.0	Water Meter	Water Meter (PW-N-00210) in Main Street	Main Street	Balgowan	2030
28772.0	Water Meter	Water Meter (PW-N-00217) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28774.0	Water Meter	Water Meter (PW-N-00219) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28779.0	Water Meter	Water Meter (PW-N-00224) in Maye Terrace	Maye Terrace	Balgowan	2030
28781.0	Water Meter	Water Meter (PW-N-00226) in Maye Terrace	Maye Terrace	Balgowan	2030
28783.0	Water Meter	Water Meter (PW-N-00228) in Maye Terrace	Maye Terrace	Balgowan	2030

Asset ID	Category	Asset Name	From	То	Year
28788.0	Water Meter	Water Meter (PW-N-00233) in First Street	First Street	Balgowan	2030
28932.0	Water Meter	Water Meter (PW-N-00377) in High Street	High Street	Balgowan	2030
28939.0	Water Meter	Water Meter (PW-N-00384) in Esplanade	Esplanade	Balgowan	2030
28941.0	Water Meter	Water Meter (PW-N-00386) in Esplanade	Esplanade	Balgowan	2030
28946.0	Water Meter	Water Meter (PW-N-00391) in Main Street	Main Street	Balgowan	2030
28948.0	Water Meter	Water Meter (PW-N-00393) in Main Street	Main Street	Balgowan	2030
28913.0	Water Meter	Water Meter (PW-N-00358) in Anne Court	Anne Court	Balgowan	2030
28915.0	Water Meter	Water Meter (PW-N-00360) in Anne Court	Anne Court	Balgowan	2030
28922.0	Water Meter	Water Meter (PW-N-00367) in Welfare Road	Welfare Road	Balgowan	2030
28924.0	Water Meter	Water Meter (PW-N-00369) in Welfare Road	Welfare Road	Balgowan	2030
28931.0	Water Meter	Water Meter (PW-N-00376) in Welfare Road	Welfare Road	Balgowan	2030
28933.0	Water Meter	Water Meter (PW-N-00378) in Esplanade	Esplanade	Balgowan	2030
28938.0	Water Meter	Water Meter (PW-N-00383) in Esplanade	Esplanade	Balgowan	2030
28940.0	Water Meter	Water Meter (PW-N-00385) in Esplanade	Esplanade	Balgowan	2030
28947.0	Water Meter	Water Meter (PW-N-00392) in Main Street	Main Street	Balgowan	2030
29608.0	Backflush Controller	Marion Bay Salt Water Desalination Plant Back Flush Controller	Moores Drive	Marion Bay	2030
28564.0	Air Valve	Air Valve (PW-N-00001) in Moores Drive	Moores Drive	Hardwicke Bay	2030
28573.0	Air Valve	Air Valve (PW-N-00010) in Souttar Terrace	Souttar Terrace	Hardwicke Bay	2030
28582.0	Air Valve	Air Valve (PW-N-00019) in Northshore Road	Northshore Road	Hardwicke Bay	2030
28587.0	Air Valve	Air Valve (PW-N-00024) in Progress Road	Progress Road	Hardwicke Bay	2030
28589.0	Air Valve	Air Valve (PW-N-00026) in Foreshore Road	Foreshore Road	Hardwicke Bay	2030
28567.0	Air Valve	Air Valve (PW-N-00004) in Moores Drive	Moores Drive	Hardwicke Bay	2030
28568.0	Air Valve	Air Valve (PW-N-00005) in Moores Drive	Moores Drive	Hardwicke Bay	2030
28585.0	Air Valve	Air Valve (PW-N-00022) in Royston Road	Royston Road	Hardwicke Bay	2030
28570.0	Air Valve	Air Valve (PW-N-00007) in Moores Drive	Moores Drive	Hardwicke Bay	2030
28574.0	Air Valve	Air Valve (PW-N-00011) in Esplanade	Esplanade	Hardwicke Bay	2030
28579.0	Air Valve	Air Valve (PW-N-00016) in Beach Road	Beach Road	Hardwicke Bay	2030
28588.0	Air Valve	Air Valve (PW-N-00025) in Progress Road	Progress Road	Hardwicke Bay	2030
28590.0	Air Valve	Air Valve (PW-N-00027) in Southshore Road	Southshore Road	Hardwicke Bay	2030

Asset ID	Category	Asset Name	From	То	Year
28575.0	Air Valve	Air Valve (PW-N-00012) in Northshore Road	Northshore Road	Hardwicke Bay	2030
28817.0	Water Meter	Water Meter (PW-N-00262) in High Street	High Street	Balgowan	2030
28818.0	Water Meter	Water Meter (PW-N-00263) in High Street	High Street	Balgowan	2030
28819.0	Water Meter	Water Meter (PW-N-00264) in High Street	High Street	Balgowan	2030
28820.0	Water Meter	Water Meter (PW-N-00265) in High Street	High Street	Balgowan	2030
28834.0	Water Meter	Water Meter (PW-N-00279) in High Street	High Street	Balgowan	2030
28835.0	Water Meter	Water Meter (PW-N-00280) in High Street	High Street	Balgowan	2030
28836.0	Water Meter	Water Meter (PW-N-00281) in High Street	High Street	Balgowan	2030
28837.0	Water Meter	Water Meter (PW-N-00282) in High Street	High Street	Balgowan	2030
28850.0	Water Meter	Water Meter (PW-N-00295) in Moody Road	Moody Road	Balgowan	2030
28851.0	Water Meter	Water Meter (PW-N-00296) in Moody Road	Moody Road	Balgowan	2030
28852.0	Water Meter	Water Meter (PW-N-00297) in Moody Road	Moody Road	Balgowan	2030
28853.0	Water Meter	Water Meter (PW-N-00298) in Moody Road	Moody Road	Balgowan	2030
28854.0	Water Meter	Water Meter (PW-N-00299) in Moody Road	Moody Road	Balgowan	2030
28867.0	Water Meter	Water Meter (PW-N-00312) in Heather Court	Heather Court	Balgowan	2030
28868.0	Water Meter	Water Meter (PW-N-00313) in South Terrace	South Terrace	Balgowan	2030
28869.0	Water Meter	Water Meter (PW-N-00314) in South Terrace	South Terrace	Balgowan	2030
28870.0	Water Meter	Water Meter (PW-N-00315) in South Terrace	South Terrace	Balgowan	2030
28884.0	Water Meter	Water Meter (PW-N-00329) in South Terrace	South Terrace	Balgowan	2030
28885.0	Water Meter	Water Meter (PW-N-00330) in South Terrace	South Terrace	Balgowan	2030
28878.0	Water Meter	Water Meter (PW-N-00323) in South Terrace	South Terrace	Balgowan	2030
28879.0	Water Meter	Water Meter (PW-N-00324) in South Terrace	South Terrace	Balgowan	2030
28892.0	Water Meter	Water Meter (PW-N-00337) in Claire Avenue	Claire Avenue	Balgowan	2030
28893.0	Water Meter	Water Meter (PW-N-00338) in Claire Avenue	Claire Avenue	Balgowan	2030
28894.0	Water Meter	Water Meter (PW-N-00339) in Claire Avenue	Claire Avenue	Balgowan	2030
28895.0	Water Meter	Water Meter (PW-N-00340) in Claire Avenue	Claire Avenue	Balgowan	2030
28909.0	Water Meter	Water Meter (PW-N-00354) in Esplanade	Esplanade	Balgowan	2030
28910.0	Water Meter	Water Meter (PW-N-00355) in Esplanade	Esplanade	Balgowan	2030
28911.0	Water Meter	Water Meter (PW-N-00356) in Esplanade	Esplanade	Balgowan	2030
28912.0	Water Meter	Water Meter (PW-N-00357) in Anne Court	Anne Court	Balgowan	2030

Asset ID	Category	Asset Name	From	То	Year
28926.0	Water Meter	Water Meter (PW-N-00371) in Welfare Road	Welfare Road	Balgowan	2030
28927.0	Water Meter	Water Meter (PW-N-00372) in Welfare Road	Welfare Road	Balgowan	2030
28928.0	Water Meter	Water Meter (PW-N-00373) in Welfare Road	Welfare Road	Balgowan	2030
28929.0	Water Meter	Water Meter (PW-N-00374) in Welfare Road	Welfare Road	Balgowan	2030
28942.0	Water Meter	Water Meter (PW-N-00387) in Esplanade	Esplanade	Balgowan	2030
28943.0	Water Meter	Water Meter (PW-N-00388) in Esplanade	Esplanade	Balgowan	2030
28944.0	Water Meter	Water Meter (PW-N-00389) in Esplanade	Esplanade	Balgowan	2030
28945.0	Water Meter	Water Meter (PW-N-00390) in Esplanade	Esplanade	Balgowan	2030
28815.0	Water Meter	Water Meter (PW-N-00260) in High Street	High Street	Balgowan	2030
28822.0	Water Meter	Water Meter (PW-N-00267) in Moody Road	Moody Road	Balgowan	2030
28824.0	Water Meter	Water Meter (PW-N-00269) in High Street	High Street	Balgowan	2030
28768.0	Water Meter	Water Meter (PW-N-00213) in Main Street	Main Street	Balgowan	2030
28769.0	Water Meter	Water Meter (PW-N-00214) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28770.0	Water Meter	Water Meter (PW-N-00215) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28784.0	Water Meter	Water Meter (PW-N-00229) in Maye Terrace	Maye Terrace	Balgowan	2030
28785.0	Water Meter	Water Meter (PW-N-00230) in Maye Terrace	Maye Terrace	Balgowan	2030
28786.0	Water Meter	Water Meter (PW-N-00231) in Maye Terrace	Maye Terrace	Balgowan	2030
28787.0	Water Meter	Water Meter (PW-N-00232) in First Street	First Street	Balgowan	2030
28800.0	Water Meter	Water Meter (PW-N-00245) in High Street	High Street	Balgowan	2030
28801.0	Water Meter	Water Meter (PW-N-00246) in Main Street	Main Street	Balgowan	2030
28802.0	Water Meter	Water Meter (PW-N-00247) in Fifth Street	Fifth Street	Balgowan	2030
28857.0	Water Meter	Water Meter (PW-N-00302) in Moody Road	Moody Road	Balgowan	2030
28864.0	Water Meter	Water Meter (PW-N-00309) in Heather Court	Heather Court	Balgowan	2030
28866.0	Water Meter	Water Meter (PW-N-00311) in Heather Court	Heather Court	Balgowan	2030
28871.0	Water Meter	Water Meter (PW-N-00316) in South Terrace	South Terrace	Balgowan	2030
28873.0	Water Meter	Water Meter (PW-N-00318) in South Terrace	South Terrace	Balgowan	2030
28880.0	Water Meter	Water Meter (PW-N-00325) in South Terrace	South Terrace	Balgowan	2030
28882.0	Water Meter	Water Meter (PW-N-00327) in South Terrace	South Terrace	Balgowan	2030
28889.0	Water Meter	Water Meter (PW-N-00334) in South Terrace	South Terrace	Balgowan	2030
28891.0	Water Meter	Water Meter (PW-N-00336) in South Terrace	South Terrace	Balgowan	2030

Asset ID	Category	Asset Name	From	То	Year
28896.0	Water Meter	Water Meter (PW-N-00341) in Claire Avenue	Claire Avenue	Balgowan	2030
28831.0	Water Meter	Water Meter (PW-N-00276) in High Street	High Street	Balgowan	2030
28833.0	Water Meter	Water Meter (PW-N-00278) in High Street	High Street	Balgowan	2030
28838.0	Water Meter	Water Meter (PW-N-00283) in High Street	High Street	Balgowan	2030
28840.0	Water Meter	Water Meter (PW-N-00285) in High Street	High Street	Balgowan	2030
28847.0	Water Meter	Water Meter (PW-N-00292) in Gill Lane	Gill Lane	Balgowan	2030
28849.0	Water Meter	Water Meter (PW-N-00294) in Moody Road	Moody Road	Balgowan	2030
28856.0	Water Meter	Water Meter (PW-N-00301) in Moody Road	Moody Road	Balgowan	2030
28858.0	Water Meter	Water Meter (PW-N-00303) in Moody Road	Moody Road	Balgowan	2030
28863.0	Water Meter	Water Meter (PW-N-00308) in Heather Court	Heather Court	Balgowan	2030
28865.0	Water Meter	Water Meter (PW-N-00310) in Heather Court	Heather Court	Balgowan	2030
28898.0	Water Meter	Water Meter (PW-N-00343) in Claire Avenue	Claire Avenue	Balgowan	2030
28900.0	Water Meter	Water Meter (PW-N-00345) in Claire Avenue	Claire Avenue	Balgowan	2030
28905.0	Water Meter	Water Meter (PW-N-00350) in Esplanade	Esplanade	Balgowan	2030
28907.0	Water Meter	Water Meter (PW-N-00352) in Esplanade	Esplanade	Balgowan	2030
28914.0	Water Meter	Water Meter (PW-N-00359) in Anne Court	Anne Court	Balgowan	2030
28916.0	Water Meter	Water Meter (PW-N-00361) in Anne Court	Anne Court	Balgowan	2030
28921.0	Water Meter	Water Meter (PW-N-00366) in Welfare Road	Welfare Road	Balgowan	2030
28923.0	Water Meter	Water Meter (PW-N-00368) in Welfare Road	Welfare Road	Balgowan	2030
28925.0	Water Meter	Water Meter (PW-N-00370) in Welfare Road	Welfare Road	Balgowan	2030
28930.0	Water Meter	Water Meter (PW-N-00375) in Welfare Road	Welfare Road	Balgowan	2030
28872.0	Water Meter	Water Meter (PW-N-00317) in South Terrace	South Terrace	Balgowan	2030
28874.0	Water Meter	Water Meter (PW-N-00319) in South Terrace	South Terrace	Balgowan	2030
28881.0	Water Meter	Water Meter (PW-N-00326) in South Terrace	South Terrace	Balgowan	2030
28883.0	Water Meter	Water Meter (PW-N-00328) in South Terrace	South Terrace	Balgowan	2030
28888.0	Water Meter	Water Meter (PW-N-00333) in South Terrace	South Terrace	Balgowan	2030
28890.0	Water Meter	Water Meter (PW-N-00335) in South Terrace	South Terrace	Balgowan	2030
28897.0	Water Meter	Water Meter (PW-N-00342) in Claire Avenue	Claire Avenue	Balgowan	2030
28899.0	Water Meter	Water Meter (PW-N-00344) in High Street	High Street	Balgowan	2030
28906.0	Water Meter	Water Meter (PW-N-00351) in Esplanade	Esplanade	Balgowan	2030

Asset ID	Category	Asset Name	From	То	Year
28908.0	Water Meter	Water Meter (PW-N-00353) in Esplanade	Esplanade	Balgowan	2030
28803.0	Water Meter	Water Meter (PW-N-00248) in Fifth Street	Fifth Street	Balgowan	2030
28758.0	Water Meter	Water Meter (PW-N-00203) in Main Street	Main Street	Balgowan	2030
28759.0	Water Meter	Water Meter (PW-N-00204) in Main Street	Main Street	Balgowan	2030
28760.0	Water Meter	Water Meter (PW-N-00205) in Main Street	Main Street	Balgowan	2030
28750.0	Water Meter	Water Meter (PW-N-00195) in Main Street	Main Street	Balgowan	2030
28751.0	Water Meter	Water Meter (PW-N-00196) in Main Street	Main Street	Balgowan	2030
28752.0	Water Meter	Water Meter (PW-N-00197) in Main Street	Main Street	Balgowan	2030
28753.0	Water Meter	Water Meter (PW-N-00198) in Main Street	Main Street	Balgowan	2030
28767.0	Water Meter	Water Meter (PW-N-00212) in Main Street	Main Street	Balgowan	2030
28761.0	Water Meter	Water Meter (PW-N-00206) in Main Street	Main Street	Balgowan	2030
28762.0	Water Meter	Water Meter (PW-N-00207) in Main Street	Main Street	Balgowan	2030
28775.0	Water Meter	Water Meter (PW-N-00220) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28776.0	Water Meter	Water Meter (PW-N-00221) in Melaleuca Court	Melaleuca Court	Balgowan	2030
28777.0	Water Meter	Water Meter (PW-N-00222) in Maye Terrace	Maye Terrace	Balgowan	2030
28778.0	Water Meter	Water Meter (PW-N-00223) in Maye Terrace	Maye Terrace	Balgowan	2030
28792.0	Water Meter	Water Meter (PW-N-00237) in First Street	First Street	Balgowan	2030
28793.0	Water Meter	Water Meter (PW-N-00238) in First Street	First Street	Balgowan	2030
28794.0	Water Meter	Water Meter (PW-N-00239) in High Street	High Street	Balgowan	2030
28795.0	Water Meter	Water Meter (PW-N-00240) in First Street	First Street	Balgowan	2030
28809.0	Water Meter	Water Meter (PW-N-00254) in Esplanade	Esplanade	Balgowan	2030
28810.0	Water Meter	Water Meter (PW-N-00255) in Esplanade	Esplanade	Balgowan	2030
28811.0	Water Meter	Water Meter (PW-N-00256) in Fifth Street	Fifth Street	Balgowan	2030
28812.0	Water Meter	Water Meter (PW-N-00257) in Main Street	Main Street	Balgowan	2030
28825.0	Water Meter	Water Meter (PW-N-00270) in High Street	High Street	Balgowan	2030
28826.0	Water Meter	Water Meter (PW-N-00271) in High Street	High Street	Balgowan	2030
28827.0	Water Meter	Water Meter (PW-N-00272) in High Street	High Street	Balgowan	2030
28828.0	Water Meter	Water Meter (PW-N-00273) in High Street	High Street	Balgowan	2030
28829.0	Water Meter	Water Meter (PW-N-00274) in High Street	High Street	Balgowan	2030
28842.0	Water Meter	Water Meter (PW-N-00287) in High Street	High Street	Balgowan	2030

Asset ID	Category	Asset Name	From	То	Year
28816.0	Water Meter	Water Meter (PW-N-00261) in High Street	High Street	Balgowan	2030
28821.0	Water Meter	Water Meter (PW-N-00266) in High Street	High Street	Balgowan	2030
28823.0	Water Meter	Water Meter (PW-N-00268) in High Street	High Street	Balgowan	2030
28830.0	Water Meter	Water Meter (PW-N-00275) in High Street	High Street	Balgowan	2030
28832.0	Water Meter	Water Meter (PW-N-00277) in High Street	High Street	Balgowan	2030
28839.0	Water Meter	Water Meter (PW-N-00284) in High Street	High Street	Balgowan	2030
28841.0	Water Meter	Water Meter (PW-N-00286) in High Street	High Street	Balgowan	2030
28846.0	Water Meter	Water Meter (PW-N-00291) in Gill Lane	Gill Lane	Balgowan	2030
28848.0	Water Meter	Water Meter (PW-N-00293) in Gill Lane	Gill Lane	Balgowan	2030
28855.0	Water Meter	Water Meter (PW-N-00300) in Moody Road	Moody Road	Balgowan	2030
28843.0	Water Meter	Water Meter (PW-N-00288) in High Street	High Street	Balgowan	2030
28844.0	Water Meter	Water Meter (PW-N-00289) in High Street	High Street	Balgowan	2030
28845.0	Water Meter	Water Meter (PW-N-00290) in Moody Road	Moody Road	Balgowan	2030
28859.0	Water Meter	Water Meter (PW-N-00304) in Moody Road	Moody Road	Balgowan	2030
28860.0	Water Meter	Water Meter (PW-N-00305) in Heather Court	Heather Court	Balgowan	2030
28861.0	Water Meter	Water Meter (PW-N-00306) in Heather Court	Heather Court	Balgowan	2030
28862.0	Water Meter	Water Meter (PW-N-00307) in Heather Court	Heather Court	Balgowan	2030
28875.0	Water Meter	Water Meter (PW-N-00320) in High Street	High Street	Balgowan	2030
28876.0	Water Meter	Water Meter (PW-N-00321) in High Street	High Street	Balgowan	2030
28877.0	Water Meter	Water Meter (PW-N-00322) in South Terrace	South Terrace	Balgowan	2030
28790.0	Water Meter	Water Meter (PW-N-00235) in First Street	First Street	Balgowan	2030
28797.0	Water Meter	Water Meter (PW-N-00242) in First Street	First Street	Balgowan	2030
28799.0	Water Meter	Water Meter (PW-N-00244) in First Street	First Street	Balgowan	2030
28804.0	Water Meter	Water Meter (PW-N-00249) in Fifth Street	Fifth Street	Balgowan	2030
28806.0	Water Meter	Water Meter (PW-N-00251) in Fifth Street	Fifth Street	Balgowan	2030
28808.0	Water Meter	Water Meter (PW-N-00253) in Fifth Street	Fifth Street	Balgowan	2030
28813.0	Water Meter	Water Meter (PW-N-00258) in Main Street	Main Street	Balgowan	2030
28934.0	Water Meter	Water Meter (PW-N-00379) in Esplanade	Esplanade	Balgowan	2030
28935.0	Water Meter	Water Meter (PW-N-00380) in Esplanade	Esplanade	Balgowan	2030
28936.0	Water Meter	Water Meter (PW-N-00381) in Esplanade	Esplanade	Balgowan	2030

Asset ID	Category Asset Name		From	То	Year
28937.0	Water Meter	Water Meter (PW-N-00382) in Esplanade	Esplanade	Balgowan	2030
28886.0	Water Meter	Water Meter (PW-N-00331) in South Terrace	South Terrace	Balgowan	2030
28887.0	Water Meter	Water Meter (PW-N-00332) in South Terrace	South Terrace	Balgowan	2030
28901.0	Water Meter	Water Meter (PW-N-00346) in Claire Avenue	Claire Avenue	Balgowan	2030
28902.0	Water Meter	Water Meter (PW-N-00347) in Claire Avenue	Claire Avenue	Balgowan	2030
28903.0	Water Meter	Water Meter (PW-N-00348) in Claire Avenue	Claire Avenue	Balgowan	2030
28904.0	Water Meter	Water Meter (PW-N-00349) in Claire Avenue	Claire Avenue	Balgowan	2030
28917.0	Water Meter	Water Meter (PW-N-00362) in Anne Court	Anne Court	Balgowan	2030
28918.0	Water Meter	Water Meter (PW-N-00363) in Anne Court	Anne Court	Balgowan	2030
28919.0	Water Meter	Water Meter (PW-N-00364) in High Street	High Street	Balgowan	2030
28920.0	Water Meter	Water Meter (PW-N-00365) in Welfare Road	Welfare Road	Balgowan	2030

Appendix E Disposal Summary

At this stage there are no assets identified for disposal.



Appendix F Budget Summary by Lifecycle Activity

The following budget summary is based on the Yorke Peninsula Council 2020/21 Budget and the Long Term Financial Plan 2021-2030. Budget summary costs are shown in 2020/21 dollar values.

Table F1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Operation	Maintenance	Current LTFP Renewal Budget*	Disposal	Total
2021	\$63,000	\$180,000	\$93,000	\$35,000	\$0	\$371,000
2022	\$0	\$180,000	\$93,000	\$46,000	\$0	\$319,000
2023	\$0	\$180,000	\$93,000	\$0	\$0	\$273,000
2024	\$0	\$180,000	\$93,000	\$44,000	\$0	\$317,000
2025	\$0	\$180,000	\$93,000	\$17,000	\$0	\$290,000
2026	\$0	\$180,000	\$93,000	\$0	\$0	\$273,000
2027	\$0	\$180,000	\$93,000	\$64,000	\$0	\$337,000
2028	\$0	\$180,000	\$93,000	\$0	\$0	\$273,000
2029	\$0	\$180,000	\$93,000	\$25,000	\$0	\$298,000
2030	\$0	\$180,000	\$93,000	\$52,000	\$0	\$325,000
2031	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2032	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2033	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2034	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2035	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2036	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2037	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2038	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2039	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300
2040	\$0	\$180,000	\$93,000	\$28,300	\$0	\$301,300

Note * Years 2031-2040 are the average of the first 10 years Current LTFP Renewal Budget figures

Appendix G **Water Network Maps**

