# **Asset Management Plan**

# Community Wastewater Management Systems

### **Wakefield Regional Council**

18 March 2021 Ref: 200818R004RevD Adopted 28 April 2021





# **Document History and Status**

Rev	Description	Author	Reviewed	Approved	Date
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В	Updated Following Council Comment	RKE/SV	RKE	RKE	3 February 2021
С	Inclusion of Asset Renewal Funding Ratio and expanding the upgrade plan detail	RKE/SV	RKE	RKE	11 February 2021
D	Update following feedback from Council	TJF	RKE	RKE	18 March 2021

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# **1** Executive Summary

The purpose of this Asset Management Plan (the Plan) is to provide a clear strategy in relation to the maintenance, renewal and upgrade of Wakefield Regional Council's Community Wastewater Management Schemes (CWMS). The Plan includes the known current service level of the schemes, known existing deficiencies and outlines the associated risks. The goal in managing infrastructure assets is to meet the required level of service in the most cost-effective manner for present and future consumers. The Plan is prepared under the direction of the community's Wakefield 2030 vision.

The CWMS assets provide a valuable service to transport wastewater from properties to centralised wastewater treatment plants for safe and hygienic treatment. Treated wastewater (recycled water) is then disposed of via irrigation of public open spaces or some private crops.

Wakefield Regional Council (Council) is responsible for several CWMS systems across the region, with a total replacement value of approximately \$21.3M. Council operates and maintains the following schemes:

- Balaklava CWMS Consisting of 26km of Pipes, 1,168 Nodes, 3 Pump Stations, a Treatment Plant and Lagoons
- Port Wakefield CWMS 14km of Pipes, 719 Nodes, a Treatment Plant and Lagoon
- Snowtown CWMS 12km of Pipes, 440 Nodes, a Treatment Plant, Lagoons and Irrigation Reuse network
- Blyth CWMS Consisting of 8km of Pipes, 357 Nodes, 2 Pump Stations and Lagoons
- Hamley Bridge CWMS 14km of Pipes, 452 Nodes, a Treatment Plant and Lagoon.

Council's services are generally provided to meet design standards where these are available. In preparing this Plan, a visual assessment of each of the existing Wastewater Treatment Plants (WWTP) and Pump Stations (PS) infrastructure has been undertaken to ascertain the asset condition and expected performance.

Council has recently commissioned and undertaken a condition assessment of treatment plants, lagoons and pump station assets to determine current condition and deficiencies. Noted deficiencies include poor compliance with SA Health Approval Requirements and multiple instances of poor plant and equipment condition.

Coinciding with these investigations, Council is currently tendering the CWMS Operation and Maintenance Contract for all schemes.

The condition assessment generally surmised that the assets are structurally sound and have life remaining, however maintenance and upkeep of the facilities requires improvement. No water quality testing was provided as a part of the assessment, as these are undertaken separately and are the responsibility of the Operations and Maintenance Contractor.

The projected average operations, maintenance and capital expenditure required over the 10 year planning period is \$782,080 per year.





Projected Capital, Operations & Maintenance Expenditure

Figure 1 Projected Operating and Capital Expenditure over the Medium Term (10 Years)



# 2 Introduction

## 2.1 Context

This Infrastructure Asset Management Plan (the Plan) has been developed as a result of a comprehensive improvement plan developed as part of the previous Plan from May 2017.

The improvement plan identified a need to improve the accuracy of the asset register. During 2020 inspections have been undertaken at all of the above ground assets, including the pump stations and treatment plants. The inspection included confirming or adjusting asset measurements, make/model and assessing the asset visual condition and performance. The improvements to the asset register will help better define the requirements for Council to maintain, renew and upgrade facilities to meet service levels.

This Plan has been developed using the following information:

- Valuation undertaken by Tonkin for financial reporting purposes as at 1 July 2019
- Capital additions, disposals and annual depreciation for the 2019-20 financial year resulting in an asset register up to date as at 30 June 2020 which is used for the financial reporting shown in this report referred to as Fair Value
- Data collected at the pump stations and treatment plants by Tonkin and Pump Technology Services (SA) Council's team, this information is used for capital renewal and proactive maintenance expenditure within this Plan.

## 2.2 Background

Wakefield Regional Council is responsible for five Community Wastewater Management Systems (CWMS) in the townships of Balaklava, Port Wakefield, Snowtown, Blyth and Hamley Bridge.

Wastewater Treatment Plants (WWTP) and Pump Stations (PS) within various Wakefield Regional Council CWMS townships (as outlined below) are Operated and Maintained for Council by a specialist wastewater treatment Contractor. At the time of reporting (November 2020), Alano Water holds the CWMS Operations and Maintenance Contract. It is noted that this contract is currently being tendered to a select market of specialist contractors, with the new agreement executed to commence at the start of the 2021-22 financial year.

Other assets, such as collection network pipework and septic tanks, are maintained by local contractors on behalf of Council.

#### Balaklava CWMS

The Balaklava CWMS consists of a gravity wastewater collection system with three pumping stations and a rising main to a new WWTP and storage lagoon situated at the racecourse on the western side of town. Treated wastewater is pumped to several irrigation tanks situated on the western side of the racecourse and then onto several sites within the township. The rising main from the wastewater treatment plant to the irrigation tanks has been included in the CWMS asset register however irrigation assets downstream of the connection point to the tanks have not been included.



#### Port Wakefield CWMS

The Port Wakefield CWMS consists primarily of a vacuum collection system with some older gravity collection areas that feed into the vacuum collection system. A vacuum pumping station situated adjacent to the wastewater treatment plant (WWTP) collects the wastewater from the entire vacuum collection system. Wastewater is then pumped to the WWTP situated to the east of the town for treatment and then pumped to a storage lagoon situated further north across the Port Wakefield-Balaklava Rd for storage. When required for irrigation, treated wastewater from the storage lagoon is pumped back to the WWTP site and then pumped via an irrigation pumping station and a rising main to the Golf Course for reuse. The reuse rising main to the oval has been included in the asset register however irrigation assets downstream of this rising main have not been included.

#### Snowtown CWMS

The Snowtown CWMS consists of a gravity wastewater collection system with a pumping station and rising main to the WWTP and storage lagoon situated to the north-east of town. Treated wastewater is pumped to the town oval and then onto several irrigation sites within the township. Irrigation pumping assets at the oval have been included in the asset register however irrigation assets downstream of this point have not been included.

#### **Blyth CWMS**

The Blyth CWMS consists of a gravity wastewater collection system with two pumping stations and a rising main to treatment lagoons situated to the south of the town. Treated wastewater is irrigated onto a crop located adjacent to the treatment lagoons.

#### Hamley Bridge CWMS

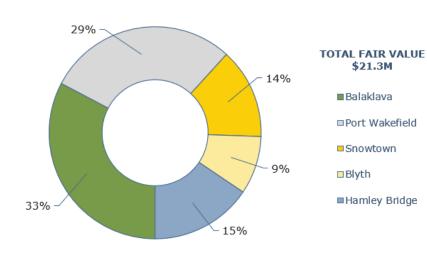
The Hamley Bridge CWMS consists of a gravity wastewater collection system and a wastewater treatment plant and storage lagoon situated in the southern part of the town. Treated wastewater is irrigated on several sites within the town. The rising main to these irrigation sites is included in the asset register however irrigation assets downstream of the connection point at each irrigation site are not included within the CWMS asset register.

A summary of each system is provided below.



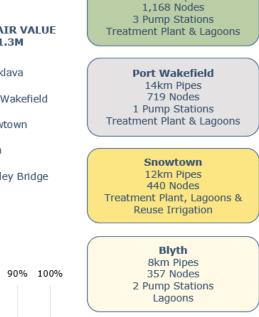
Balaklava 26km Pipes

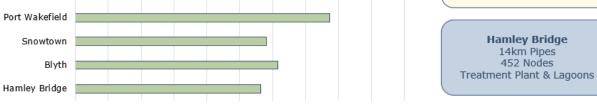
CWMS Infrastructure



0%

Balaklava





80%

Figure 2 Distribution of value of CWMS asset as of 30 June 2020

% of Asset Remaining Value

10% 20% 30% 40% 50% 60% 70%



## 2.3 Plan Framework

This Plan is based on the fundamental structure of the Institute of Public Works Engineering Australasia (IPWEA) and National Asset Management Strategy (NAMS) 3 - Asset Management for Small, Rural or Remote Communities template.

Wakefield Regional Council provides services for the community and a major part of this is through the provision of infrastructure assets. Over the years, Council has acquired these assets directly through construction by Council staff or contractors or by inheritance from developers or other organisations.

The CWMS assets provide a valuable service to transport and treat wastewater from properties to centralised wastewater treatment plants safely and hygienically. Treated wastewater (recycled water) is then disposed of via irrigation of public open spaces or some private crops.

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

- Taking a life cycle approach.
- Developing cost-effective management strategies for the long term
- Providing a defined level of service and monitoring performance
- Managing risks associated with asset failures
- Sustainable use of physical resources.

Key elements of the Plan are:

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



This Plan is prepared under the direction of the community's Wakefield 2030 vision and key themes which are as follows:

"Wakefield is a thriving and connected regional community known for its lifestyle, vibrant towns and economic prosperity. The region is growing, supported by quality assets and driven by a strong sense of pride and confidence.

Wakefield is a great place to do business and a great place to belong."

#### **Liveable Communities**

#### **Thriving Region**

Wakefield is a great place to live, work and play. Our vibrant, attractive towns are full of energy and excitement, with places and spaces designed for people to pursue recreation, leisure and fun. Our communities are connected by social events, a sense of pride and belonging and quality infrastructure that serves them well. Wakefield is open for business. Our region's economic future is bright as existing businesses thrive and expand, while new businesses and industries put down local roots. Our population is growing as people recognise the affordable, quality lifestyle on offer, with new housing options enticing people to move to the area.

#### Sustainable Future

Wakefield has a clean, green future. Strong partnerships between Council, the community and other agencies have been formed as we come together to manage our environment in the best possible way. We are seen as a region that respects its natural assets and seeks sustainable outcomes for the community.

In order to deliver on this vision the way infrastructure is managed from planning, budgeting, delivery and maintenance and operations needs to be of a high standard with resources equipped to match the demand that this Plan outlines.

In order to provide residents with an effective and safe community wastewater management system into the future this plan sets to develop a range of improvement measures to ensure there are efficiency gains in operations and compliance to public health regulations



# 3 Life Cycle Management

The life cycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in Section 5) while optimising life cycle costs.

## 3.1 Background Data

Wakefield Regional Council's CWMS assets are located in the five townships of Balaklava, Port Wakefield, Snowtown, Blyth and Hamley Bridge. The assets covered in this Plan are summarised in Figure 2.

### 3.1.1 Asset Condition

The condition of Wakefield Regional Council's CWMS assets has been ascertained by visual inspection and testing of mechanical features of the asset (where practical) or with reference to the known age and life expectancy of the specific asset.

The condition of the CWMS gravity and vacuum collection networks within the Wakefield Regional Council is largely unknown. No condition assessment of the gravity mains, vacuum mains or pumping mains has been undertaken. As most of the pipes are less than 30 years old, it would not be expected that pipes would have deteriorated below a serviceable standard however pipe condition should be considered in future iterations of this Plan as the networks age.

The Port Wakefield vacuum system is unique in the Council CWMS, whereas all other collection networks in townships are gravity and pumped mains. A vacuum collection system works most efficiently when all connections are active, which is not always the case in Port Wakefield. Vacuum collection systems have a higher maintenance regime than standard gravity collection systems. Operation and maintenance of the Port Wakefield vacuum system is undertaken by Alano Water.

A full assessment has been undertaken for Wastewater Treatment Plants and Pump Stations by Tonkin and Pump Technology Services to ascertain the current asset condition of these facilities. There has been no assessment made on the current condition of collection network pipework, assumptions of conditions have been made with reference to the age of the pipework only. Assessment of vacuum pits, as a part of the Port Wakefield vacuum collection network have been based on previous reporting.

Generally, the Council's Wastewater Treatment Plants and Pump Station assets appear to be in structurally sound condition across each of the five sites. However, it was noted during inspections that the upkeep and maintenance status of all of these facilities could be improved, with numerous minor components requiring replacement or overhauling to maintain functionality. An improved standard of upkeep and maintenance of treatment facilities may also result in an improved ability to operate continually in accordance with Department of Health and Wellbeing and EPA approvals.

Operations and Maintenance of WWTP and PS assets are the responsibility of Alano Water, as contracted by Council. Alano Water have a maintenance schedule for all plant and equipment associated with CWMS infrastructure. Reactive maintenance is carried out as required to address faults at WWTPs and PSs. Pumps are maintained annually and as required to rectify faults. There are alarms on all pumps to identify faults, however generally these alarms are limited to warning lights. There is limited remote communication and operational ability.

The wastewater treatment plants and lagoon assets are required to be inspected by Alano Water weekly as a part of the contracted terms.

The overall age profile of the pipe and node assets for the entire CWMS is shown by estimated renewal cost included in this Plan and shown in Figure 3.

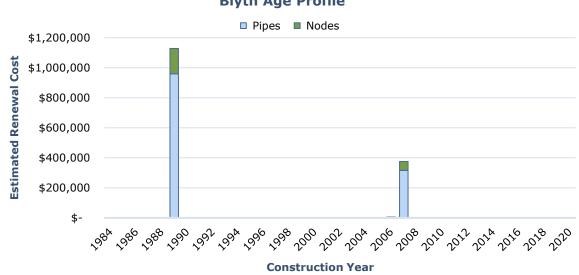


**Overall Age Profile** Pipes Nodes \$6,000,000 Estimated Renewal Cost \$5,000,000 \$4,000,000 \$3,000,000 \$2,000,000 \$1,000,000 \$-~9<sup>966</sup> 1996 2006 298<sup>A</sup> 198<sup>8</sup> 1992 2994 , 29<sup>96</sup> 2002 1990 2000 2004 200 2010 2012 2014 2016 **Construction Year** 

#### Figure 3 Overall age profile of pipe and node assets

Figure 3 shows the age profile for the whole CWMS pipe and node network. The individual age profiles for the 5 township systems of Blyth, Baklava, Hamley Bridge, Snowtown and Port Wakefield are shown below in Figure 4 to Figure 8.

As shown in Figure 4 to Figure 7Figure 3 the original CWMS systems in Blyth, Balaklava, Hamley Bridge and Snowtown were constructed between 1984 and 1989. Between 2006 and 2011 these four systems were upgraded and new wastewater treatment plants were built at Balaklava, Snowtown and Hamley Bridge and new lagoons were constructed at Blyth, Snowtown and Hamley Bridge. As shown in Figure 8 the Port Wakefield CWMS was initially built as a small gravity system and lagoon in 1995. A large vacuum collection system, new wastewater treatment plant and storage lagoon were constructed in Port Wakefield between 2009 and 2010.

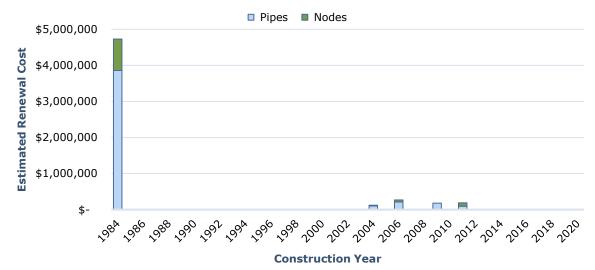


#### **Blyth Age Profile**

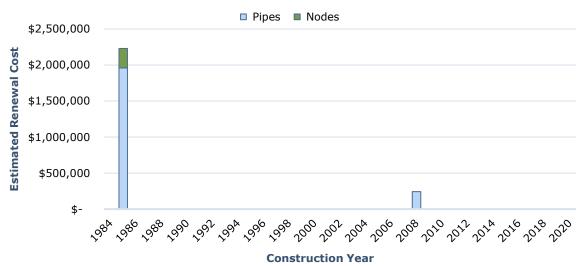
Figure 4 Age profile of pipe and node assets at Blyth



Balaklava Age Profile



#### Figure 5 Age profile of pipe and node assets at Balaklava

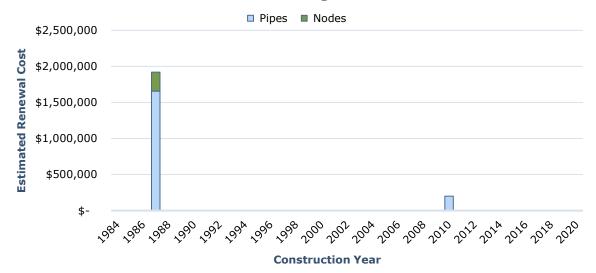


### Hamley Bridge Age Profile

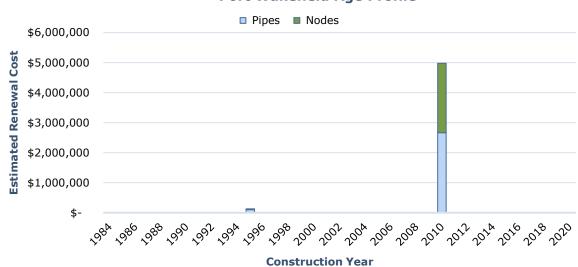
Figure 6 Age profile of pipe and node assets at Hamley Bridge



**Snowtown Age Profile** 







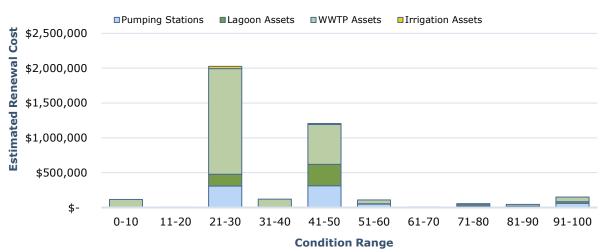
### Port Wakefield Age Profile

Figure 8 Age profile of pipe and node assets at Port Wakefield



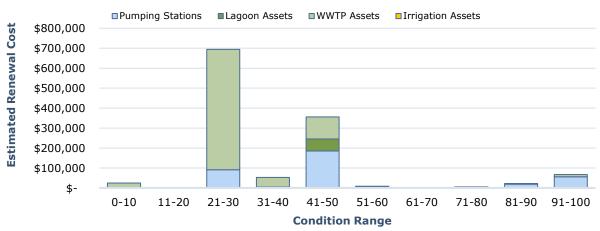
The overall condition profile of the pumping stations, lagoon, wastewater treatment plants and irrigation assets shown by estimated renewal cost included in this Plan is shown in Figure 9.

The overall condition is given a score out of 100 based on a 0 (as new) to 100 (poor, end of life) rating.



#### **Overall Condition Profile**

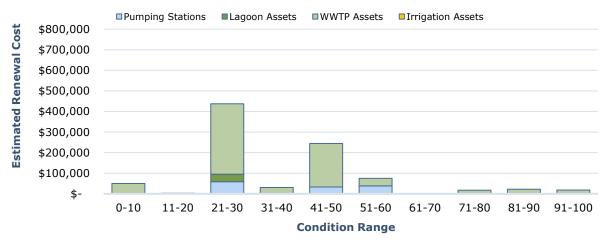
Figure 9 Overall condition profile of pumping station, WWTP, lagoon and irrigation assets



#### **Balaklava Condition Profile**

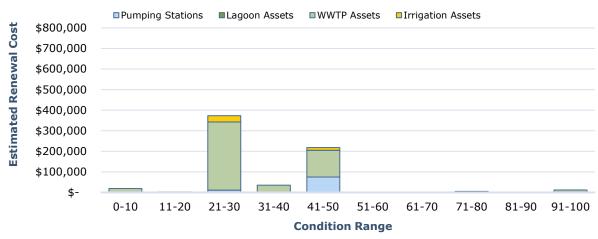
Figure 10 Condition profile of other CWMS assets at Balaklava





#### Port Wakefield Condition Profile

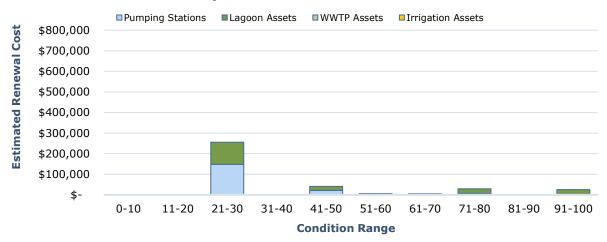
Figure 11 Condition profile of other CWMS assets at Port Wakefield



#### **Snowtown Condition Profile**

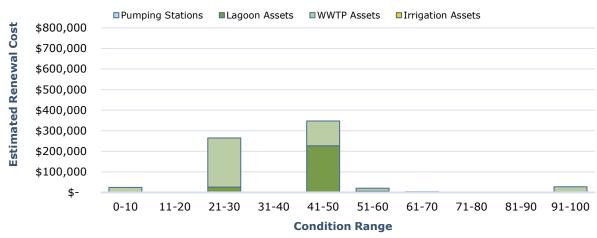
Figure 12 Condition profile of other CWMS assets at Snowtown





**Blyth Condition Profile** 

Figure 13 Condition profile of other CWMS assets at Blyth



#### **Hamley Bridge Condition Profile**

Figure 14 Condition profile of other CWMS assets at Hamley Bridge



## 3.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. In preparing this Plan, a visual assessment of each of the existing WWTP and PS infrastructure has been undertaken to ascertain the asset condition and expected performance.

The condition assessment generally surmised that the assets are structurally sound and have life remaining, however maintenance and upkeep of the facilities requires improvement. No water quality testing was provided as a part of the assessment, as these are undertaken separately and are the responsibility of the Operations and Maintenance Contractor.

It is recommended that water quality testing results are obtained to confirm the performance of the facilities. An adjustment to treatment processes is likely to be required to meet conformance requirements. This is to be determined by the facility operators, Alano Water.

Locations where deficiencies in service performance were observed are detailed in Table 1.

Assets	Service Deficiency		
Gravity Collection Networks	No known deficiencies or faults. No specific assessment undertaken to inform this Plan		
Vacuum Collection Network	There are no location alarms to identify faults within the vacuum network at Port Wakefield.		
Pump Stations	Deficiencies noted at several pump stations across the Council's CWMS. Key issues requiring immediate resolution include access safety, deficient pump lifting chains and lack of suitable lifting guides.		
	Several electrical features (switchboards, fittings etc) at PSs are dilapidated and require repair and/or replacement.		
	Port Wakefield vacuum pump station requires flood proofing.		
Wastewater Treatment Plants & Storage Lagoons	Compliance of resultant treated effluent has not been confirmed. Contracted Plant Operators (Alano Water) are to confirm compliance and modify procedures such that approval requirements are shown to be conforming.		
	Lagoons require egress ladders to be installed for safety.		
	Several electrical features (switchboards, fittings etc) at WWTPs are dilapidated and require repair and/or replacement.		
	Port Wakefield wastewater treatment plant requires flood proofing.		

#### Table 1 Known Service Performance Deficiencies



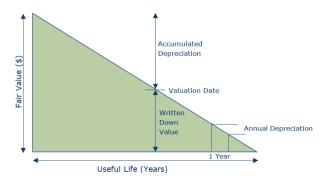
### 3.1.3 Asset Valuations

The value of the CWMS assets recorded in the asset register were valued as at 1 July 2019. The asset register has been updated with capital works and annual depreciation for the 2019-20 financial year and the values shown in Table 2 below are current as at 30 June 2020.

CWMS System	Fair Value	Carrying Amount (WDV)	Annual Depreciation (2019-2020)
Balaklava CWMS	\$6,976,937	\$3,864,107	\$115,695
Port Wakefield CWMS	\$6,194,776	\$4,785,510	\$143,202
Snowtown CWMS	\$2,945,730	\$1,709,903	\$53,843
Blyth CWMS	\$1,891,052	\$1,164,050	\$30,224
Hamley Bridge CWMS	\$3,318,720	\$1,872,089	\$57,802
Total	\$21,327,215	\$13,395,659	\$400,766

 Table 2
 CWMS Asset Value Summary as at 30 June 2020

The current rate of consumption (annual depreciation / depreciable amount) for CWMS assets is 1.9%. This indicates on average over the life of the asset that 1.9% of the depreciable amount is consumed annually. The translation of this consumption rate into renewals is subject to a decision on funding, service level determination, timing of renewal and condition.



## 3.2 Risk Management

Risks to the CWMS systems are addressed in Council's corporate risk register which is reviewed annually.

The risk assessment process identifies credible risks, considers the likelihood of an event occurring and assesses the impact or consequence that would be caused by an event occurring. A risk rating system using a risk matrix of likelihood versus impact is developed and a risk treatment plan to address non-acceptable risk is developed.

This Plan does not include a formal risk assessment however the following general comments regarding risks to the CWMS systems is provided.



Table 3	CWMS	Preliminary	Risk	Register
---------	------	-------------	------	----------

Risk	Mitigation Measure Comments			
<b>Collection network:</b> Increased capacity requirement	The CWMS collection areas are all developed currently and not likely to be infilled with subdivisions. Should additional connections be added to a catchment as per Council's 2030 vision, Council will undertake an assessment to ensure the collection network and pump station is still within its operating capacity			
Pump stations: Increased capacity requirement	The CWMS pump stations are situated in catchment areas that are developed. Should additional connections be added to a catchment, Council will undertake an assessment to ensure the collection network and pump station is still within its operating capacity			
WWTP, storage lagoon & irrigation systems: Increased capacity requirement	There is currently some spare capacity in these treatment systems. Should additional connections be added to a catchment, Council will undertake an assessment to ensure the collection network and pump station is still within its operating capacity			
WWTP failure	Contractors to Council are required to respond to faults at wastewater treatment plants which will be rectified within <8 hours, in accordance with the operations and maintenance contracts. Alarms and remote sensors identify issues at all treatment plants			
Failure to Comply with Approvals and Licenses	Failure to comply with relevant Department for Health and Wellbeing (DHW) and Environmental Protection Authority (EPA) approval requirements could represent a risk to human health and cause environmental harm. Adherence to compliance requirements to be confirmed by water quality testing and reporting in accordance with the CWMS operations and maintenance contract (undertaken by Contractor)			
	Failure to comply with license and approval requirements may also result in fines and immediate corrective actions			
	There is a further risk that capital upgrades to treatment facilities may be required if current infrastructure is shown to be unable to achieve compliance. This risk is considered slight/moderate, as assets generally appear to be in sound condition and it is assumed that compliance can be achieved with adjustments of the treatment process			
Failure to supply reuse water for irrigation	Recycled Water agreements with users include a clause stating no guarantee of supply of treated wastewater for irrigation			

## 3.3 Required Expenditure

This Plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year medium term financial planning period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.



### 3.3.1 Routine Maintenance

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again. Maintenance includes reactive (unplanned), planned and specific maintenance work activities. Assessment and prioritisation of reactive maintenance is undertaken by operational staff using experience and judgement.

The annual maintenance expenditure for the past three years for the five CWMS systems is provided in Table 4.

Financial Year	CWMS Maintenance	Septic Tank Desludging	CWMS Water Licence Expense	CWMS FCA Distribution	Total
2017-18	\$448,663	\$28,615	\$6,900	\$33,382	\$517,561
2018-19	\$500,390	\$24,836	\$7,070	\$37,399	\$569,695
2019-20	\$619,384	\$25,782	\$6,740	\$39,960	\$691,866
Annual Average	\$522,813	\$26,411	\$6,903	\$36,914	\$593,041

#### Table 4 Previous Annual Operation and Maintenance Expenditure

Future operation and maintenance expenditure is forecast to be in line with previous expenditure and so the average annual expenditure of \$600,000 has been adopted for the 10 year planning period.

### 3.3.2 Capital Renewal

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

The method used to develop the renewal plan uses the asset register data to project the renewal costs for renewal years using acquisition year and useful life. This equates to the expiry date generated from Council's asset management system.

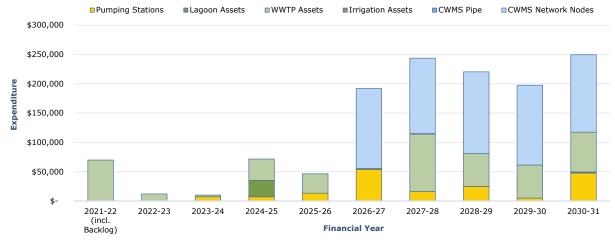
The costs associated with the renewals have been aggregated for each financial year over a 10 year planning period (medium term) and shown in Table 5 and Figure 15. The average annual capital renewal cost over the 10 year medium term is \$142,530.



Financial Year	Pumping Stations	Lagoon Assets	WWTP Assets	Irrigation Assets	CWMS Pipe	CWMS Network Nodes
2021-22 (incl. Backlog)	\$7,343	\$0	\$69,940	\$0	\$0	\$0
2022-23	\$13,450	\$0	\$12,248	\$0	\$0	\$0
2023-24	\$54,000	\$0	\$2,979	\$0	\$0	\$0
2024-25	\$16,267	\$27,811	\$36,615	\$0	\$0	\$0
2025-26	\$24,930	\$0	\$32,939	\$0	\$0	\$0
2026-27	\$4,967	\$0	\$1,879	\$0	\$0	\$136,049
2027-28	\$47,656	\$0	\$97,924	\$800	\$0	\$128,616
2028-29	\$63,062	\$0	\$56,005	\$0	\$0	\$139,370
2029-30	\$6,847	\$0	\$56,466	\$0	\$0	\$136,049
2030-31	\$49,274	\$1,928	\$67,947	\$0	\$0	\$131,936
Total	\$287,796	\$29,739	\$434,941	\$800	\$0	\$672,020

#### Table 5 Estimated Capital Renewal Expenditure

#### Estimated Capital Renewal Expenditure





The projected capital renewal program is shown in Appendix A.



### 3.3.3 Capital New/Upgrade and Acquisition

Capital new/upgrade expenditure is major work that creates a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development.

There are opportunities for Council to upgrade and complement existing infrastructure. Upgrades to be considered include:

- SCADA Monitoring Infrastructure The implementation of a remote monitoring system that has the ability to inform operators of treatment operations in realtime would benefit the Council to allow quick response to issues and reduce risk of health or environmental hazards.
- Solar and Batteries Wastewater Treatment Plants and Pump Stations are ideal candidates for the implementation of alternative electric supply from a combination of solar power and battery storage. Whilst installation of solar and battery infrastructure is a capital expense, in the long term power costs may be reduced, offsetting installation costs.
- Automatic Chlorine Dosing Chlorine dosing requires operator to attend site. Automating dosing
  will ensure that intervals and quantities are maintained. Automatic chlorine dosing can be
  integrated with a SCADA system.

Appendix B includes indicative costs for gradually upgrading the system over a 5 year period, and will be the subject of ongoing review as technologies advance and as improvements in system operations develop.

The Port Wakefield vacuum collection system is currently being reviewed to consider removal of rag ball solids upstream of the vacuum pump at the treatment plant. Upgrade works are subject to review.

### 3.3.4 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. There have been a small number of redundant CWMS assets that can be disposed of by Council. These assets are not viewed as critical or high priority and have been redundant for a significant period to date.

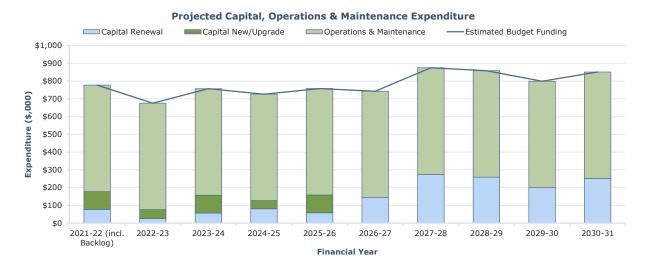
### 3.3.5 Financial Projections

The financial projections are shown in Table 6 and Figure 16 for projected operating (operations and maintenance), capital renewal, capital new/upgrade and estimated budget funding.



Financial Year	Operations & Maintenance	Capital Renewal	Capital New/Upgrade	Projected Operating & Capital Expenditure
2021-22 (incl. Backlog)	\$600,000	\$77,282	\$100,000	\$777,282
2022-23	\$600,000	\$25,698	\$50,000	\$675,698
2023-24	\$600,000	\$56,979	\$100,000	\$756,979
2024-25	\$600,000	\$80,693	\$45,500	\$726,193
2025-26	\$600,000	\$57,869	\$100,000	\$757,869
2026-27	\$600,000	\$142,896	\$0	\$742,896
2027-28	\$600,000	\$274,996	\$0	\$874,996
2028-29	\$600,000	\$258,436	\$0	\$858,436
2029-30	\$600,000	\$199,361	\$0	\$799,361
2030-31	\$600,000	\$251,086	\$0	\$851,086
Total	\$6,000,000	\$1,425,296	\$395,500	\$7,820,796

#### Table 6 Operating and Capital Expenditure



#### Figure 16 Projected Operating and Capital Expenditure over the Medium Term (10 Years)

The projected average operations, maintenance and capital expenditure required over the 10 year planning period is \$782,080 per year.



## 3.3.6 Asset Renewal Funding Ratio

No financial restrictions were applied in the development of this plan in an effort to ensure all maintenance and renewal requirements were appropriately captured. Council's Long Term Financial Plan (LTFP) has however delivered a reality check to this approach as there are other financial obligations within Wakefield 2030 Strategic Plan and a commitment by Council to responsibly manage any rate increase.

To ensure an appropriate balance is achieved in relation to strategic objectives, rate increases and asset maintenance and renewal, the LTFP requires an Asset Renewal Funding Ratio of 80% for the first four years of this plan. The ratio will increase to above 100% for the remaining half of this plan to ensure all identified maintenance and renewal requirements are delivered by year 10.

It should be noted that the financial numbers within this plan have not been adjusted down and reflect 100% maintenance and renewal requirements. Numbers will only be adjusted within Council's LTFP and Annual Budgets to ensure the financial integrity of each IAMP is preserved and Council remains within its identified financial targets.



# 4 Future Demand

## 4.1 Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc. Future demand and demand forecasting considers Council's 2030 Vision for the Wakefield Community and the intent is to align with growth goals for the region.

Demand factor trends and impacts on service delivery are summarised in Table 7.

Demand Driver	Present Position	Projection	Impact on Services
Growth in connections	Hamley Bridge system is almost at capacity with only 29 connections still available	Housing development projections for Hamley Bridge are currently zero	An increase in connections (above the 29 available) would require an upgrade of the treatment plant and storage lagoon and potential relocation of these facilities
Population growth	There is some potential for population growth in Port Wakefield and Balaklava due to business expansion The populations in Snowtown, Hamley Bridge and Blyth are stable	Unknown	Significant population growth in Port Wakefield or Balaklava would require reassessment of the collection, treatment and storage capacities
Growth in Council Irrigation	Plan to irrigate Lumeah Homes and Federation Gardens in Snowtown in addition to current irrigation area	Additional irrigation areas in Snowtown to be added within 12 months	Snowtown has good capacity to provide additional treated wastewater and harvested stormwater for irrigation

#### Table 7 Demand Factors, Projections and Impact on Services



## 4.2 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Council will determine the ability of the existing assets to manage increased requirements. Opportunities identified to date for demand management are shown in Table 8. Further opportunities will be developed in future revisions of this Plan.

Table 8	Demand	Management	Plan	Summary
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Service Activity	Demand Management Plan
Wastewater Collection	<ul> <li>Capacity assessment of each pump station</li> <li>Evaluation of impact of new allotments on existing infrastructure</li> <li>Developer contributions per Council policy</li> <li>Negotiated developer system augmentations where required</li> <li>Planning to incorporate any identified growth over asset life</li> <li>Incorporate in future iterations of the Asset Management Plan as requirements are known</li> </ul>
Wastewater Treatment, Storage and Reuse	<ul> <li>Capacity assessment of wastewater treatment processes, transfer and storage of treated wastewater</li> <li>Evaluation of impact of new irrigation areas</li> <li>Planning to incorporate any identified growth of treated effluent demand for irrigation</li> <li>Incorporate in future iterations of the Asset Management Plan as requirements are known</li> </ul>



## **5** Levels of Service

The community generally expect that Council will provide an effective method of collection and disposal of wastewater which meets the required Australian and State legislative regulations applicable to CWMS assets. Council has defined service levels in two terms and provides the level of service objective, performance measure process and service target in Table 9 and Table 10.

## 5.1 Community Levels of Service

Community levels of service relate to the service outcomes that the community wants in terms of quality reliability, responsiveness, amenity, safety and financing.

Service targets have been updated to reflect the requirements of the incumbent CWMS operations and maintenance contract pertaining to the responsibility for Council's Wastewater Treatment and Pump Stations.

Key Performance Measure	Level of Service Objective	Current Level of Service	Performance Measure Process	Service Target
Reliability	Minimise interruption to service provision	Minimal interruption to service delivery	Reported service interruptions due to CWMS infrastructure failure	Minimal interruption to service delivery
	Collection system operation without blockage or overflow	Minimal interruption to service delivery	Reported or identified blockages or overflows	Minimal interruption to service delivery
	Maintenance of service during power outage	Activation of Council contingency plan	Manage system in accordance with contingency plan to minimise and manage overflow	Activation of contingency plan as required under the Operations and Maintenance Contract

#### Table 9Community Levels of Service



Key Performance Measure	Level of Service Objective	Current Level of Service	Performance Measure Process	Service Target
Responsiveness	Response to blockages and alarms within set timeframe	Response times not defined or realistic (<1 hour)	Response to critical alarms and complaints	Pipe Blockage Clearing – Investigate within less than 3 hours
				Vacuum System Failure – Investigate within less than 3 hours
				Chlorine Leak – Investigate within less than 3 hours
				Level Sensors – Investigate within less than 8 hours
Amenity	Maintain visual amenity of CWMS infrastructure	Limited to weed spraying by Council in conjunction with footpath spraying program	Maintain equipment and land clear from weeds and debris	Ongoing maintenance of all equipment and infrastructure on site in a safe, fit- for-purpose condition
				Weed spraying of CWMS sites in conjunction with footpath spraying program
				>5 per year
	Control odour generation from pump stations, treatment plants and storage lagoons	Not defined	Reported odour complaints	Nil complaints recorded each month that are verified to be as a result of the contractor's failure to operate the facilities in accordance with the agreement



Key Performance Measure	Level of Service Objective	Current Level of Service	Performance Measure Process	Service Target
Safety	Ensure public safety around high risk system components including pump stations, manholes, treatment plant and storage lagoons	No unauthorised access to CWMS infrastructure	All lockable infrastructure secured from public access	No unauthorised access to CWMS infrastructure
	Manage public access to sites irrigated with reclaimed water	Minimise risk to public health from public irrigation	Irrigation operation in conformance with the Irrigation Management Plan for the specified irrigation site	Minimise risk to public health from public area irrigation in accordance with the Irrigation Management Plans in place for each of the irrigation sites
				Compliance with DHW approval in accordance with the Monitoring Programme and Contingency plan
Financing	Ensure annual services charges meet requirements for compliant operations of scheme and planned asset renewals within relevant legislative requirement	Not defined	Adequate recording and reporting on costs and charges	Charges cover operations, maintenance and renewal



## 5.2 Technical Levels of Service

Technical levels of service support the community service levels and are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the Council undertakes to best achieve the desired community outcomes.

Service targets have been updated to reflect the requirements of the incumbent CWMS Operations and Maintenance Contract pertaining to the responsibility for Council's Wastewater Treatment and Pump Stations.

Key Performance Measure	Level of Service Objective	Current Level of Service	Performance Measure Process	Service Target
Quality	Treated effluent to comply with approval and license conditions. Operations compliant with current DHW and EPA standards	Within DHW requirements for water quality. Current testing and reporting not defined	Quarterly sampling to be undertaken and testing by National Association of Testing Authorities (NATA) accredited laboratory Infrastructure compliant or plans for upgrade to meet compliant levels	Maintaining treatment infrastructure to consistently produce treated effluent within DHW approval requirements for water quality for irrigation reuse Timely and proactive sampling, testing and reporting at the periods specified herein demonstrating compliant operations.
Reliability	Ongoing operation of pump stations and treatment plant Availability of treated effluent for	<48 hours treatment plant downtime per annum <4 hours of pump station downtime in a single incident Annually increase Council irrigation	System outage frequency and duration due to CWMS infrastructure failure Acceptable quantity and quality of	<48 hours treatment plant downtime per annum <3 hours of pump station downtime in a single incident Annually increase Council irrigation
	Availability of treated effluent for irrigation	Annually increase Council irrigation areas where possible to maximise reuse of wastewater (if required)	Acceptable quantity and quality of water to meet irrigation requirements	Annually increase Council areas where possible to r reuse of wastewater

#### Table 10 Technical Levels of Service



Key Performance Measure	Level of Service Objective	Current Level of Service	Performance Measure Process	Service Target
Maintenance	System maintenance in accordance with component manufacturers' recommendations and requirements of the Operations and Maintenance	Records maintained for all of system maintenance. Limited records available currently	Reporting	Contractor to meet maintenance requirements in accordance with the Operations and Maintenance Contract
	Contract			Records maintained of all system maintenance
Renewal	Planned asset renewal and upgrade undertaken to maintain system in compliant operational condition	Updated previous plans adopted for budgeting and reviewed annually	Asset Management Plan integrated with Long Term Financial Plan and annual budget process	Updated current plans adopted for budgeting and reviewed annually
Capacity	Ensure adequate capacity for future growth forecasts	System catchment component plans completed and aligned to growth forecasts and development planning	System planning based on growth forecasts and development planning	Compliance with relevant DHW and EPA approvals and licences
				System catchment component plans completed and aligned to growth forecasts and development planning
Safety	System free of preventable hazards	No lost time injury associated with CWMS operations	Assessment of hazardous components and tasks in accordance with Hazard Management Procedure	No lost time Injury associated with CWMS operations
Responsiveness	Respond to faults at wastewater treatment plants to maintain service levels	Contractor to respond within 24hrs to faults at wastewater treatment plants	Compliance with treated water quality requirements	Contractor to respond within 8hrs to faults at wastewater treatment plants in accordance with Operations and Maintenance Contract
				Contractor to respond immediately (within 3 hours) to a Chlorine leak



# **6 Plan Improvement and Monitoring**

The following tasks have been identified for improving future versions of the Plan. Council should assign responsibilities and resources to these tasks as part of the endorsement of the Plan.

Table 11 Tasks identified for improving future version	s of the plan
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Task No.	Task	Responsibility
1.	Undertake compliance review for each of the sites in conjunction with the Operations and Maintenance Contractor to confirm performance. Performance is assessed as adherence to DHW and EPA approval and licence requirements.	Council
2.	Review the accuracy of the asset register to include any recently replaced or new assets and consider whether overflow lagoons situated outside of the townships are to be included in the asset register and maintained.	Council
3.	Consider undertaking a condition review and potentially a condition assessment of a selection of the collection pipe and node network to assess end of life of the collection systems.	Council

This Plan will be reviewed during annual budget planning processes and amended as required to address any material changes in service levels and/or resources available to provide those services as a result of budget decisions.



# 7 References

- IPWEA, 2006, NAMS.PLUS3 Asset Management, Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org</u>
- IPWEA, 2011, Asset Management for Small, Rural or Remote Communities Practice Note, Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org</u>

		Projected 10 Year Capita	al Renewal Plan			
Asset ID	Asset Group	Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost
26367.2	Electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	Switchboard	2020-21	\$ 11,000.00
26281	Civil	Balaklava WWTP	Balaklava	Utility shed	2021-22	\$ 10,684.80
26326	Civil	Hudson Road PS	Balaklava	Vent Pipe	2021-22	\$ 2,447.50
26344	Civil	Charles Street PS	Blyth	Vent Pipe	2021-22	\$ 2,447.50
26385	Civil	Hamley bridge WWTP	Hamley Bridge	Utility shed	2021-22	\$ 7,938.00
26401	Civil	Port Wakefield WWTP	Pt Wakefield	Utility shed	2021-22	\$ 9,450.00
26467	Civil	Snowtown WWTP	Snowtown	Utility shed	2021-22	\$ 9,450.00
26474	Civil	Glen Davidson Drive PS	Snowtown	Vent Pipe	2021-22	\$ 2,447.50
26404	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible Sump Pump (medium)	2021-22	\$ 6,039.00
26754	Pump	Hamley Bridge WWTP	Hamley Bridge	Relift Wastewater Pump	2021-22	\$ 8,539.00
29445.1	Pump	Port Wakefield WWTP	Pt Wakefield	Chemical Dosing Pump (Chlorine)	2021-22	\$ 3,500.00
29675	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Lift Pump 1.1kW	2021-22	\$ 3,339.00
26413	Pump	Port Wakefield WWTP	Pt Wakefield	Irrigation Pressure Pump (7.5kW)	2022-23	\$ 12,247.50
26314.4	Electrical and instrument	Hospital PS	Balaklava	Switchboard	2022-23	\$ 5,500.00
26314.5	Electrical and instrument	Hospital PS	Balaklava	Dialler	2022-23	\$ 450.00
26320.5	Electrical and instrument	Hudson Road PS	Balaklava	Surge diverters	2022-23	\$ 1,100.00
26339.1	Electrical and instrument	Charles Street PS	Blyth	Dialler	2022-23	\$ 450.00
26339.3	Electrical and instrument	Charles Street PS	Blyth	Switchboard	2022-23	\$ 5,500.00
26345.1	Electrical and instrument	JS McEwin terrace PS	Blyth	Dialler	2022-23	\$ 450.00
26318	Civil	Hospital PS	Balaklava	Pump station sump 1.9m dia x 4m deep	2023-24	\$ 54,000.00
26452.4	Electrical and instrument	Snowtown WWTP	Snowtown	Surge diverters	2023-24	\$ 1,100.00
26445	Mechanical	Snowtown WWTP	Snowtown	Air conditioning unit	2023-24	\$ 1,879.25
26338	Civil	Blyth Lagoons	Blyth	Security Fencing 1.8m with 3 barbed wire	2024-25	\$ 22,311.00
26417	Civil	Port Wakefield WWTP	Pt Wakefield	Security Fencing 1.8m with 3 barbed wire	2024-25	\$ 8,576.00
26307	VPF	Boronia Circuit PS	Balaklava	Pump Station Pipework and Valves	2024-25	\$ 4,967.30
29445	Pump	Port Wakefield WWTP	Pt Wakefield	Chemical Dosing Pump (Chlorine)	2024-25	\$ 3,500.00
29447	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible Sump Pump (large)	2024-25	\$ 13,539.00
26314.1	Electrical and instrument	Hospital PS	Balaklava	Controller	2024-25	\$ 5,500.00
26314.3	Electrical and instrument	Hospital PS	Balaklava	24vac supply	2024-25	\$ 300.00
26339.2	Electrical and instrument	Charles Street PS	Blyth	Controller	2024-25	\$ 5,500.00
26390	Electrical and instrument	Port Wakefield WWTP	Pt Wakefield	Lagoon switchboard	2024-25	\$ 5,500.00
26406	Electrical and instrument	Port Wakefield WWTP	Pt Wakefield	Switchboard	2024-25	\$ 5,500.00
New-1	Electrical and instrument	Hamley Bridge Lagoon	Hamley Bridge	Switchboard for aerator	2024-25	\$ 5,500.00
26318.2	Civil	Hospital PS	Balaklava	Valve Chamber	2025-26	\$ 13,929.64
26363	Pump	Hamley Bridge WWTP	Hamley Bridge	Submersible Wastewater Lift Pump <2kW	2025-26	\$ 6,039.00
26283.3	Electrical and instrument	Balaklava WWTP	Balaklava	24vdc power supply	2025-26	\$ 300.00
26283.6	Electrical and instrument	Balaklava WWTP	Balaklava	Switchboard	2025-26	\$ 5,500.00
26288	Electrical and instrument	Balaklava WWTP	Balaklava	Filter controller	2025-26	\$ 800.00
26306.6	Electrical and instrument	Boronia Circuit PS	Balaklava	Switchboard	2025-26	\$ 5,500.00
26367.7	Electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	24vdc power supply and ups	2025-26	\$ 550.00
26426.1	Electrical and instrument	Port Wakefield WWTP	Pt Wakefield	Switchboard	2025-26	\$ 5,500.00
26426.2	Electrical and instrument	Port Wakefield WWTP	Pt Wakefield	Controller	2025-26	\$ 5,500.00
26426.7	Electrical and instrument	Port Wakefield WWTP	Pt Wakefield	Ups	2025-26	\$ 1,200.00
26452.2	Electrical and instrument	Snowtown WWTP	Snowtown	Switchboard	2025-26	\$ 5,500.00
2015212			Snowtown		2025-26	\$ 1,200.00
26452.5	Electrical and instrument	Snowtown WWTP	Showrown	Ups		

#### Projected 10 Year Capital Renewal Plan

Asset ID	Asset Group	Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost
27087	Electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	Irrigation filter automatic backwash switchboard	2025-26	\$ 850.00
24497	Nodes	Vacuum Valve and Float Switch (CWMS-N-2124) in John Street (Pt Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24534	Nodes	Vacuum Valve and Float Switch (CWMS-N-2125) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
23791	Nodes	Vacuum Division Valve (CWMS-N-2127) in Burra Street (East)	Pt Wakefield	Vacuum Division Valve	2026-27	\$ 5,220.00
24550	Nodes	Vacuum Valve and Float Switch (CWMS-N-2128) in Thomas Crescent	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24551	Nodes	Vacuum Valve and Float Switch (CWMS-N-2129) in Thomas Crescent	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24441	Nodes	Vacuum Valve and Float Switch (CWMS-N-2130) in Burra Street (East)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24473	Nodes	Vacuum Valve and Float Switch (CWMS-N-2131) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24442	Nodes	Vacuum Valve and Float Switch (CWMS-N-2132) in Burra Street (East)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24443	Nodes	Vacuum Valve and Float Switch (CWMS-N-2133) in Burra Street (East)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24452	Nodes	Vacuum Valve and Float Switch (CWMS-N-2135) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24511	Nodes	Vacuum Valve and Float Switch (CWMS-N-2136) in Main Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24482	Nodes	Vacuum Valve and Float Switch (CWMS-N-2138) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24483	Nodes	Vacuum Valve and Float Switch (CWMS-N-2139) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24484	Nodes	Vacuum Valve and Float Switch (CWMS-N-2142) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
23792	Nodes	Vacuum Division Valve (CWMS-N-2143) in Burra Street (East)	Pt Wakefield	Vacuum Division Valve	2026-27	\$ 5,220.00
24512	Nodes	Vacuum Valve and Float Switch (CWMS-N-2144) in Main Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24513	Nodes	Vacuum Valve and Float Switch (CWMS-N-2145) in Main Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24453	Nodes	Vacuum Valve and Float Switch (CWMS-N-2147) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24454	Nodes	Vacuum Valve and Float Switch (CWMS-N-2148) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24535	Nodes	Vacuum Valve and Float Switch (CWMS-N-2149) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24536	Nodes	Vacuum Valve and Float Switch (CWMS-N-2150) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
23911	Nodes	Vacuum Division Valve (CWMS-N-2156) in John Street (Pt Wakefield)	Pt Wakefield	Vacuum Division Valve	2026-27	\$ 5,220.00
24523	Nodes	Vacuum Valve and Float Switch (CWMS-N-2157) in Minnie Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24524	Nodes	Vacuum Valve and Float Switch (CWMS-N-2158) in Minnie Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24525	Nodes	Vacuum Valve and Float Switch (CWMS-N-2160) in Minnie Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24537	Nodes	Vacuum Valve and Float Switch (CWMS-N-2161) in Phillips Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24538	Nodes	Vacuum Valve and Float Switch (CWMS-N-2164) in Phillips Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24539	Nodes	Vacuum Valve and Float Switch (CWMS-N-2165) in Phillips Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24540	Nodes	Vacuum Valve and Float Switch (CWMS-N-2166) in Phillips Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24033	Nodes	Vacuum Division Valve (CWMS-N-2167) in Golf Course Track	Pt Wakefield	Vacuum Division Valve	2026-27	\$ 5,220.00
24541	Nodes	Vacuum Valve and Float Switch (CWMS-N-2168) in Phillips Street	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
24498	Nodes	Vacuum Valve and Float Switch (CWMS-N-2169) in John Street (Pt Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2026-27	\$ 4,113.19
26469	VPF	Glen Davidson Drive PS	Snowtown	Pump Station Pipework and Valves	2026-27	\$ 4,967.30
26361	Mechanical	Hamley Bridge WWTP	Hamley Bridge	Air conditioning unit	2026-27	\$ 1,879.25
24457	Nodes	Vacuum Valve and Float Switch (CWMS-N-2000) in Crescent Wharf	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24458	Nodes	Vacuum Valve and Float Switch (CWMS-N-2001) in Crescent Wharf	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24563	Nodes	Vacuum Valve and Float Switch (CWMS-N-2003) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24564	Nodes	Vacuum Valve and Float Switch (CWMS-N-2004) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24459	Nodes	Vacuum Valve and Float Switch (CWMS-N-2006) in Crescent Wharf	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24460	Nodes	Vacuum Valve and Float Switch (CWMS-N-2007) in Crescent Wharf	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24565	Nodes	Vacuum Valve and Float Switch (CWMS-N-2012) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24514	Nodes	Vacuum Valve and Float Switch (CWMS-N-2013) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24285	Nodes	Vacuum Division Valve (CWMS-N-2014) in West Street	Pt Wakefield	Vacuum Division Valve	2027-28	\$ 5,220.00
24566	Nodes	Vacuum Valve and Float Switch (CWMS-N-2015) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24574	Nodes	Vacuum Valve and Float Switch (CWMS-N-2016) in Copper Street (South)	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19

#### Projected 10 Year Capital Renewal Plan

Projected 10 Year Capital Kenewal Plan						
Asset ID	Asset Group	Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost
24515	Nodes	Vacuum Valve and Float Switch (CWMS-N-2017) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24516	Nodes	Vacuum Valve and Float Switch (CWMS-N-2018) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24517	Nodes	Vacuum Valve and Float Switch (CWMS-N-2019) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24575	Nodes	Vacuum Valve and Float Switch (CWMS-N-2020) in Copper Street (South)	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24461	Nodes	Vacuum Valve and Float Switch (CWMS-N-2021) in Drake Crescent	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24465	Nodes	Vacuum Valve and Float Switch (CWMS-N-2023) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24466	Nodes	Vacuum Valve and Float Switch (CWMS-N-2024) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24548	Nodes	Vacuum Valve and Float Switch (CWMS-N-2025) in South Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24526	Nodes	Vacuum Valve and Float Switch (CWMS-N-2026) in Musgrave Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24527	Nodes	Vacuum Valve and Float Switch (CWMS-N-2027) in Musgrave Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24549	Nodes	Vacuum Valve and Float Switch (CWMS-N-2028) in South Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24446	Nodes	Vacuum Valve and Float Switch (CWMS-N-2029) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24491	Nodes	Vacuum Valve and Float Switch (CWMS-N-2031) in Gibbon Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24492	Nodes	Vacuum Valve and Float Switch (CWMS-N-2032) in Gibbon Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24493	Nodes	Vacuum Valve and Float Switch (CWMS-N-2033) in Gibbon Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24494	Nodes	Vacuum Valve and Float Switch (CWMS-N-2034) in Gibbon Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24447	Nodes	Vacuum Valve and Float Switch (CWMS-N-2035) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24448	Nodes	Vacuum Valve and Float Switch (CWMS-N-2036) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24449	Nodes	Vacuum Valve and Float Switch (CWMS-N-2037) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
24495	Nodes	Vacuum Valve and Float Switch (CWMS-N-2038) in Gibbon Street	Pt Wakefield	Vacuum Valve and Float Switch	2027-28	\$ 4,113.19
26291	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Lift Pump <2kW	2027-28	\$ 6,039.00
26295	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Lift Pump 3kW	2027-28	\$ 7,939.00
26296	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Lift Pump 3kW	2027-28	\$ 7,939.00
26316	Pump	Hospital PS	Balaklava	Submersible Wastewater Pump 2.3kW	2027-28	\$ 6,039.00
26317	Pump	Hospital PS	Balaklava	Submersible Wastewater Pump 2.3kW	2027-28	\$ 6,039.00
26342	Pump	Charles Street PS	Blyth	Submersible Grinder Pump 7.8kW	2027-28	\$ 10,339.00
26362	Pump	Hamley Bridge WWTP	Hamley Bridge	Submersible Wastewater Lift Pump <2kW	2027-28	\$ 6,039.00
26381	Pump	Hamley Bridge WWTP	Hamley Bridge	Wastewater Mixing Pump 2.3kW	2027-28	\$ 6,039.00
26383	Pump	Hamley Bridge WWTP	Hamley Bridge	Submersible WAS Pump 2.3kW	2027-28	\$ 5,839.00
26391	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible Wastewater Lift Pump <2kW	2027-28	\$ 6,039.00
26398	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible WAS Pump	2027-28	\$ 4,939.00
26399	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible WAS Pump	2027-28	\$ 4,939.00
26450	Pump	Snowtown WWTP	Snowtown	Submersible Wastewater Lift Pump <2kW	2027-28	\$ 6,039.00
26461	Pump	Snowtown WWTP	Snowtown	Submersible Wastewater Lift Pump 2.2kW	2027-28	\$ 6,039.00
26462	Pump	Snowtown WWTP	Snowtown	Submersible RAS Pump 1.5kW	2027-28	\$ 4,939.00
29446	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible Sump Pump 2.2kW	2027-28	\$ 6,039.00
29674	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Lift Pump <2kW	2027-28	\$ 6,039.00
29679	Pump	Charles Street PS	Blyth	Submersible Grinder Pump 7.8kW	2027-28	\$ 10,339.00
29682	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible Wastewater Lift 1.5kW	2027-28	\$ 4,989.00
29683	Pump	Port Wakefield WWTP	Pt Wakefield	Submersible Wastewater Lift 1.5kW	2027-28	\$ 4,989.00
26283.4	Electrical and instrument	Balaklava WWTP	Balaklava	Ups	2027-28	\$ 1,200.00
26306.1	Electrical and instrument	Boronia Circuit PS	Balaklava	Main switch	2027-28	\$ 350.00
26306.2	Electrical and instrument	Boronia Circuit PS	Balaklava	Controller	2027-28	\$ 5,500.00
26306.3	Electrical and instrument	Boronia Circuit PS	Balaklava	Phase fail relay	2027-28	\$ 250.00
26306.4	Electrical and instrument	Boronia Circuit PS	Balaklava	24vdc power supply	2027-28	\$ 300.00
26306.7	Electrical and instrument	Boronia Circuit PS	Balaklava	UPS	2027-28	\$ 1,200.00

Projected 10 Year Capital Renewal Plan						
Asset ID	Asset Group	Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost
26314.2	Electrical and instrument	Hospital PS	Balaklava	Main switch	2027-28	\$ 350.00
26320.2	Electrical and instrument	Hudson Road PS	Balaklava	Dc power supply	2027-28	\$ 300.00
26320.6	Electrical and instrument	Hudson Road PS	Balaklava	Phase fail relay	2027-28	\$ 250.00
26339.4	Electrical and instrument	Charles Street PS	Blyth	Main switch	2027-28	\$ 350.00
26345.3	Electrical and instrument	JS McEwin terrace PS	Blyth	Phase fail relay	2027-28	\$ 250.00
26345.4	Electrical and instrument	JS McEwin terrace PS	Blyth	Switchboard	2027-28	\$ 5,500.00
26367.1	Electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	Phase fail relay	2027-28	\$ 250.00
26367.3	Electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	Main switch	2027-28	\$ 350.00
26367.5	Electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	Modem	2027-28	\$ 450.00
26426.9	Electrical and instrument	Port Wakefield WWTP	Pt Wakefield	24vdc power supply and ups	2027-28	\$ 550.00
26437.2	Electrical and instrument	Snowtown oval	Snowtown	Filter control panel	2027-28	\$ 800.00
26452.6	Electrical and instrument	Snowtown WWTP	Snowtown	24vdc power supply	2027-28	\$ 300.00
26468.2	Electrical and instrument	Glen Davidson Drive PS	Snowtown	24vdc power supply	2027-28	\$ 300.00
24467	Nodes	Vacuum Valve and Float Switch (CWMS-N-2040) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24468	Nodes	Vacuum Valve and Float Switch (CWMS-N-2041) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24469	Nodes	Vacuum Valve and Float Switch (CWMS-N-2042) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24470	Nodes	Vacuum Valve and Float Switch (CWMS-N-2043) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24471	Nodes	Vacuum Valve and Float Switch (CWMS-N-2044) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24472	Nodes	Vacuum Valve and Float Switch (CWMS-N-2046) in East Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24518	Nodes	Vacuum Valve and Float Switch (CWMS-N-2048) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24519	Nodes	Vacuum Valve and Float Switch (CWMS-N-2049) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24520	Nodes	Vacuum Valve and Float Switch (CWMS-N-2051) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24521	Nodes	Vacuum Valve and Float Switch (CWMS-N-2053) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24522	Nodes	Vacuum Valve and Float Switch (CWMS-N-2055) in Mine Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
23874	Nodes	Vacuum Division Valve (CWMS-N-2056) in Company Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24139	Nodes	Vacuum Division Valve (CWMS-N-2057) in Mine Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24140	Nodes	Vacuum Division Valve (CWMS-N-2058) in Mine Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24450	Nodes	Vacuum Valve and Float Switch (CWMS-N-2059) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24451	Nodes	Vacuum Valve and Float Switch (CWMS-N-2060) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24567	Nodes	Vacuum Valve and Float Switch (CWMS-N-2063) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24286	Nodes	Vacuum Division Valve (CWMS-N-2064) in West Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24474	Nodes	Vacuum Valve and Float Switch (CWMS-N-2066) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24556	Nodes	Vacuum Valve and Float Switch (CWMS-N-2067) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24272	Nodes	Vacuum Division Valve (CWMS-N-2068) in Walters Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24044	Nodes	Vacuum Division Valve (CWMS-N-2070) in John Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24552	Nodes	Vacuum Valve and Float Switch (CWMS-N-2071) in Wakefield Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24553	Nodes	Vacuum Valve and Float Switch (CWMS-N-2072) in Wakefield Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
23725	Nodes	Vacuum Division Valve (CWMS-N-2074) in Burra Street	Pt Wakefield	Vacuum Division Valve	2028-29	\$ 5,220.00
24554	Nodes	Vacuum Valve and Float Switch (CWMS-N-2075) in Wakefield Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24438	Nodes	Vacuum Valve and Float Switch (CWMS-N-2076) in Burra Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24439	Nodes	Vacuum Valve and Float Switch (CWMS-N-2077) in Burra Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24440	Nodes	Vacuum Valve and Float Switch (CWMS-N-2079) in Burra Street	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24546	Nodes	Vacuum Valve and Float Switch (CWMS-N-2081) in Railway Reserve	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24547	Nodes	Vacuum Valve and Float Switch (CWMS-N-2082) in Railway Reserve	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
24555	Nodes	Vacuum Valve and Float Switch (CWMS-N-2083) in Wakefield Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2028-29	\$ 4,113.19
26274	Pump	Balaklava WWTP	Balaklava	Submersible WAS Pump 0.56kW	2028-29	\$ 4,939.00

26376 Pu	Isset Group			Projected 10 Year Capital Renewal Plan					
		Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost			
26432 Pu	ump	Hamley Bridge WWTP	Hamley Bridge	Relift Wastewater Pump 2.3kW	2028-29	\$ 8,539.00			
	ump	Vacuum PS	Pt Wakefield	Vacuum Pump (18.5kW)	2028-29	\$ 19,017.00			
26433 Pu	ump	Vacuum PS	Pt Wakefield	Vacuum Pump (18.5kW)	2028-29	\$ 19,017.00			
26449 Pu	ump	Snowtown WWTP	Snowtown	Chemical Dosing Pump (Chlorine)	2028-29	\$ 3,500.00			
26449.1 Pu	ump	Snowtown WWTP	Snowtown	Chemical Dosing Pump (Chlorine)	2028-29	\$ 3,500.00			
26460 Pu	ump	Snowtown WWTP	Snowtown	Submersible Wastewater Lift Pump 2.2kW	2028-29	\$ 6,039.00			
26470 Pu	ump	Glen Davidson Drive PS	Snowtown	Submersible Wastewater Pump 3.2kW	2028-29	\$ 7,939.00			
29443 Pu	Pump	Hudson Road PS	Balaklava	Submersible Wastewater Pump 7.9kW	2028-29	\$ 17,089.00			
26367.6 Ele	electrical and instrument	Hamley Bridge WWTP	Hamley Bridge	Plc	2028-29	\$ 3,500.00			
26426.6 Ele	electrical and instrument	Port Wakefield WWTP	Pt Wakefield	Manual change over switch	2028-29	\$ 450.00			
26411 Me	1echanical	Port Wakefield WWTP	Pt Wakefield	Water filter	2028-29	\$ 25,537.54			
24499 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2170) in John Street (Pt Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24486 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2171) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24487 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2173) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24501 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2174) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24071 No	lodes	Vacuum Division Valve (CWMS-N-2175) in Johnson Street	Pt Wakefield	Vacuum Division Valve	2029-30	\$ 5,220.00			
24502 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2177) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
23924 No	lodes	Vacuum Division Valve (CWMS-N-2180) in Johnson Street	Pt Wakefield	Vacuum Division Valve	2029-30	\$ 5,220.00			
24500 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2181) in John Street (Pt Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24570 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2182) in White Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24571 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2183) in White Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24572 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2184) in White Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24573 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2185) in White Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24503 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2186) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24504 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2187) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24505 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2188) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24506 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2189) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24001 No	lodes	Vacuum Division Valve (CWMS-N-2190) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Division Valve	2029-30	\$ 5,220.00			
24488 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2191) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24542 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2192) in Port Wakefield Highway	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24543 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2193) in Port Wakefield Highway	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24544 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2194) in Port Wakefield Highway	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24444 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2199) in Catherine Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24445 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2200) in Catherine Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24489 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2201) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24490 No	lodes	Vacuum Valve and Float Switch (CWMS-N-2202) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
24002 No	lodes	Vacuum Division Valve (CWMS-N-2203) in George Street (Port Wakefield)	Pt Wakefield	Vacuum Division Valve	2029-30	\$ 5,220.00			
	lodes	Vacuum Valve and Float Switch (CWMS-N-2204) in Port Wakefield Highway	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
	lodes	Vacuum Valve and Float Switch (CWMS-N-2205) in Main Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
	lodes	Vacuum Valve and Float Switch (CWMS-N-2206) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
	lodes	Vacuum Valve and Float Switch (CWMS-N-2207) in Johnson Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
	lodes	Vacuum Valve and Float Switch (CWMS-N-2208) in Main Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
	lodes	Vacuum Valve and Float Switch (CWMS-N-2312) in Company Street	Pt Wakefield	Vacuum Valve and Float Switch	2029-30	\$ 4,113.19			
	/PF	Charles Street PS	Blyth	Pump Station Pipework and Valves	2029-30	\$ 4,967.30			
		Hamley Bridge WWTP	Hamley Bridge	Wastewater Aerator	2029-30	\$ 16,456.00			
		Port Wakefield WWTP	Pt Wakefield	Wastewater Aerator 11kW	2029-30	\$ 16,456.00			

Projected 10 Year Capital Renewal Plan						
Asset ID	Asset Group	Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost
26397	Pump	Port Wakefield WWTP	Pt Wakefield	Wastewater Aerator 11kW	2029-30	\$ 16,456.00
26448	Pump	Snowtown WWTP	Snowtown	Submersible Wastewater Lift Pump 0.9kW	2029-30	\$ 3,339.00
26277	Mechanical	Balaklava WWTP	Balaklava	Air conditioning unit	2029-30	\$ 1,879.25
26400	Mechanical	Port Wakefield WWTP	Pt Wakefield	Air conditioning unit	2029-30	\$ 1,879.25
New	Mechanical	Vacuum PS	Pt Wakefield	Air conditioning unit	2029-30	\$ 1,879.25
24568	Nodes	Vacuum Valve and Float Switch (CWMS-N-2084) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24569	Nodes	Vacuum Valve and Float Switch (CWMS-N-2085) in West Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
23726	Nodes	Vacuum Division Valve (CWMS-N-2086) in Burra Street	Pt Wakefield	Vacuum Division Valve	2030-31	\$ 5,220.00
23980	Nodes	Vacuum Division Valve (CWMS-N-2087) in Edward Street	Pt Wakefield	Vacuum Division Valve	2030-31	\$ 5,220.00
24475	Nodes	Vacuum Valve and Float Switch (CWMS-N-2088) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24476	Nodes	Vacuum Valve and Float Switch (CWMS-N-2089) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24557	Nodes	Vacuum Valve and Float Switch (CWMS-N-2090) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24558	Nodes	Vacuum Valve and Float Switch (CWMS-N-2091) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24477	Nodes	Vacuum Valve and Float Switch (CWMS-N-2093) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24559	Nodes	Vacuum Valve and Float Switch (CWMS-N-2094) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24528	Nodes	Vacuum Valve and Float Switch (CWMS-N-2096) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24529	Nodes	Vacuum Valve and Float Switch (CWMS-N-2097) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24530	Nodes	Vacuum Valve and Float Switch (CWMS-N-2098) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24531	Nodes	Vacuum Valve and Float Switch (CWMS-N-2099) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24184	Nodes	Vacuum Division Valve (CWMS-N-2100) in North Street	Pt Wakefield	Vacuum Division Valve	2030-31	\$ 5,220.00
24532	Nodes	Vacuum Valve and Float Switch (CWMS-N-2101) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24533	Nodes	Vacuum Valve and Float Switch (CWMS-N-2102) in North Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24485	Nodes	Vacuum Valve and Float Switch (CWMS-N-2103) in Florence Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24560	Nodes	Vacuum Valve and Float Switch (CWMS-N-2104) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24185	Nodes	Vacuum Division Valve (CWMS-N-2108) in North Street	Pt Wakefield	Vacuum Division Valve	2030-31	\$ 5,220.00
24561	Nodes	Vacuum Valve and Float Switch (CWMS-N-2109) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24562	Nodes	Vacuum Valve and Float Switch (CWMS-N-2111) in Walters Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24462	Nodes	Vacuum Valve and Float Switch (CWMS-N-2112) in Drake Crescent	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24463	Nodes	Vacuum Valve and Float Switch (CWMS-N-2114) in Drake Crescent	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24464	Nodes	Vacuum Valve and Float Switch (CWMS-N-2115) in Drake Crescent	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24478	Nodes	Vacuum Valve and Float Switch (CWMS-N-2116) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24479	Nodes	Vacuum Valve and Float Switch (CWMS-N-2119) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24480	Nodes	Vacuum Valve and Float Switch (CWMS-N-2120) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24456	Nodes	Vacuum Valve and Float Switch (CWMS-N-2121) in Copper Street (North)	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24481	Nodes	Vacuum Valve and Float Switch (CWMS-N-2122) in Edward Street	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
24496	Nodes	Vacuum Valve and Float Switch (CWMS-N-2123) in John Street (Pt Wakefield)	Pt Wakefield	Vacuum Valve and Float Switch	2030-31	\$ 4,113.19
26273	Pump	Balaklava WWTP	Balaklava	Submersible RAS Pump 0.9kW	2030-31	\$ 4,939.00
26276	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Pump	2030-31	\$ 339.00
26299	Pump	Balaklava WWTP	Balaklava	Submersible Sump Pump 1.25kW	2030-31	\$ 4,989.00
26308	Pump	Boronia Circuit PS	Balaklava	Submersible Wastewater Pump 1.2kW	2030-31	\$ 3,689.00
26309	Pump	Boronia Circuit PS	Balaklava	Submersible Wastewater Pump 1.2kW	2030-31	\$ 3,689.00
26347	Pump	JS McEwin terrace PS	Blyth	Submersible Grinder Pump 2.4kW	2030-31	\$ 5,839.00
26348	Pump	JS McEwin terrace PS	Blyth	Submersible Grinder Pump 2.4kW	2030-31	\$ 5,839.00
26373	Pump	Hamley Bridge WWTP	Hamley Bridge	Irrigation Pressure Pump (7.5kW)	2030-31	\$ 12,247.50
26382	Pump	Hamley Bridge WWTP	Hamley Bridge	Submersible RAS Pump	2030-31	\$ 4,939.00
26447	Pump	Snowtown WWTP	Snowtown	Submersible Wastewater Lift Pump 0.9kW	2030-31	\$ 3,339.00

Projected 10 Year Capital Renewal Plan						
Asset ID	Asset Group	Common Name	Suburb	Asset Type	Financial Year	Estimated Renewal Cost
26463	Pump	Snowtown WWTP	Snowtown	Submersible WAS Pump 0.9kW	2030-31	\$ 4,939.00
29444	Pump	Hudson Road PS	Balaklava	Submersible Sump Pump 15kW	2030-31	\$ 17,589.00
29686	Pump	Glen Davidson Drive PS	Snowtown	Submersible Wastewater Pump 2.6kW	2030-31	\$ 6,039.00
NEW-3	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Pump 0.9kW	2030-31	\$ 3,339.00
NEW-4	Pump	Balaklava WWTP	Balaklava	Submersible Wastewater Pump 0.9kW	2030-31	\$ 3,339.00
26329	Mechanical	Blyth lagoons	Blyth	Water meter	2030-31	\$ 1,928.12
26371	Mechanical	Hamley Bridge WWTP	Hamley Bridge	Irrigation Filter	2030-31	\$ 25,537.54
26421	Mechanical	Vacuum PS	Pt Wakefield	Vacuum PS Air/Water Separator	2030-31	\$ 6,590.33



# Appendix A Projected 10 Year Capital Renewal Plan



# Appendix B Projected 10 Year Capital New/Upgrade Plan

Financial Year	Common Name	Estimated Renewal Cost
2021-22	SCADA Upgrade	\$100,000.00
2022-23	Solar Upgrade	\$50,000.00
2023-24	SCADA Upgrade	\$100,000.00
2024-25	Guide rail installation	\$37,500.00
2024-25	Egress ladders installation	\$8,000.00
2025-26	SCADA Upgrade	\$100,000.00
Total		\$395,500.00