



Final Service and Performance Plan

2021/22

Bundaberg Distribution Service Contract

27 August 2021

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At a glance

Our performance in 2019/20



Operating costs:
\$15.17 million (37.0% more than forecast)

This can be attributed to the additional delivery costs—largely electricity—associated with the out of allocation event and water made available during the essential works project for Paradise Dam.



Annuity-funded costs:
\$2.36 million (15.0% less than forecast)

A key driver for the cost variance was the deferral of the Woongarra Balancing Storage comprehensive risk assessment (CRA) and associated input studies to 2020/21. These works will be combined with similar studies, to help deliver efficiency gains. The remainder of the 2019/20 program of works was delivered broadly in line with our forecasts, with variances between forecast and actual costs at the project level.



Total water deliveries:
147,806 ML

Water delivered to irrigators: 97,683 ML



Service targets: 2 exceedances

Unplanned shutdowns (duration) and maximum number of interruptions were not met.

Outlook for 2021/22



Forecast operating costs:
\$14.13 million

Significant areas of expenditure (prior to cost transfer):

- electricity (\$5.89 million)
- insurance (\$1.54 million)
- operations (\$3.09 million)
- preventative maintenance (\$2.25 million)
- corrective maintenance (\$1.40 million).



Forecast annuity-funded costs:
\$2.69 million

Key projects planned:

- continuation of the low voltage switchboard replacement at Bullyard pump station (\$0.40 million)
- cable and switchboard replacement at Bucca pump station (\$0.27 million)
- CRA at Isis Balancing Storage and a comprehensive inspection (\$0.18 million).

Introduction

This Service and Performance Plan (S&PP) details a range of proposed scheme activities and projects, and presents a breakdown of anticipated costs for review. It also compares Sunwater’s actual costs for 2019/20 with our previous forecasts for this scheme.

The purpose of this year’s S&PP for the Bundaberg Distribution Service Contract is to:

- present to customers Sunwater’s projected costs¹ for the upcoming five-year period, i.e. 2021/22 to 2025/26
- consult with our customers on forecast operating and annuity-funded costs for 2021/22 and the forward program of works
- examine Sunwater’s performance in 2019/20 against previous forecasts and service targets.

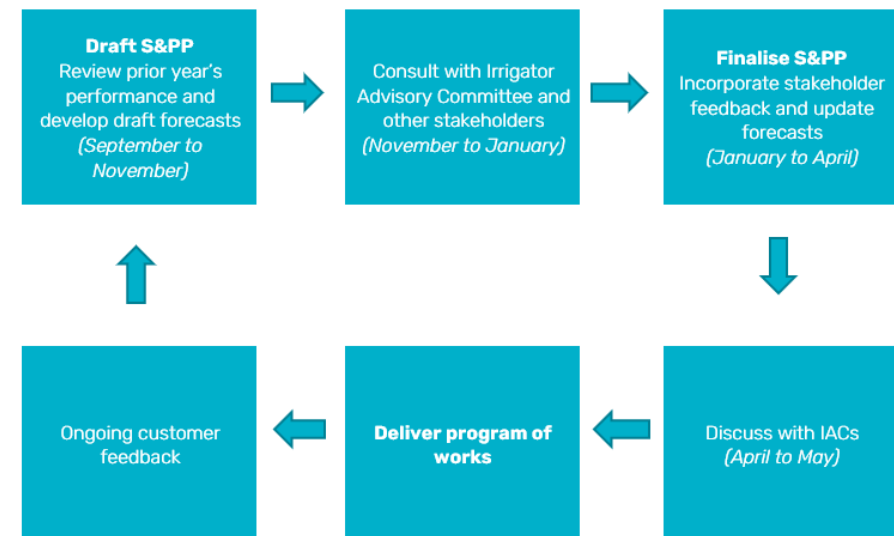
Our focus during 2021/22 will be on ensuring operations activities are implemented safely, timely and efficiently. We are also continuing to implement an efficient and effective preventative maintenance program, with a focus on ensuring the service contract’s assets continue to perform reliably.

In addition to this S&PP, Sunwater has published an information sheet which explains the types of costs we incur in delivering water to our customers and how those costs are allocated to service contracts. The information sheet is available at: www.sunwater.com.au/customer/products-and-services/service-and-performance-plans/

¹ All financial figures reported in this document are in nominal dollars, i.e. dollars of the day. Figures may not sum due to rounding.

Input from customers is a valuable part of Sunwater’s planning process and ensures that we invest in areas which support the services we provide to customers. Figure 1 outlines how Sunwater and customers work together in relation to S&PPs.

Figure 1: Customer consultation and S&PPs



We welcome and encourage your feedback on this S&PP. To have your say and shape future S&PPs, please contact us via email or post:

Email: sppfeedback@sunwater.com.au
Post: S&PP Feedback
PO Box 15536
City East Qld 4002

Delivering services to our customers

At Sunwater we are committed to working collaboratively with our customers to deliver value and fit-for-purpose water solutions.

Our customers

The majority of our 923 customers in this service contract are irrigators who grow crop types including sugar cane, tomatoes, rockmelons, watermelons, capsicum, zucchini, beans, macadamia nuts, avocados, peanuts and soybeans. Water is also supplied to the Bundaberg Regional Council for urban purposes.

The water allocations for each customer segment are included in Table 1, together with water deliveries in 2019/20. Historical total water usage is available in **Appendix 1**.

Table 1: Water allocations and usage data¹

Customer segment	Total water allocations (ML)	High priority water allocations (ML)	Medium priority water allocations (ML)	Total water deliveries 2019/20 (ML)
Irrigation	149,075	12	149,063	97,683
Industrial ²	13,113	151	12,962	4983
Urban	1859	1767	92	1597
Sunwater (excl. distribution losses)	70	0	70	12
Sunwater distribution losses	41,520	16,080	25,440	43,531 ³
Total	205,637	18,010	187,627	147,806

1. Includes Burnett Water Pty Ltd (Paradise Dam).
2. Includes BWPL irrigation customers.
3. During 2019/20 Sunwater lowered Paradise Dam's water storage to facilitate essential work to reduce the risk of a dam failure. The released water was offered to customers free of charge which resulted in a higher distribution loss delivery volume than distribution loss allocations available. Unsold water allocations from the Sunwater trading accounts were temporarily transferred to cover the shortfall.

Irrigation charges

The 2021/22 charges and cost per megalitre are shown in Table 2.

Table 2: Irrigation charges for 2021/22^{1,2}

Tariff group	Product	2021/22 (\$/ML) ³	QCA cost-reflective (\$/ML) ⁴
Channel or watercourse supplemented by a channel	Allocation Charge – Part C	39.18	70.83
	Allocation Water – Part D	46.20	55.57

1. This table includes distribution charges only. For bulk water charges, please refer to the Bulk Water Service Contract S&PP.
2. Excludes BWPL charges (Paradise Dam).
3. Includes the Queensland Government's 15 per cent discount for irrigation customers. Refer to www.rdmw.qld.gov.au for more information.
4. Is the cost-reflective price determined by the Queensland Competition Authority (QCA) in its 2020–2024 irrigation price investigation. Costs reflect lower bound cost recovery, i.e. recovery of future replacement and ongoing maintenance and operations. Charges do not allow for any returns on existing assets.

For more information on Sunwater's fees and charges, refer to:

www.sunwater.com.au/customer/fees-and-charges/

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Bundaberg Distribution Service Contract. Table 3 below sets out our recent performance against selected service targets for this scheme.

Table 3: Scheme service targets and performance

Service target		Target	Number of exceptions		
			2017/18	2018/19	2019/20
Planned shutdowns – notification	For shutdowns planned to exceed 2 weeks	8 weeks	0	0	0
	For shutdowns planned to exceed 3 days	2 weeks	0	0	0
	For shutdowns planned to be less than 3 days	5 days	0	0	0
Unplanned shutdowns – duration	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	72 hours	2	3	1
Maximum number of interruptions ¹	Planned or unplanned interruptions per water year	10	15	16	12

1. This is the total number of distribution customers in the scheme that have been interrupted in excess of the target.

In addition, Sunwater has company-wide customer interactions service targets. Our performance in 2019/20 against these service targets is shown in Table 4.

Table 4: Customer interactions service targets and performance

Service target	Target	2019/20
Telephone answering ¹	80.00%	94.87%
Requests actioned within Service Level Agreement (SLA) timeframes ²	> 95.00%	95.46%

1. This target measures the percentage of 13 15 89 calls that are answered within 60 seconds. The 2019/20 result reflects the average monthly performance over the November 2019 to June 2020 period.
2. This target measures the percentage of email or workflow requests (such as property transfers and temporary transfers) to the Customer Support email address that are completed within the agreed SLAs. The SLA timeframes range between two and 10 business days, depending on the request. The 2019/20 result covers the October 2019 to June 2020 period.

Key infrastructure

Table 5 lists the key infrastructure used to deliver distribution services to our customers in Bundaberg.

Table 5: Key infrastructure

Asset	Description	Capacity
Isis Balancing Storage	Earth embankment across a watercourse. Classified as a referable dam under the <i>Water Supply (Safety and Reliability) Act 2008</i> .	6160 ML
Woongarra Balancing Storage	Earthen embankment constructed across two small watercourses. Classified as a referable dam under the <i>Water Supply (Safety and Reliability) Act 2008</i> .	1225 ML
Gooburrum Balancing Storage	Earth embankment across a shallow depression.	1040 ML
Bullyard Creek Balancing Storage	Earth embankment.	453 ML
Monduran pump station	Three pumps. This pump station also performs a bulk water function.	1100 ML/day
Don Beattie pump station	Three pumps.	648 ML/day
Bullyard Creek pump station	Four pumps.	415 ML/day
Woongarra pump station	Five pumps.	395 ML/day
Gooburrum pump station	Two pumps.	300 ML/day

Asset	Description	Capacity
Quart Pot Creek pump station (two sections)	Four pumps (two in each section).	250 ML/day 275 ML/day
Walker Street pump station	Four pumps.	225 ML/day
Dinner Hill pump station	Three pumps.	160 ML/day
Tirroan pump station	Two pumps.	72 ML/day
North Gregory pump station	Two pumps.	63 ML/day
Bucca pump station	Two pumps.	60 ML/day
Mcllwraith pump station	Two pumps.	60 ML/day
Abbotsford pump station	Two submersible pumps.	23.7 ML/day

Financial summary—Revenue and expenditure

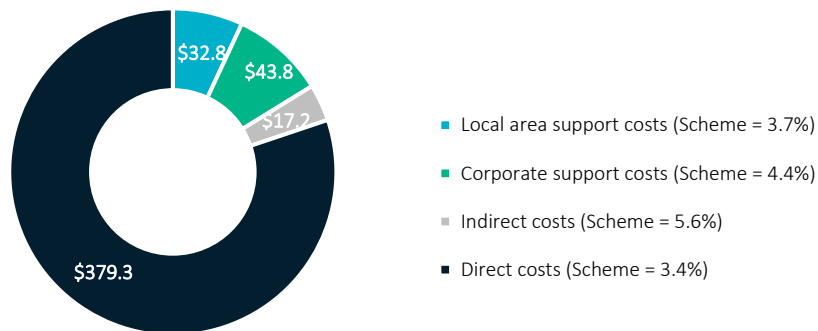
A high-level summary of the budgeted financial performance of the Bundaberg Distribution Service Contract is presented in Table 6.

The revenue Sunwater receives from urban and industrial customers is agreed by term contract. The revenue we receive from irrigation customers is determined by the Queensland Government, based on recommendations made by the QCA as part of its review of irrigation prices.

Sunwater anticipates an increase in revenue for the Bundaberg Distribution Service Contract in 2021/22.

In 2021/22, Sunwater expects to spend \$473 million across all parts of our business, i.e. regulated and non-regulated. A breakdown of the forecast total cost pool at the direct and non-direct cost level is shown in Figure 2, together with the percentage of these costs allocated to the Bundaberg Distribution Service Contract. Detail on the planned spend for this scheme is outlined on subsequent pages of this S&PP.

Figure 2: Total Sunwater cost pools and allocation to scheme¹—2021/22 forecast (\$M)



1. Prior to the transfer of a portion of Gin Gin main channel and Monduran pump station costs to the Bundaberg Bulk Water Service Contract.

Table 6: Service contract financial summary

Bundaberg Distribution Service Contract	2017/18 Actual \$'000	2018/19 Actual \$'000	2019/20 Actual \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000
Revenue					
Irrigation	11,532.9	15,565.1	13,707.7	11,800.1	12,969.0
Community Service Obligation	-	-	-	-	-
Industrial ¹	102.1	115.8	113.8	117.6	121.9
Urban ¹	624.5	645.3	646.9	634.8	648.1
Revenue transfers ²	(3006.5)	(3134.0)	(3595.5)	(3966.1)	(3608.7)
Drainage	-	-	-	-	-
Other	(303.0)	22.3	108.5	1.0	2.0
Revenue total	8950.1	13,214.5	10,981.4	8587.4	10,132.3
Less – Operating expenditure	10,693.8	13,619.4	15,166.4	12,609.3 ³	14,126.6 ³
Less					
Annuity-funded	1527.6	1826.2	2357.4	4096.6 ³	2688.4 ³
Non-annuity funded ⁴	130.3	67.3	126.0	84.2	-
Surplus (deficit)	(3401.7)	(2298.4)	(6668.4)	(8202.6)	(6682.7)

- Forecast revenues for industrial and urban customers are based on current contractual arrangements.
- Revenue transfers represent the cost of bulk water supplies delivered through the distribution system. The revenue accrues to the distribution system before it is transferred to the Bulk Water Service Contract as a contribution to the cost of the bulk water service.
- Excludes a share of Gin Gin main channel and Monduran pump station costs which have been transferred to the Bundaberg Bulk Water Service Contract.
- This is expenditure which has not been funded by irrigation customers. An example of this in the Bundaberg Distribution Service Contract is metered offtakes.

Cost of delivering services—Operating expenditure

Operating expenditure includes funds for: operations activities, i.e. operations, electricity and insurance; preventative maintenance; and corrective maintenance.

Table 7 sets out actual and forecast operating expenditure for the Bundaberg Distribution Service Contract. For a more detailed breakdown by cost category, refer to **Appendix 2**.

Table 7: Operating expenditure¹

Bundaberg Distribution Service Contract	2017/18	2018/19	2019/20		2020/21		2021/22		2022/23	2023/24	2024/25	2025/26	
	Sunwater Actual \$'000	Sunwater Actual \$'000	Sunwater Forecast \$'000	Sunwater Actual \$'000	Variance \$'000	Sunwater Forecast \$'000	QCA Target \$'000 ²	Sunwater Forecast \$'000	QCA Target \$'000 ²	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Operations	7407.3	10,141.5	7937.0	11,624.7	3687.7	9181.7	8102.5	10,521.5	9508.2	10,697.9	10,952.1	11,188.1	11,407.5
Electricity	4393.5	6751.9	4527.8	8282.0	3754.2	5100.2	4572.9	5893.0	5903.8	6010.9	6131.1	6253.7	6378.8
Insurance	708.3	755.7	845.6	870.7	25.1	1173.8	951.8	1540.5	970.8	1571.4	1602.8	1634.8	1667.5
Operations	2305.5	2633.9	2563.5	2471.9	(91.5)	2907.7	2577.8	3088.0	2633.6	3115.7	3218.2	3299.6	3361.2
Preventative maintenance	2136.4	2244.4	1940.0	2205.7	265.7	2131.2	2025.5	2248.9	2068.9	2277.7	2344.4	2406.1	2461.3
Corrective maintenance	1150.1	1233.5	1191.9	1336.0	144.2	1334.4	1349.6	1398.7	1378.4	1415.7	1458.4	1497.6	1532.3
Less costs transferred to Bundaberg bulk for Gin Gin main channel and Monduran pump station costs ³						(37.9)	(34.4)	(42.5)	(38.9)	(43.2)	(44.3)	(45.3)	(46.2)
Operating costs total	10,693.8	13,619.4	11,068.9	15,166.4	4097.5	12,609.3	11,443.1	14,126.6	12,916.7	14,348.2	14,710.6	15,046.5	15,354.8
Recreational facility costs ⁴						-		-		-	-	-	-
Operating costs total (incl. recreational facility costs)	10,693.8	13,619.4	11,068.9	15,166.4	4097.5	12,609.3		14,126.6		14,348.2	14,710.6	15,046.5	15,354.8

1. Sunwater's 2022/23 to 2025/26 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.
2. Reflects the QCA's 2020–2024 irrigation price investigation final recommendations. Excludes recreational facility costs.
3. Under the water planning framework, the Gin Gin main channel and Monduran pump station also perform a bulk water function. In its 2020–2024 irrigation price investigation final recommendations, the QCA transferred a share of the Gin Gin main channel and Monduran pump station costs from the Bundaberg Distribution Service Contract to the Bundaberg Bulk Water Service Contract. Refer to section 6.4.1 of the QCA's final Part B report at: www.qca.org.au/project/rural-water/irrigation-price-investigations/
4. From 1 July 2020, irrigation customers no longer contribute towards the cost of operating and maintaining recreational facilities. Forecast costs have been separately identified for transparency.

Our performance in 2019/20

In 2019/20, operating costs were higher than our previous forecast.² This can be attributed to the additional delivery costs—largely electricity—associated with the out of allocation event and water made available during the essential works project for Paradise Dam.

Electricity

One of the key challenges for Sunwater is managing the cost of electricity. In 2019/20, Sunwater undertook the following energy improvement initiatives in the Bundaberg Distribution Service Contract:

- a review of our electricity tariff selections, to ensure that we are using the most cost-effective tariffs. The review focused on pump stations with five tariff changes, resulting in a decrease from 21.38 c/kWh in 2018/19 to 18.04 c/kWh in 2019/20.
- an investigation into the investment in small-scale solar systems across all pump stations, in collaboration with Bundaberg CANEGROWERS Ltd, CANEGROWERS Isis Ltd and Bundaberg Fruit and Vegetable Growers Cooperative Ltd. Three sites were identified as being cost-effective for solar installation as part of Sunwater's energy strategy. However, following a request for quote process undertaken in 2020/21, the solar installations did not proceed as the assessment criteria objectives were not met.
- interval meters were installed at pump stations (as required) to provide the granular level of consumption and demand information required to accurately assist in identifying operational optimisation and renewable generation opportunities.

Outlook for 2021/22 Operations

Bundaberg Distribution Service Contract's total operations budget (prior to cost transfers) in 2021/22 is 10.7 per cent above the QCA's recommended cost target. Electricity costs are projected to be marginally lower than the QCA's allowance, while insurance costs are expected to be higher.

² See the 2019/20 Network Service Plan at www.sunwater.com.au/schemes/Bundaberg/

Insurance

Insurance is one of Sunwater's largest expenditure items. These costs have increased significantly in recent years due to multiple flood events in Queensland and global insurable events impacting premiums. Although Sunwater is subject to market forces in the pricing of insurance premiums, we have also been actively managing insurance premium costs by reviewing coverage levels and policy specifications (including deductibles) to ensure that our insurance coverage is appropriate and reflective of the risks faced by our business.

In 2020/21, Sunwater experienced a significant price increase in insurance premiums. Our insurance broker has indicated this is the beginning of an upward trend in premiums due to, among other factors, the number and size of natural disasters that have occurred in Australia over the past 12 months. Insurance premiums in 2021/22 are therefore expected to be higher than the QCA's recommended allowance and historical costs.

Electricity

In 2021/22, Sunwater will continue our focus on managing the cost of electricity in this service contract. The following energy improvement initiatives are currently planned:

- annual tariff optimisation analysis
- operational optimisation assessment (as required)
- renewable generation opportunity assessment (as required)
- outcome of energy audits reviewed and implemented (as required).

Preventative maintenance

The forecast preventative maintenance costs (prior to cost transfers) for the Bundaberg Distribution Service Contract are 8.7 per cent above the QCA's recommended cost target. Statutory compliance drives a large portion of expenditure in the preventative maintenance field on items such as overhead cranes, fire panels and high voltage (HV) testing regimes.

Corrective maintenance

In 2021/22, Sunwater anticipates spending \$1.40 million on corrective maintenance (prior to cost transfers) in the Bundaberg Distribution Service Contract. This is consistent with the QCA's recommended cost target (1.5 per cent above the target).

Electricity metrics

Table 8 sets out electricity usage and efficiency-related information for the Bundaberg Distribution Service Contract.

Table 8: Electricity usage and efficiency-related metrics

Metric	2016/17	2017/18	2018/19	2019/20
Electricity usage (kWh)	26,757,865	19,625,264	31,378,276	45,869,105
Water usage (ML)	134,817	95,428	161,167	147,806
Actual electricity cost per ML (\$/ML delivered)	42.49	46.04	41.89	56.03
Average pump energy indicator ¹ (kWh/ML/per metre of head)	3.64	3.65	3.55	3.58

1. The industry guidelines are 3.4 to 4.5, depending on the size and design of the pump station with the benchmark for larger pump stations being more efficient.

To effectively monitor pump efficiency, a granular level of both energy and water data is required. With the installation of interval meters in 2020 to capture energy consumption at a granular level, Sunwater is now able to more frequently monitor our performance against this metric.

Cost of delivering services—Annuity and non-annuity funded expenditure

Annuity expenditure include funds for preventative and corrective maintenance, as well as large, one-off operations activities. The preventative maintenance activities monitor the asset condition and inform the corrective maintenance program when an asset needs to be refurbished or replaced. Non-annuity funded expenditure largely relates to Sunwater’s Dam Improvement Program and recreational facility costs.

Table 9 outlines our annuity and non-annuity funded expenditure. A comparison of forecast and actual annuity-funded projects for 2019/20 is provided in **Appendix 3**, with details of the major annuity-funded projects planned for the 2020/21 to 2025/26 period set out in **Appendix 4** (all projects except Gin Gin main channel and Monduran pump station) and **Appendix 5** (Gin Gin main channel and Monduran pump station projects).

Table 9: Annuity and non-annuity funded expenditure^{1,2}

Bundaberg Distribution Service Contract	2017/18	2018/19	2019/20		Variance \$'000	2020/21		2021/22		2022/23	2023/24	2024/25	2025/26
	Sunwater Actual \$'000 ³	Sunwater Actual \$'000 ³	Sunwater Forecast \$'000	Sunwater Actual \$'000		Sunwater Forecast \$'000	QCA Target \$'000 ⁴	Sunwater Forecast \$'000	QCA Target \$'000 ⁴	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Annuity-funded													
Operations	0.4	-	-	-	-	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	1409.5	1826.2	2773.2	2357.4	(415.8)	4118.8	1912.9	2702.1	1357.1	2619.6	3033.6	4107.8	3495.1
Unplanned corrective maintenance	117.7	-	-	-	-	-	-	-	-	-	-	-	-
Less costs transferred to Bundaberg bulk for Gin Gin main channel and Monduran pump station ⁵						(22.2)	(10.5)	(13.6)	(6.8)	(8.6)	(10.6)	(11.2)	(8.9)
Annuity-funded total	1527.6	1826.2	2773.2	2357.4	(415.8)	4096.6	1902.4	2688.4	1350.3	2611.0	3023.0	4096.5	3486.2
Non-annuity funded													
Dam Improvement Program	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational facility projects						84.2							
Metered offtakes and dividend reinvestment	130.3	67.3	-	126.0	126.0	-							
Non-annuity total	130.3	67.3	-	126.0	126.0	84.2							

1. Sunwater’s 2022/23 to 2025/26 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.
2. Forecast annuity-funded costs from 2020/21 exclude recreational facility projects.
3. The annuity-funded spend for 2017/18 and 2018/19 reflects the QCA’s 2020–2024 irrigation price investigation final recommendations, which included adjustments to Sunwater’s actual costs.
4. Reflects the QCA’s 2020–2024 irrigation price investigation final recommendations.
5. In its 2020–2024 irrigation price investigation final recommendations, the QCA transferred a share of the Gin Gin main channel and Monduran pump station costs from the Bundaberg Distribution Service Contract to the Bundaberg Bulk Water Service Contract. Refer to section 6.4.1 of the QCA’s final Part B report at: www.qca.org.au/project/rural-water/irrigation-price-investigations/

Asset management and planning improvements

In its final report for the 2020–2024 irrigation price investigation, the QCA identified several potential improvements to Sunwater’s asset management and planning framework. It suggested Sunwater should:

- improve our predictive maintenance and asset condition reporting arrangements to better inform the timing of asset replacement
- review our cost estimation approach and ensure that asset values are based on modern equivalent replacement values where appropriate
- develop transparent guidelines for options analyses.³

Sunwater acknowledges there is room for improvement in our asset management system and is working on several initiatives to address these potential improvements, as outlined below.

Predictive maintenance and asset condition reporting

A focus during 2021/22 and beyond is to better leverage data to make more informed decisions and to ensure operations and maintenance activities are implemented safely, timely and efficiently.

To achieve this, Sunwater has invested in a new Enterprise Asset Management system (SAP). The new system and other IT infrastructure changes, such as a mobility solution that enables near real-time data to be loaded into the system and data automation initiatives, have presented a significant opportunity to transition to a data driven decision-making business.

In addition, Sunwater is improving predictive maintenance capability by monitoring asset performance data of critical assets. For example, the preventative maintenance program for pump stations is transitioning to usage-based intervals and energy and condition data is being analysed via remote dashboards. The asset data will provide a greater insight to asset performance, condition, and refurbishment and replacement planning.

³ See pages 58 to 60, www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-part-b-sunwater-final-report.pdf

Cost estimation approach

A change to Sunwater’s asset planning cycle in 2019 has improved the near-term cost estimation of annuity funded work. The change targets two years of fully cost-estimated work and has increased the visibility of the forward program.

Options analyses

Sunwater is implementing improvements to our asset management system with a fit-for-purpose alignment to the ISO55001 asset management standard. Key to the alignment is the simplification of how maintenance work is identified and delivered.

Low value, low complexity work follows a standard work management methodology and is managed at a service contract level. High value, high complexity work is managed at an individual level and follows Sunwater’s project, program and portfolio management framework (P3MF) and is subject to an options analysis.

Options analyses under P3MF examine a range of options and assess the shortlisted options against selected criteria, including financial, regulatory, social and environmental factors.

Annuity balance

Annuities are managed by Sunwater on behalf of each service contract. They allow for customer charges to reflect a constant amount necessary to recoup the costs of refurbishment/replacement of the assets over a pre-determined period of time. The forecast annuity balances, and the impacts of budgeted spend, are shown in Table 10 below.

The QCA and Sunwater closing balances differ due to differences in the expenditure profile allowed by the QCA in its 2020–2024 final recommendations and actual expenditure incurred by Sunwater in 2019/20 and what we expect to spend thereafter.

Table 10: Annuity balance

Bundaberg Distribution Service Contract	2017/18 Actual \$'000	2018/19 Actual \$'000	2019/20 Actual \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000	2024/25 Forecast \$'000	2025/26 Forecast \$'000
Opening balance ¹	7033.6	7939.2	8783.2	9086.6	6951.8	6210.0	5563.0	4546.3	4575.6
Spend ²	(1527.6)	(1826.2)	(2357.4)	(4118.8)	(2702.1)	(2619.6)	(3033.6)	(4107.8)	(3495.1)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	121.5	-	-	-	-	-	-	-
Annuity contribution ³	1906.4	1954.1	2002.9	1586.7	1656.3	1701.1	1773.8	3938.2	4054.6
Interest/financing costs	526.8	594.6	657.9	397.3	304.0	271.5	243.2	198.8	200.1
Sunwater – Closing balance	7939.2	8783.2	9086.6	6951.8	6210.0	5563.0	4546.3	4575.6	5335.1
QCA – Closing balance	7939.2	8783.2	9034.9	9103.7	9800.9	9722.1	10,323.0		
Difference	-	-	51.7	(2151.9)	(3590.9)	(4159.2)	(5776.7)		
Less annuity contribution transferred to Bundaberg bulk for Gin Gin main channel and Monduran pump station ⁴				(13.6)	(13.6)	(14.4)	(14.5)	(19.6)	(19.8)

1. The opening balances for 2017/18, 2018/19 and 2019/20 reflect the QCA's 2020–2024 irrigation price investigation final recommendations.
2. The spend for 2017/18 and 2018/19 reflects the QCA's 2020–2024 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs. The 2019/20 spend reflects Sunwater's actual costs. Thereafter, the spend is based on Sunwater's forecasts. Figures presented are prior to cost transfers to the Bundaberg Bulk Water Service Contract.
3. The annuity contribution is included in the prices paid by customers. For 2020/21 to 2023/24, the annuity contribution is based on the QCA's 2020–2024 irrigation price investigation final recommendations. Thereafter, it is based on Sunwater's projections.
4. In its 2020–2024 irrigation price investigation final recommendations, the QCA recovered part of the Bundaberg Distribution Service Contract annuity contribution from the River bulk water tariff group as the Gin Gin main channel and Monduran pump station also perform a bulk water function.

Appendix 1—Historical water usage

The below table contains the scheme’s recent water use, together with the 18-year average for the 2002/03 to 2019/20 period. It includes water deliveries to BWPL.

Year	Usage (ML)
2010/11	33,923
2011/12	78,341
2012/13	87,436
2013/14	166,545
2014/15	101,563
2015/16	118,628
2016/17	134,817
2017/18	95,428
2018/19	161,167
2019/20	147,806
18-year historical average	97,687

Appendix 2—Operating and annuity-funded costs by expense type

Bundaberg Distribution Service Contract	2017/18 Sunwater Actual \$'000	2018/19 Sunwater Actual \$'000	Sunwater Forecast \$'000	2019/20 Sunwater Actual \$'000	Variance \$'000	2020/21 Sunwater Forecast \$'000	QCA Target \$'000	2021/22 Sunwater Forecast \$'000	QCA Target \$'000	2022/23 Sunwater Forecast \$'000	2023/24 Sunwater Forecast \$'000	2024/25 Sunwater Forecast \$'000	2025/26 Sunwater Forecast \$'000
Operating costs													
Operations	7407.3	10,141.5	7937.0	11,624.7	3687.7	9181.7	8102.5	10,521.5	9508.2	10,697.9	10,952.1	11,188.1	11,407.5
Labour	754.6	682.7	711.1	719.6	8.4	755.5	726.1	808.2	742.8	832.4	857.4	883.1	909.6
Contractors	17.9	15.1	25.0	1.7	(23.3)	25.0	25.4	25.0	25.9	25.5	26.0	26.5	27.1
Materials	14.9	28.3	12.0	27.8	15.8	15.0	12.2	15.0	12.4	15.3	15.6	15.9	16.2
Electricity	4393.5	6751.9	4527.8	8282.0	3754.2	5100.2	4572.9	5893.0	5903.8	6010.9	6131.1	6253.7	6378.8
Insurance	708.3	755.7	845.6	870.7	25.1	1173.8	951.8	1540.5	970.8	1571.4	1602.8	1634.8	1667.5
Other	110.5	503.0	526.1	482.7	(43.4)	556.7	440.1	546.3	448.9	546.8	565.0	569.9	565.3
Local area support costs	586.1	398.1	273.7	347.0	73.3	420.8	307.3	490.1	313.9	504.8	520.0	535.6	551.7
Corporate support costs	335.6	659.9	531.0	549.3	18.3	566.6	561.2	767.8	573.2	790.8	814.5	839.0	864.1
Indirect costs	485.9	346.8	484.5	343.9	(140.7)	568.1	505.7	435.6	516.5	400.1	419.7	429.6	427.2
Preventative maintenance	2136.4	2244.4	1940.0	2205.7	265.7	2131.2	2025.5	2248.9	2068.9	2277.7	2344.4	2406.1	2461.3
Labour	548.2	593.6	505.5	589.7	84.2	519.3	516.2	533.2	528.0	549.2	565.7	582.7	600.1
Contractors	118.8	122.8	115.0	91.7	(23.3)	95.0	116.7	95.0	119.1	96.9	98.8	100.8	102.8
Materials	425.0	381.8	455.0	430.7	(24.3)	500.0	461.1	500.0	470.4	510.0	520.2	530.6	541.2
Other	56.6	45.1	52.0	84.4	32.4	60.0	46.9	60.0	47.8	61.2	62.4	63.7	64.9
Local area support costs	427.6	343.0	181.1	282.1	101.0	285.9	218.4	320.8	223.1	330.4	340.3	350.5	361.0
Corporate support costs	243.8	520.5	377.5	449.1	71.6	389.5	398.9	506.6	407.5	521.7	537.4	553.5	570.1
Indirect costs	316.3	237.6	253.9	278.0	24.1	281.4	267.2	233.3	272.9	208.3	219.5	224.3	221.0
Corrective maintenance	1150.1	1233.5	1191.9	1336.0	144.2	1334.4	1349.6	1398.7	1378.4	1415.7	1458.4	1497.6	1532.3
Labour	315.8	334.9	324.0	379.3	55.3	357.7	330.8	361.7	338.5	372.5	383.7	395.2	407.0
Contractors	2.3	31.3	20.0	59.3	39.3	18.0	20.3	18.0	20.7	18.4	18.7	19.1	19.5
Materials	106.1	116.8	150.0	117.5	(32.5)	135.0	152.0	135.0	155.1	137.7	140.5	143.3	146.1
Other	160.7	147.2	178.0	133.8	(44.2)	165.0	279.4	165.0	285.0	168.3	171.7	175.1	178.6
Local area support costs	246.3	221.0	115.1	176.9	61.8	196.7	140.0	217.2	143.0	223.7	230.4	237.3	244.5
Corporate support costs	136.6	239.0	242.0	288.6	46.6	268.2	255.7	343.6	261.2	353.9	364.5	375.4	386.7
Indirect costs	182.2	143.4	162.7	180.5	17.8	193.8	171.3	158.3	174.9	141.3	148.9	152.1	149.9
Less cost transfer to Bundaberg bulk						(37.9)	(34.4)	(42.5)	(38.9)	(43.2)	(44.3)	(45.3)	(46.2)
Operating costs total	10,693.8	13,619.4	11,068.9	15,166.4	4097.5	12,609.3	11,443.1	14,126.6	12,916.7	14,348.2	14,710.6	15,046.5	15,354.8
Annuity-funded costs													
Labour			295.9	380.7	84.8	393.6	182.8	314.2	157.8	355.3	379.9	528.9	458.8
Contractors			1161.0	1034.2	(126.8)	1786.5	829.8	890.2	447.1	694.3	918.3	1212.7	980.3
Materials			835.6	251.4	(584.2)	1221.1	567.1	832.2	418.0	793.6	936.5	1229.7	1005.2
Other			-	58.1	58.1	-	-	36.6	18.4	87.1	58.7	108.3	167.9
Local area support costs			111.2	167.1	55.9	209.0	97.1	192.8	96.8	217.0	232.0	322.2	278.2
Corporate support costs			221.0	290.8	69.8	295.2	137.1	298.5	149.9	337.5	360.9	502.4	435.9
Indirect costs			148.6	175.2	26.6	213.3	99.1	137.5	69.1	134.7	147.4	203.6	168.9
Less cost transfer to Bundaberg bulk						(22.2)	(10.5)	(13.6)	(6.8)	(8.6)	(10.6)	(11.2)	(8.9)
Annuity-funded total¹	1527.6	1826.2	2773.2	2357.4	(415.8)	4096.6	1902.4	2688.4	1350.3	2611.0	3023.0	4096.5	3486.2
Total costs²	12,221.4	15,445.5	13,842.1	17,523.8	3681.7	16,705.9	13,345.5	16,815.0	14,267.0	16,959.2	17,733.6	19,143.0	18,841.0

1. The 2017/18 and 2018/19 costs reflect the QCA's 2020–24 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs. Sunwater has provided cost information at the lowest level of granularity available.
2. Excludes recreational facility costs from 2020/21.

Appendix 3—Comparison of forecast and actual annuity-funded projects for 2019/20

The below table sets out the major annuity-funded projects planned for the Bundaberg Distribution Service Contract in 2019/20 and the actual projects undertaken.

Project	Forecast \$'000	Actual \$'000	Commentary
Monduran pump station	416	437	Works undertaken at Monduran pump station were completed broadly in line with the forecast.
Isis System	374	307	<p><u>Dinner Hill pump station</u></p> <p>The pump 3 electric motor at the Dinner Hill pump station was in a better condition than expected and subsequently required less work and effort to refurbish (20BIA40; \$13k less than forecast). The discharge and suction valves were refurbished within budget, while additional repairs were required to the pump, pipework and frames (20BIA32, \$46k above forecast). The additional works to the pipework and frames were only identified after the pump had been removed.</p> <p><u>Isis Balancing Storage</u></p> <p>A failure impact assessment review of the balancing storage was deferred (20BIA31, \$16k) and will be undertaken as part of the CRA.</p> <p><u>Isis channel</u></p> <p>A project to replace sections of the pipeline was deferred (20BIA34, \$42k). The project was planned in response to historical instances of pipe breaks. Prior to commencement of this project, a review was conducted to validate the works. It was deemed that replacement was not warranted yet.</p> <p>The installation of bulkhead gate guides was deferred to the annual shutdown in 2020/21. Costs incurred for this project related to the purchase (manufacture) of the replacement guides only (20BIA39, \$11k less than forecast).</p> <p><u>Flow meter replacements</u></p> <p>The original intent of these projects was a "like-for-like" replacement of the existing flow meters. A different type of meter was installed as it was non-invasive (no shutdown required) and minimised installation risks and long-term maintenance costs. The result was significantly less labour and less expensive hardware (20BIA30, \$38k less than forecast).</p> <p><u>Quart Pot pump station</u></p> <p>Contractor costs to replace the fire alarm system were lower than estimated (20BIA35, \$8 less than forecast), while the contractor costs to complete HV testing were more than forecast (20BIA36, \$6k above forecast). The extent of work involved in refurbishing the motor starter at pump 3 was less than anticipated, leading to a \$4k reduction in costs (20BIA38).</p> <p><u>Other works</u></p> <p>The remainder of the other works scheduled in the Isis System were completed in line with the forecast amounts.</p>
Woongarra System	1286	832	<p><u>Walker Street pump station</u></p> <p>The estimate to refurbish a suction valve included an allowance for replacing the valve if its condition warranted. The valve was able to be refurbished cost effectively (20BIA29, \$14k less than forecast).</p>

Project	Forecast \$'000	Actual \$'000	Commentary
			<p><u>Woongarra Balancing Storage</u></p> <p>The CRA (20BIA25, \$177k) and associated input studies (20BIA27, \$253k) were deferred to combine them with similar studies. The seismic investigation scoping determined that no further work was needed to satisfy the requirements of this study (20BIA26, \$43k less than forecast).</p> <p><u>Woongarra pump station</u></p> <p>HV testing at the facility was no longer required as the switchboard was replaced (20BIA20, \$11k), while pump and motor performance/efficiency testing took longer than anticipated due to the nature of the pump station and limited access to the station because of the switchboard upgrade (20BIA21, \$5k above forecast).</p> <p><u>Other works</u></p> <p>The remainder of the other works scheduled in the Woongarra System were completed broadly in line with the forecast amounts.</p>
Gooburrum pump station	288	214	<p>Refurbishment of the bulkhead gate required slightly more labour than the estimate allowed (20BIA12, \$1k above forecast). The electric motor was in better condition than anticipated. The estimate included an allowance for certain aspects of the refurbishment which were not needed in this instance (20BIA09, \$15k less than forecast). Similarly, the suction valve was in a better condition than expected and required less work to refurbish than the estimate allowed (20BIA15, \$14k less than forecast).</p> <p>HV testing was more complicated than expected and required additional labour hours and multiple switching operations which were not included in the estimate (20BIA14, \$11k above forecast).</p>
Bullyard pump station	44	76	<p>The pump was in a worse condition than expected and required significantly more work to refurbish than the estimate allowed (20BIA07, \$12k above forecast). Meanwhile, the options study cost was \$20k above forecast as it included the cable and switchboard replacement options analysis for the Bullyard pump station (see below).</p>
Bucca pump station – Cable and switchboard replacement options analysis	21	-	<p>The project costs are included in the Bullyard pump station costs above.</p>
Other works	344	356	<p>Other works were completed broadly in line with the forecast.</p>
Non-scheduled works	-	135	<p>There was a carryover of costs for two projects that were undertaken in 2018/19:</p> <ul style="list-style-type: none"> replacement of pump 1 discharge valve at Quart Pot pump station. The valve was installed in 2019/20 during the annual shutdown (19BIA40, \$26k). refurbishment of pump 3 at Don Beattie pump station. The installation was scheduled for the annual shutdown in 2019/20 to minimise supply interruptions (19BIA44, \$54k). <p>In addition, there was an unplanned project to address a safety hazard associated with access to a break pressure structure in the Bingera main channel (20BIA59, \$45k) and other minor works.</p>
2019/20 Total	2773	2357	

Appendix 4—Annuity-funded projects for 2020/21 to 2025/26

The below table sets out Sunwater’s currently planned annuity-funded projects for the 2020/21 to 2025/26 period for this scheme (excluding Gin Gin main channel and Monduran pump station projects, refer to **Appendix 5**). While the immediate program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are likely to change in future S&PPs, reflecting changes in project delivery timing; asset condition and risk updates; outcomes from scheduled asset inspections; and customer feedback.

Year	Facility	Activity description	Forecast \$'000
2020/21 ⁴	Woongarra, Bucca, Tirroan, Bullyard, Dinner Hill, North Gregory and Mclwraith pump stations	Replace – flow meters based on known asset condition and age, to assist with water distribution.	417
	Mclwraith pump station	Refurbish – pump unit No. 2 motor and discharge, suction and non-return valves based on known asset condition and age.	75
	Bullyard pump station	Refurbish – selected pumps, motors, valves and actuators across all four pumps to ensure ongoing optimal performance, and options and design of cable and low voltage (LV) switchboard replacement. Based on known condition of the assets.	219
	Woongarra Balancing Storage	Study – CRA based on regulatory requirements to better understand asset condition and risk.	180
	Scheme	Replace – customer meters based on known asset condition and age.	349
	Woongarra pump station	Replace – electrical cables and switchboards based on known asset condition and age.	1297
	Woongarra Balancing Storage	Study – updated geotechnical, hydrological, stability and failure consequence assessments to be conducted to inform the CRA.	188
	North Gregory pump station	Refurbish – pump unit No. 1 pump based on known asset condition and age.	20
	Don Beattie pump station	Study – a deformation survey to determine if the rising main and break pressure structure are moving or not.	16
	Quart Pot Creek pump station	Refurbish – pump unit No. 4 pump, motor, discharge valve and actuator based on known asset condition and age.	177
	Isis Balancing Storage	Study – updated seismic, stability and geotechnical studies to be conducted to inform the CRA.	184
	Multiple	There were nine other annuity-funded projects planned for 2020/21 including regulating gate refurbishments; fencing improvements; design and installation of additional bulkheads to better facilitate acrolein treatments; an arc flash study to reduce electrical safety hazards; refurbishment of the inlet screen to Gooburrun Balancing Storage due to corrosion; and a contingency amount.	552

⁴ Based on the program of works underpinning the 2020/21 annuity-funded budget figures presented in this S&PP. This data was extracted from Sunwater’s systems in mid-2020 and has been provided to facilitate future reporting of our performance against forecast costs. Changes to the 2020/21 program of works since the date of extraction are not incorporated here.

Year	Facility	Activity description	Forecast \$'000
	2020/21 Total		3674
2021/22	Bullyard pump station	Replace – LV switchboard based on known asset condition and age. Covers installation and commissioning.	403
	Bucca pump station	Replace – switchboard and cabling based on known asset condition and age.	272
	Isis Balancing Storage	Study – CRA based on regulatory requirements to better understand asset condition and risk.	182
	Abbotsford pump station	Replace – switchboard based on known asset condition and age. Covers design and procurement.	165
	Bullyard pump station	Replace – electrical cabling based on known asset condition and age.	157
	Isis System	Replace – customer meters based on known asset condition and age.	99
	Woongarra System	Replace – customer meters based on known asset condition and age.	93
	Gooburrum pump station	Refurbish – inlet screen based on known asset condition and age.	69
	Gooburrum pump station	Replace – rotork actuators on both discharge valves based on known asset condition and age.	69
	Bingera System	Replace – customer meters based on known asset condition and age.	67
	Gooburrum System	Replace – customer meters based on known asset condition and age.	62
	Bingera main channel	Refurbish – concrete lining based on known asset condition and age.	58
	Gin Gin System	Replace – customer meters based on known asset condition and age.	52
	Multiple	There are 29 other annuity-funded projects planned for 2021/22. These include, for example, a regulating gate refurbishment at Woongarra main channel; electric motor, pump and valve refurbishments at Tirroan pump station; options studies into the replacement of LV switchboards, cables and controls at Tirroan pump station; non-return valve, electric motor, discharge valve and pump refurbishments at Bullyard pump station; electric motor and discharge valve refurbishments at Dinner Hill pump station; comprehensive inspections at Isis and Woongarra balancing storages; motor starter replacements at Bucca pump station; an options study into the replacement of switchboard No. 2 at Quart Pot pump station; and decommissioning the outlet desilting system at Gooburrum storage.	681
		2021/22 Total	
2022/23	Gooburrum pump station	Replace – electrical switchboard based on known asset condition and age. Covers design and procurement.	237
	Quart Pot Creek pump station	Replace – HV switchboard based on known asset condition and age. Covers design and procurement.	235
	Woongarra pump station	Refurbish – rising main based on the outcomes of the options study.	141
	Bullyard pump station	Refurbish – suction valves at pump units No. 1 to 4 based on known asset condition and age.	123
	Gooburrum pump station	Refurbish – pump unit No. 2 based on known asset condition and age.	102
	Isis System	Replace – customer meters based on known asset condition and age.	100
	Woongarra System	Replace – customer meters based on known asset condition and age.	95

Year	Facility	Activity description	Forecast \$'000
	Abbotsford pump station	Replace – switchboard based on known asset condition and age. Covers installation and commissioning.	78
	Bingera System	Replace – customer meters based on known asset condition and age.	68
	Bullyard pump station	Refurbish – pump unit No. 4 based on known asset condition and age.	68
	Tirroan pump station	Replace – LV switchboard based on known asset condition and age. Covers design and procurement.	65
	Gooburrum System	Replace – customer meters based on known asset condition and age.	63
	Bingera main channel	Refurbish – concrete lining based on known asset condition and age.	59
	Quart Pot Creek pump station	Replace – cable and cableways based on known asset condition and age.	59
	Gooburrum pump station	Refurbish – pump unit No. 2 electric motor based on known asset condition and age.	59
	Isis main channel	Refurbish – regulating gate based on known asset condition and age.	57
	Gin Gin System	Replace – customer meters based on known asset condition and age.	53
	Gooburrum pump station	Refurbish – discharge valve actuator based on known asset condition and age.	43
	Gooburrum pump station	Refurbish – 900mm valve based on known asset condition and age.	43
	Multiple	There are 31 other annuity-funded projects planned for 2022/23. These include, for example, reflux valve, discharge valve, electric motor and actuator refurbishments/replacements at Bullyard pump station; discharge valve, suction valve and pump refurbishments at Dinner Hill pump station; valve refurbishment, electrical meter compliance testing, HV inspection and testing, and electrical control replacements at Quart Pot Creek pump station; discharge valve, suction valve, pump cartridge and non-return valve refurbishments at Walker Point pump station; and an options study into the replacement of switchboard No. 2 at Don Beattie pump station and HV inspection and testing.	700
	2022/23 Total		2448
2023/24	Gooburrum pump station	Replace – electrical switchboard based on known asset condition and age. Covers installation and commissioning.	568
	Don Beattie pump station	Refurbish – pump unit No. 2 based on known asset condition and age.	158
	Woongarra pump station	Replace – pump unit No. 4 bearings based on known asset condition and age.	125
	Gooburrum pump station	Replace – electrical cabling based on known asset condition and age. Covers installation and commissioning.	111
	Isis System	Replace – customer meters based on known asset condition and age.	103
	Woongarra System	Replace – customer meters based on known asset condition and age.	97
	Bullyard pump station	Replace – delivery line manifold based on known asset condition and age.	96
	Tirroan pump station	Replace – LV switchboard based on known asset condition and age. Covers installation and commissioning.	90
	Bingera System	Refurbish – concrete lining based on known asset condition and age.	83

Year	Facility	Activity description	Forecast \$'000
	Woongarra pump station	Refurbish – pump unit No. 4 motor based on known asset condition and age.	75
	Bingera System	Replace – customer meters based on known asset condition and age.	70
	Gooburrum System	Replace – customer meters based on known asset condition and age.	64
	Woongarra Balancing Storage	Study – 20-year dam safety review based on regulatory requirements and to better understand asset condition and risk.	62
	Isis main channel	Refurbish – regulating gate based on known asset condition and age.	61
	Quart Pot Creek pump station	Replace – HV switchboard No. 2 based on known asset condition and age. Covers procurement and construction.	60
	Bingera main channel	Refurbish – concrete lining based on known asset condition and age.	60
	Quart Pot Creek pump station	Replace – electrical controls based on known asset condition and age. Covers procurement and construction.	60
	Quart Pot Creek pump station	Replace – cable and cableways based on known asset condition and age. Covers procurement and construction.	60
	Multiple	There are 34 other annuity-funded projects planned for 2023/24. These projects include, for example, regulating gate refurbishments at Woongarra main channel and Gooburrum channel; discharge valve, non-return valve and suction valve refurbishments at Bullyard pump station; pump, discharge valve, reflux valve and suction valve refurbishments/replacements at Bucca pump station; motor and suction valve refurbishments at Don Beattie pump station; an electrical control battery charge replacement at Don Beattie pump station; discharge valve, pump and non-return valve refurbishments at North Gregory pump station; options study into the replacement of the electrical cabling and switchboard at North Gregory pump station; meter replacements; and fencing, gates and grid refurbishments at Woongarra main channel.	816
	2023/24 Total		2819
2024/25	Quart Pot Creek pump station	Replace – HV switchboard based on known asset condition and age. Covers procurement and construction.	680
	Don Beattie pump station	Replace – HV switchboard based on known asset condition and age. Covers design and procurement.	678
	Quart Pot Creek pump station	Replace – electrical controls based on known asset condition and age. Covers procurement and construction.	186
	Quart Pot Creek pump station	Replace – electrical cabling based on known asset condition and age. Covers procurement and construction.	133
	Woongarra pump station	Refurbish – pump unit No. 5 based on known asset condition and age.	124
	Isis System	Replace – customer meters based on known asset condition and age.	105
	Woongarra System	Replace – customer meters based on known asset condition and age.	99
	Woongarra System	Refurbish – fencing based on known asset condition and age.	97

Year	Facility	Activity description	Forecast \$'000
	Tirroan pump station	Replace – cables based on known asset condition and age.	89
	Don Beattie pump station	Replace – LV switchboard based on known asset condition and age.	83
	Woongarra pump station	Replace – pump unit No. 5 motor based on known asset condition and age.	79
	Bingera System	Replace – customer meters based on known asset condition and age.	71
	Gooburrum System	Replace – customer meters based on known asset condition and age.	66
	Bingera main channel	Refurbish – concrete lining based on known asset condition and age.	62
	Isis Balancing Storage	Study – 20-year dam safety review based on regulatory requirements and to better understand asset condition and risk.	62
	Gin Gin System	Refurbish – concrete lining based on known asset condition and age.	55
	Woongarra main channel	Refurbish – regulating gate based on known asset condition and age.	47
	Multiple	There are 48 other annuity-funded projects planned for 2024/25. These projects include, for example, inlet bulkhead gate, suction line, delivery line, building and ladder refurbishments at Don Beattie pump station; an actuator replacement at Bullyard pump station; reflux and suction valve refurbishments at Bucca pump station; LV switchboard and electrical cabling replacements at North Gregory pump station; bulkhead gate guide, regulating gate, inlet gate and discharge valve refurbishments at Gooburrum; cooling water unit replacements at Woongarra pump station; and regulating gate refurbishments at Woongarra channel and main channel.	1168
	2024/25 Total		3884
2025/26	Don Beattie pump station	Replace – HV switchboard based on known asset condition and age. Covers construction and installation.	509
	Don Beattie pump station	Replace – common control system based on known asset condition and age.	457
	Quart Pot Creek pump station	Replace – HV switchboard based on known asset condition and age. Covers installation and commissioning.	253
	Isis Balancing Storage	Study – 20-year dam safety review based on regulatory requirements and to better understand asset condition and risk.	253
	Isis Balancing Storage	Study – CRA to assess the risks identified in the 20-year dam safety review.	126
	Woongarra pump station	Refurbish – pump unit No. 1 based on known asset condition and age.	125
	Isis System	Refurbish – roads based on known asset condition and age.	115
	Isis System	Replace – customer meters based on known asset condition and age.	107
	Woongarra System	Replace – customer meters based on known asset condition and age.	101
	Mcllwraith pump station	Replace – electrical cabling based on known asset condition and age. Covers design, installation and commissioning.	79
	Woongarra pump station	Refurbish – pump unit No. 1 motor based on known asset condition and age.	75

Year	Facility	Activity description	Forecast \$'000
	Bingera System	Replace – customer meters based on known asset condition and age.	73
	North Gregory pump station	Replace – electrical cabling based on known asset condition and age. Covers installation and commissioning.	73
	Gooburrum System	Replace – customer meters based on known asset condition and age.	67
	Bingera main channel	Refurbish – concrete lining based on known asset condition and age.	63
	Quart Pot Creek pump station	Replace – electrical controls based on known asset condition and age. Covers installation and commissioning.	63
	Multiple	There are 40 other annuity-funded projects planned for 2025/26. These projects include, for example, a flow meter replacement at Don Beattie pump station; discharge and non-return valve refurbishments at Walker Point pump station; fencing refurbishments at Woongarra main channel and Bingera, Abbotsford, Gooburrum and Isis systems; HV inspections and testing at Don Beattie, Gooburrum, Quart Pot and Woongarra pump stations; road refurbishments at Bingera, Abbotsford, Gooburrum and Woongarra systems; meter replacements at Gin Gin System; and cabling replacements at Quart Pot Creek pump station.	777
	2025/26 Total		3316

Appendix 5—Gin Gin main channel and Monduran pump station annuity-funded projects for 2020/21 to 2025/26

The below table sets out Sunwater’s currently planned Gin Gin main channel and Monduran pump station annuity-funded projects for the 2020/21 to 2025/26 period. Customers in the Bundaberg Distribution Service Contract contribute towards 95 per cent of these costs.

While the immediate program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are likely to change in future S&PPs, reflecting changes in project delivery timing; asset condition and risk updates; outcomes from scheduled asset inspections; and customer feedback.

Year	Facility	Activity description	Total forecast project costs \$'000	Distribution share of forecast project costs \$'000
2020/21 ⁵	Monduran pump station	Refurbish – pump unit 1 based on known asset condition and age.	245	233
	Monduran pump station	Replace – access stairs based on known asset condition and age.	100	95
	Monduran pump station	Study – options study to assess the cost effectiveness of installing variable speed drives.	21	20
	Monduran pump station	Study – the condition assessment on the HV switchboard at the pump station identified some minor safety hazards that need to be addressed to keep operators safe. Options will be identified and included in the 2022 switchboard refurbishment project.	14	13
	Gin Gin main channel	Repair – minor bank slips.	38	36
	Gin Gin main channel	Replace – sections of fencing along the main channel to maintain adequate levels of public safety.	27	26
		2020/21 Total		445
2021/22	Monduran pump station	Refurbish – pump unit 2 based on known asset condition and age.	75	71
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 1).	58	55
	Monduran pump station	Refurbish – pump unit 2 discharge and suction valves based on asset condition and age.	44	42
	Monduran pump station	Refurbish – electrical switchboard based on known asset condition and age.	39	37
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 1).	28	26

⁵ Based on the program of works underpinning the 2020/21 annuity-funded budget figures presented in this S&PP. This data was extracted from Sunwater’s systems in mid-2020 and has been provided to facilitate future reporting of our performance against forecast costs. Changes to the 2020/21 program of works since the date of extraction are not incorporated here.

Year	Facility	Activity description	Total forecast project costs \$'000	Distribution share of forecast project costs \$'000
	Monduran pump station	Refurbish – reflux valve No. 2 based on known asset condition and age.	29	28
	2021/22 Total		273	259
2022/23	Monduran pump station	Refurbish – pump unit 4 suction valve based on known asset condition and age.	19	18
	Monduran pump station	Refurbish – pump unit 4 discharge valve based on known asset condition and age.	23	22
	Monduran pump station	Study – electrical meter compliance tests based on regulatory requirements.	31	29
	Monduran pump station	Inspect and test – HV equipment in accordance with Asset Management Standard AM26.	12	11
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 2).	59	56
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 2).	28	27
	2022/23 Total		172	163
2023/24	Monduran pump station	Refurbish – control system based on known asset condition and age.	124	118
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 3).	60	57
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 3).	29	28
	2023/24 Total		213	203
2024/25	Monduran pump station	Replace – supervisory control and data acquisition (SCADA) computer based on known asset condition and age.	15	14
	Monduran pump station	Replace – 415v station services based on known asset condition and age.	89	84
	Monduran pump station	Replace – switchboard vacuum priming system based on known asset condition and age.	11	10
	Monduran pump station	Refurbish – town water pump unit 2 and electric motor based on known asset condition and age.	19	18
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 4).	62	59
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 4).	30	28
	2024/25 Total		226	213
2025/26	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 5).	63	60
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 5).	30	29
	Monduran pump station	Replace – uninterruptible power supply based on known asset condition and age.	20	19
	Gin Gin main channel	Replace – weed deflector based on known asset condition and age.	20	19
	Gin Gin main channel	Refurbish – siphon 4 fencing based on known asset condition and age.	18	17

Year	Facility	Activity description	Total forecast project costs \$'000	Distribution share of forecast project costs \$'000
	Monduran pump station	Inspect and test – HV equipment in accordance with Asset Management Standard AM26.	15	14
	Gin Gin main channel	Replace – water level sensor and stilling well based on known asset condition and age.	12	12
	2025/26 Total		178	170

Contact us

To have your say and shape future Service and Performance Plans, please contact us via email or post:

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This Service and Performance Plan has been prepared by Sunwater to provide indicative information to our customers for the purpose of consultation. It contains estimates and forecasts which are based upon a number of assumptions. The actual financial performance of the service contract to which this plan relates, and the operations and activities actually undertaken by Sunwater during the relevant periods, may vary materially from the information contained in this plan. This plan should not be relied upon beyond its purpose as a tool for consultation and you should not rely on the information contained in this plan in making decisions about your circumstances. Sunwater will not be responsible or liable for any loss (including consequential loss), claim or damage (including in tort) that is in any way connected with the use of this plan or the information contained within it.