



Final Service and Performance Plan

2022/23

Bundaberg Bulk Water Service Contract


5 August 2022

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At a glance

Our performance in 2020/21




Operating costs:
\$1.65 million (0.4% more than QCA target, after cost transfers)

Higher electricity, insurance and preventative maintenance costs were offset by lower operations costs.




Annuity-funded costs:
\$5.36 million (54.0% less than QCA target, after cost transfers)

This was primarily due to staging repairs of the Fred Haigh Dam spillway caused by floods. The overall cost for this project was lower than initially anticipated. Additionally, the installation component of the Ben Anderson Barrage shutter replacement project was deferred to 2021/22 due to inflows.



Total water deliveries:
172,040 ML


Water delivered to irrigators: 143,112 ML



Service targets: Met

No exceptions


Outlook for 2022/23



Forecast operating costs:
\$2.58 million (after cost transfers)

Significant areas of expenditure:

- insurance (\$0.34 million)
- operations (\$1.43 million)
- preventative maintenance (\$0.44 million).



Forecast annuity-funded costs:
\$1.17 million (after cost transfers)

Key projects planned:

- build eight new shutters and commence an options study on the rail, thrust plate and slides replacement at Ben Anderson Barrage (\$0.34 million)
- replace customer meters, as required (\$0.28 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 sets out Sunwater’s actual costs for 2020/21.

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

- present to customers Sunwater’s projected costs¹ for the upcoming five-year period, i.e. 2022/23 to 2026/27
- consult with our customers on forecast operating and annuity-funded costs for 2022/23 and the forward program of works
- examine Sunwater’s performance in 2020/21 against cost and service targets.

Our focus during 2022/23 will be on ensuring dam safety compliance is maintained and that refurbishment and corrective work identified through our annual and five yearly comprehensive inspections at Fred Haigh Dam are implemented safely, timely and efficiently.

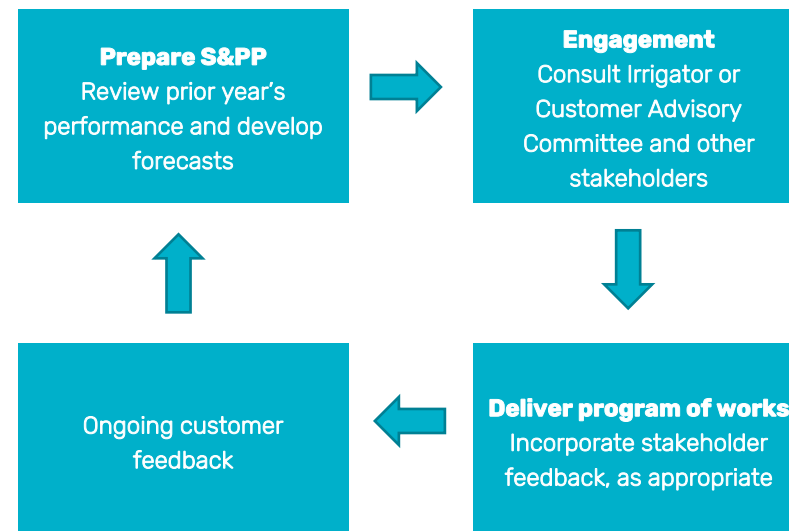
In addition to this S&PP, Sunwater has published an information sheet which explains the types of costs we incur in delivering water to our customers and how those costs are allocated to service contracts. The information sheet is available at:

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 1047 customers in this scheme are irrigators who grow crops including sugar cane, tomatoes, rockmelons, watermelons, capsicum, zucchini, beans, macadamia nuts and avocados. Water is also supplied to the city of Bundaberg and communities in the Bundaberg Regional Council area.

The water allocations for each customer segment are included in Table 1, together with water deliveries in 2020/21. 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 2020/21 (ML)
Irrigation	185,608	12	185,596	143,112
Urban	8404	8257	147	5309
Industrial	332	3	329	131
Sunwater (excl. distribution losses)	465	20	445	79
Sunwater distribution losses	41,520	16,080	25,440	23,409
Total	236,329	24,372	211,957	172,040

1. Includes distribution system. Excludes Burnett Water Pty Ltd (BWPL) (Paradise Dam).

Irrigation charges

The 2022/23 charges and cost per megalitre are shown in Table 2.

Table 2: Irrigation charges for 2022/23^{1,2}

Tariff group	Product	2022/23 (\$/ML) ³	QCA cost-reflective (\$/ML) ⁴
River	Allocation Charge – Part A	11.10	12.84
	Allocation Water – Part B	0.88	1.06
Channel or watercourse supplemented by a channel	Allocation Charge – Part A	10.68	12.84
	Allocation Water – Part B	0.88	1.06

1. This table includes bulk water charges only. For distribution charges, please refer to the Distribution 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 Bulk Water 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		
			2018/19	2019/20	2020/21
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	0	0	0
Maximum number of interruptions ¹	Planned or unplanned interruptions per water year	10	0	0	0

1. This is the total number of bulk 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 2020/21 against these service targets is shown in Table 4.

Table 4: Customer interactions service targets and performance

Service target	Target	2020/21
Telephone answering ¹	80.00%	90.93%
Requests actioned within Service Level Agreement (SLA) timeframes ²	> 95.00%	99.14%

1. This target measures the percentage of 13 15 89 calls that are answered within 60 seconds.
2. This target measures the percentage of email or workflow requests (such as property transfers and temporary transfers) to the Customer Support team that are completed within the agreed SLAs. The SLA timeframes range between two and 10 business days, depending on the request.

Key infrastructure

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

Table 5: Key infrastructure

Asset	Description	Capacity
Fred Haigh Dam	Earth and rock fill dam. Classified as a referable dam under the <i>Water Supply (Safety and Reliability) Act 2008</i> .	562,000 ML
Ben Anderson Barrage	Tidal barrage with a four-gated vertical slot fishway.	30,300 ML
Ned Churchward Weir	Fully automated fish lock. Includes a small anabranch weir built to prevent the river from deepening at the anabranch.	29,500 ML
Bucca Weir	Roller compacted concrete.	11,600 ML
Kolan Barrage	Tidal barrage with a vertical slot fishway.	4020 ML
Monduran pump station	Three pumps. The pump station is also a distribution system asset.	1100 ML/day

Financial summary—Revenue and expenditure

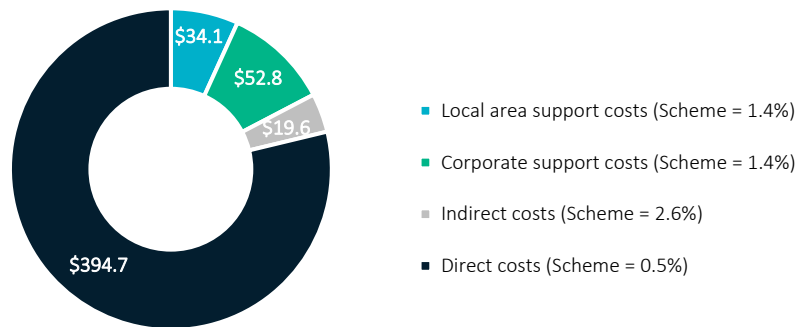
A high-level summary of the budgeted financial performance of the Bundaberg Bulk Water Service Contract is presented in Table 6.

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 no material change in revenue for the Bundaberg Bulk Water Service Contract in 2022/23.

In 2022/23, Sunwater expects to spend \$501 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 Bulk Water Service Contract. Details on the planned spend for this scheme are outlined on subsequent pages of this S&PP.

Figure 2: Total Sunwater cost pools and allocation to scheme¹—2022/23 forecast (\$M)



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

Table 6: Service contract financial summary

Bundaberg Bulk Water Service Contract	2018/19 Sunwater / QCA Actual \$'000	2019/20 Actual \$'000	2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000
Revenue					
Irrigation	501.3	507.7	533.1	495.2	421.0
Community Service Obligation	-	-	-	-	-
Industrial ¹	-	52.1	71.8	-	-
Urban ¹	661.1	671.7	683.2	693.9	693.9
Revenue transfers ²	3134.0	3595.5	3552.8	1971.9	2016.2
Drainage	-	-	-	-	-
Other	4.7	6.6	16.6	2.0	2.0
Revenue total	4301.1	4833.6	4857.5	3163.0	3133.0
Less – Operating expenditure	1145.0	1328.7	1657.6 ³	2262.9 ³	2575.7 ³
Less					
Annuity-funded	1460.5	2902.0	5360.2 ³	1112.7 ³	1173.6 ³
Non-annuity funded ⁴	6.8	7.3	9.9	-	-
Surplus (deficit)	1688.7	595.6	(2170.1)	(212.6)	(616.2)

- 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.
- Includes a share of Gin Gin main channel and Monduran pump station costs which have been transferred from the Bundaberg Distribution Service Contract.
- This is expenditure which has not been funded by irrigation customers. An example of this in the Bundaberg Bulk Water 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 Bulk Water Service Contract. For a more detailed breakdown by cost category, refer to **Appendix 2**.

Table 7: Operating expenditure¹

Bundaberg Bulk Water Service Contract	2018/19	2019/20	2020/21		2021/22		2022/23		2023/24	2024/25	2025/26	2026/27	
	Sunwater Actual \$'000	Sunwater Actual \$'000	QCA Target \$'000 ²	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	784.7	978.0	1264.9	1240.3	(24.6)	1607.9	1291.7	1784.5	1322.6	1860.4	1927.7	1995.1	2083.6
Electricity	11.7	53.9	9.6	11.0	1.4	13.0	9.7	11.0	9.8	11.3	11.6	11.9	12.3
Insurance	256.9	293.0	323.6	389.8	66.2	518.7	330.1	341.2	337.7	368.1	397.1	428.4	462.2
Operations	516.1	631.1	931.8	839.6	(92.2)	1076.3	951.9	1432.4	975.1	1481.0	1518.9	1554.7	1609.1
Preventative maintenance	309.9	268.3	216.8	247.0	30.1	376.2	221.5	439.2	227.0	453.5	465.9	477.0	493.6
Corrective maintenance	50.5	82.5	122.1	123.9	1.8	236.3	124.8	309.6	127.8	319.6	328.4	336.2	347.9
Gin Gin main channel and Monduran pump station cost transfer from Bundaberg distribution ³			34.4	33.9	(0.5)	42.5	38.9	42.3	39.6	43.8	45.2	46.6	48.2
Operating costs total	1145.0	1328.7	1638.3	1645.1	6.8	2262.9	1676.9	2575.7	1717.0	2677.3	2767.1	2854.9	2973.3
Recreational facility costs ⁴				12.4		-		-		-	-	-	-
Operating costs total (incl. recreational facility costs)	1145.0	1328.7		1657.6		2262.9		2575.7		2677.3	2767.1	2854.9	2973.3

1. Sunwater's 2022/23 to 2026/27 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 (part of the Bundaberg distribution system) 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 2020/21

In 2020/21, operating costs were in line with the QCA's recommended cost target. Higher electricity, insurance and preventative maintenance costs were offset by lower operations costs.

Outlook for 2022/23

Operations

Bundaberg Bulk Water Service Contract's total operations budget (prior to cost transfers) in 2022/23 is 34.9 per cent above the QCA's recommended cost target, with additional direct labour costs and associated with non-directs above the QCA recommended target contributing to this forecast.

Preventative maintenance

The forecast preventative maintenance costs (prior to cost transfers) for the Bundaberg Bulk Water Service Contract are above the QCA's recommended cost target. Statutory compliance drives a large portion of expenditure in the preventative maintenance space, including on items such as overhead cranes, fire panels and fishways. Direct and indirect labour charges above QCA forecast also contribute to this variance; however, Sunwater will look for ways to optimise expenditure.

Corrective maintenance

In 2022/23, Sunwater anticipates spending \$0.31 million on corrective maintenance in the Bundaberg Bulk Water Service Contract. This is above QCA's recommended cost target.

It is inherently difficult to forecast corrective maintenance costs due to the operating nature and location of particular assets. Sunwater will aim to keep actual corrective maintenance costs to a minimum, while ensuring all assets can perform satisfactorily. Labour and contractor costs make up the largest proportion of the corrective maintenance budget. These costs will only be realised if required.

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

Annuity-funded expenditure include funds for preventative and corrective maintenance, as well as large, one-off operations activities. Preventative maintenance activities monitor the asset condition and inform when an asset needs to be refurbished or replaced under the corrective maintenance program.

Non-annuity funded expenditure largely relates to Sunwater’s Dam Improvement Program and recreational facility costs.

Table 8 outlines our annuity and non-annuity funded expenditure for this service contract.

Table 8: Annuity and non-annuity funded expenditure^{1,2}

Bundaberg Bulk Water Service Contract	2018/19 Sunwater / QCA Actual \$'000 ³	2019/20 Sunwater Actual \$'000	2020/21			2021/22		2022/23		2023/24	2024/25	2025/26	2026/27
			QCA Target \$'000 ⁴	Sunwater Actual \$'000	Variance \$'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	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	1378.4	817.0	11,636.1	817.7	(10,818.3)	1099.0	2109.9	1159.9	659.2	1465.2	2824.6	2261.5	999.0
Unplanned corrective maintenance	82.1	2084.9	-	4517.4	4517.4	-	-	-	-	-	-	-	-
Gin main channel and Monduran pump station cost transfer from Bundaberg distribution ⁵			10.5	25.0	14.5	13.6	6.8	13.6	5.7	11.7	12.2	10.0	2.6
Annuity-funded total	1460.5	2902.0	11,646.6	5360.2	(6286.4)	1112.7	2116.7	1173.6	664.8	1476.9	2836.7	2271.6	1001.6
Non-annuity funded													
Dam Improvement Program	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational facility projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Metered offtakes and dividend reinvestment	6.8	7.3	-	9.9	-	-	-	-	-	-	-	-	-
Non-annuity total	6.8	7.3		9.9		-		-		-	-	-	-

1. Sunwater’s 2022/23 to 2026/27 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 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 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/

Our performance in 2020/21

Performance against the QCA target

Sunwater updates our program of works based on our whole-of-life replacement and maintenance strategy, which looks at the risk and condition of each asset and uses this information to estimate the future work required to ensure the asset will continue to provide the required level of service into the future. Other factors such as changes in project delivery timing (e.g. due to weather) may also affect the program of works.

These factors mean the actual program of works delivered in any given year will differ to the program assessed by the QCA. At a project level, cost variances may also occur due to changes in the scope of work and cost inputs.

In 2020/21, total annuity-funded costs were lower than the QCA's recommended cost target. This was primarily due to staging repairs on the Fred Haigh Dam spillway caused by floods. The overall cost for this project was lower than initially anticipated. Additionally, the installation component of the Ben Anderson Barrage shutter replacement project was deferred to 2021/22 due to inflows.

Project level cost variances

Appendix 3 provides a comparison of the annuity-funded projects planned for 2020/21 and the actual projects undertaken, together with justification for the variances.

Outlook

Details of the major annuity-funded projects planned for the 2022/23 to 2026/27 period are set out in **Appendix 4**. In 2022/23, Sunwater plans to replace customer meters and build eight new shutters at Ben Anderson Barrage.

² See pages 58 to 60, www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-part-b-sunwater-final-report.pdf

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.²

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 2022/23 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 SAP Analytic Cloud should also allow asset condition data to be trended over time. This will present asset condition decay curves which can be used to predict when an asset should be

scheduled for maintenance. The asset data will provide a greater insight to asset performance, condition, and refurbishment and replacement planning.

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.

Sunwater undertook an asset valuation exercise in 2021 to estimate the value of fully replacing high value assets including dams and pipelines using a bottom-up assessment of material line items. This data informs the replacement values underpinning forecast annuity-funded costs outside of the immediate program of works.

Options analyses

Sunwater has implemented 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 is subject to an options analysis. High value, high complexity work will also be assessed against the relevant criteria to determine if it meets Sunwater’s project, program, and portfolio management framework (P3MF) for project management guidelines.

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

Annuity balance—Bulk water

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 9 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 9: Annuity balance

Bundaberg Bulk Water Service Contract	2018/19 QCA Actual \$'000	2019/20 Actual \$'000	2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000	2024/25 Forecast \$'000	2025/26 Forecast \$'000	2026/27 Forecast \$'000
Opening balance ¹	(10,258.3)	(11,173.2)	(14,246.0)	(17,828.9)	(17,311.1)	(16,804.9)	(16,544.7)	(16,478.8)	(15,754.6)
Spend ²	(1460.5)	(2902.0)	(5335.1)	(1099.0)	(1159.9)	(1465.2)	(2824.6)	(2261.5)	(999.0)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	664.3	-	-	-	-	-	-	-	-
Annuity contribution ³	649.7	666.0	2375.1	2396.4	2423.0	2460.1	3613.8	3706.2	3777.8
Interest/financing costs	(768.3)	(836.9)	(622.9)	(779.5)	(756.9)	(734.7)	(723.4)	(720.5)	(688.8)
Sunwater – Closing balance	(11,173.2)	(14,246.0)	(17,828.9)	(17,311.1)	(16,804.9)	(16,544.7)	(16,478.8)	(15,754.6)	(13,664.7)
QCA – Closing balance	(11,173.2)	(12,235.6)	(22,031.5)	(22,708.3)	(21,937.3)	(20,937.9)			
Difference	-	(2010.5)	4202.6	5397.2	5132.4	4393.2			

1. The opening balances for 2018/19 and 2019/20 reflect the QCA's 2020–2024 irrigation price investigation final recommendations.
2. The spend for 2018/19 reflects the QCA's 2020–2024 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs. The 2019/20 and 2020/21 spend reflects Sunwater's actual costs. Thereafter, the spend is based on Sunwater's forecasts.
3. The annuity contribution is included in the prices paid by customers. It was set by the QCA from 2012/13 to 2016/17 and was rolled forward with the Consumer Price Index (CPI) for 2017/18, 2018/19 and 2019/20. From 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.

Annuity balance—Gin Gin main channel and Monduran pump station

The Gin Gin main channel and Monduran pump station, which form part of the Bundaberg distribution system, perform a bulk water function under the water planning framework. In recognition of this, a share of the Gin Gin main channel and Monduran pump station annuity-funded costs is transferred from the Bundaberg Distribution Service Contract to the Bundaberg Bulk Water Service Contract. These costs are recovered in customers' bulk water prices via the annuity contribution.

Table 10 shows the forecast annuity balances and budgeted spend for the Gin Gin main channel and Monduran pump station, split between the bulk water and distribution system service contracts. A comparison of forecast and actual annuity-funded projects for 2020/21 is provided in **Appendix 5**, with details of the major annuity-funded projects planned for the 2022/23 to 2026/27 period set out in **Appendix 6**.

In 2022/23, the annuity contribution included in prices paid by customers in the Bundaberg Bulk Water Service Contract is \$14.4k. The remainder of the annuity contribution is recovered through distribution prices.

Table 10: Gin Gin main channel and Monduran pump station annuity balance

Gin Gin main channel and Monduran pump station	2018/19 QCA Actual \$'000	2019/20 Actual \$'000	2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000	2024/25 Forecast \$'000	2025/26 Forecast \$'000	2026/27 Forecast \$'000
Opening balance ¹	311.6	350.8	155.8	(66.7)	(69.5)	(57.0)	(3.8)	183.6	426.2
Spend ²	(212.2)	(455.0) ³	(500.9)	(272.8)	(273.0)	(233.9)	(243.2)	(200.7)	(51.3)
Allocated to Bundaberg bulk			(25.0)	(13.6)	(13.6)	(11.7)	(12.2)	(10.0)	(2.6)
Allocated to Bundaberg distribution			(475.8)	(259.1)	(259.3)	(222.2)	(231.0)	(190.7)	(48.7)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-	-
Annuity contribution ⁴	228.1	233.8	271.6	272.9	288.5	289.6	430.8	435.3	437.5
Interest/financing costs	23.3	26.3	6.8	(2.9)	(3.0)	(2.5)	(0.2)	8.0	18.6
Sunwater – Closing balance	350.8	155.8	(66.7)	(69.5)	(57.0)	(3.8)	183.6	426.2	831.1
Annuity contribution to Bundaberg bulk ⁵			13.6	13.6	14.4	14.5	21.5	21.8	21.9

1. The opening balances for 2018/19 and 2019/20 reflect the QCA's 2020–2024 irrigation price investigation final recommendations.
2. The spend for 2018/19 reflects the QCA's 2020–2024 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs. The 2019/20 and 2020/21 spend reflects Sunwater's actual costs. Thereafter, the spend is based on Sunwater's forecasts.
3. This figure reflects the actual costs incurred in 2019/20 and differs to the 2021/22 S&PP which inadvertently presented the QCA target.
4. The annuity contribution is included in the prices paid by bulk water and distribution customers. For 2020/21 to 2023/24, the annuity contribution is based on the QCA's irrigation price investigation 2020–2024 final recommendations. Thereafter, it is based on Sunwater's projections.
5. Reflects the share of the annuity contribution included in the prices paid by bulk water customers.

Appendix 1—Historical water usage

The below table contains the scheme’s recent water use, together with the 19-year average for the 2002/03 to 2020/21 period. It excludes water deliveries to BWPL.

Year	Usage (ML)
2010/11	36,862
2011/12	88,195
2012/13	95,029
2013/14	183,521
2014/15	112,538
2015/16	133,207
2016/17	162,397
2017/18	108,518
2018/19	183,997
2019/20	164,388
2020/21	172,040
19-year historical average	115,389

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

Bundaberg Bulk Water Service Contract	2018/19 Sunwater / QCA Actual \$'000	2019/20 Sunwater Actual \$'000	QCA Target \$'000	2020/21 Sunwater Actual \$'000	Variance \$'000	2021/22 Sunwater Forecast \$'000	QCA Target \$'000	2022/23 Sunwater Forecast \$'000	QCA Target \$'000	2023/24 Sunwater Forecast \$'000	2024/25 Sunwater Forecast \$'000	2025/26 Sunwater Forecast \$'000	2026/27 Sunwater Forecast \$'000
Operating costs													
Operations	784.7	978.0	1264.9	1240.3	(24.6)	1607.9	1291.7	1784.5	1322.6	1860.4	1927.7	1995.1	2083.6
Labour	116.9	321.5	238.4	213.8	(24.5)	265.1	243.9	390.5	250.1	402.2	414.3	426.7	439.5
Contractors	10.6	21.7	22.7	26.4	3.7	18.5	23.1	15.0	23.7	15.4	15.8	16.3	16.7
Materials	4.7	3.5	5.7	8.2	2.6	15.0	5.8	15.0	5.9	15.4	15.8	16.3	16.7
Electricity	11.7	53.9	9.6	11.0	1.4	13.0	9.7	11.0	9.8	11.3	11.6	11.9	12.3
Insurance	256.9	293.0	323.6	389.8	66.2	518.7	330.1	341.2	337.7	368.1	397.1	428.4	462.2
Other	96.5	98.8	131.8	108.4	(23.4)	136.4	134.5	135.9	137.6	140.3	143.3	146.4	151.0
Local area support costs	71.0	48.6	100.9	101.5	0.6	161.2	103.0	236.3	105.5	243.4	250.7	258.2	265.9
Corporate support costs	107.4	71.5	184.2	184.8	0.6	251.8	188.2	371.0	192.8	382.1	393.6	405.4	417.5
Indirect costs	108.9	65.6	248.1	196.3	(51.8)	228.2	253.4	268.7	259.6	282.2	285.5	285.5	301.7
Preventative maintenance	309.9	268.3	216.8	247.0	30.1	376.2	221.5	439.2	227.0	453.5	465.9	477.0	493.6
Labour	93.2	84.3	65.6	69.4	3.8	100.9	67.1	125.0	68.9	128.8	132.6	136.6	140.7
Contractors	13.6	7.9	13.0	3.0	(10.0)	25.0	13.3	25.0	13.6	25.7	26.4	27.1	27.9
Materials	8.1	6.2	5.3	6.4	1.1	18.0	5.4	18.0	5.5	18.5	19.0	19.5	20.1
Other	7.7	7.2	7.6	6.5	(1.1)	6.0	7.7	6.0	7.9	6.2	6.3	6.5	6.7
Local area support costs	58.9	42.0	27.8	40.1	12.3	61.9	28.4	75.0	29.1	77.3	79.6	82.0	84.4
Corporate support costs	76.9	64.3	50.7	67.2	16.5	95.9	51.8	118.8	53.1	122.3	126.0	129.8	133.7
Indirect costs	51.5	56.5	46.8	54.4	7.6	68.5	47.8	71.5	49.0	74.8	76.0	75.5	80.2
Corrective maintenance	50.5	82.5	122.1	123.9	1.8	236.3	124.8	309.6	127.8	319.6	328.4	336.2	347.9
Labour	12.3	23.2	30.6	30.2	(0.5)	61.4	31.3	87.0	32.1	89.6	92.3	95.1	97.9
Contractors	12.6	4.4	15.9	7.9	(8.0)	20.0	16.3	20.0	16.7	20.6	21.1	21.7	22.3
Materials	5.4	6.0	13.8	2.5	(11.3)	15.0	14.1	15.0	14.4	15.4	15.8	16.3	16.7
Other	2.2	4.2	3.3	15.5	12.2	3.0	3.4	3.0	3.4	3.1	3.2	3.3	3.3
Local area support costs	1.7	11.4	13.0	16.7	3.7	36.9	13.2	52.2	13.6	53.8	55.4	57.0	58.8
Corporate support costs	9.1	18.0	23.7	27.5	3.8	58.3	24.2	82.7	24.8	85.1	87.7	90.3	93.0
Indirect costs	7.2	15.2	21.8	23.7	1.8	41.7	22.3	49.8	22.9	52.1	52.9	52.6	55.8
Cost transfer from Bundaberg distribution			34.4	33.9	(0.5)	42.5	38.9	42.3	39.6	43.8	45.2	46.6	48.2
Operating costs total	1145.0	1328.7	1638.3	1645.1	6.8	2262.9	1676.9	2575.7	1717.0	2677.3	2767.1	2854.9	2973.3
Annuity-funded costs													
Labour		361.0	956.6	438.6	(518.0)	103.8	199.3	195.9	111.3	247.3	478.0	384.4	169.5
Contractors		1750.3	8470.2	3883.6	(4586.6)	414.5	795.7	215.5	122.4	271.4	523.2	419.8	184.7
Materials		63.6	34.9	16.0	(18.9)	340.9	654.4	215.5	122.4	271.4	523.2	419.8	184.7
Other		68.8	117.6	53.9	(63.7)	6.4	12.3	117.5	66.8	148.0	285.4	229.0	100.7
Local area support costs		146.4	396.3	181.7	(214.6)	64.4	123.6	117.5	66.8	148.4	286.8	230.7	101.7
Corporate support costs		273.4	938.0	430.1	(507.9)	98.6	189.3	186.1	105.7	235.0	454.1	365.2	161.0
Indirect costs		238.3	722.5	331.2	(391.2)	70.5	135.3	112.0	63.7	143.7	273.8	212.6	96.7
Cost transfer from Bundaberg distribution			10.5	25.0	14.5	13.6	6.8	13.6	5.7	11.7	12.2	10.0	2.6
Annuity-funded total¹	1460.5	2902.0	11,646.6	5360.2	(6286.4)	1112.7	2116.7	1173.6	664.8	1476.9	2836.7	2271.6	1001.6
Total costs²	2605.5	4230.7	13,284.9	7005.3	(6279.6)	3375.5	3793.6	3749.3	2381.8	4154.2	5603.9	5126.5	3974.9

1. The 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 2020/21

The below table sets out the major annuity-funded projects planned for the Bundaberg Bulk Water Service Contract in 2020/21³ and the actual projects undertaken.

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
Ben Anderson Barrage	Replace – ten shutters.	287	229	New shutters were manufactured and the site installation component was deferred until 2021/22.
Fred Haigh Dam	Repair – unlined spillway discharge chute.	5314	4517	<p>Most of this expenditure (\$3.54 million) related to works completed at Fred Haigh Dam to repair scour damage from previous flood events which was caused by the energy impact of floodwater on the natural spillway channel.</p> <p>Stage 1B of the works was completed in January 2021 and involved:</p> <ul style="list-style-type: none"> installing a mass concrete slab across a section of the spillway channel, immediately downstream of the spillway chute installing anchors immediately downstream of the spillway to provide reinforcement for the concrete slab. <p>The remainder of the expenditure was for a comprehensive risk assessment at Fred Haigh Dam and geotechnical investigations.</p>
Ned Churchward Weir	Repair – left abutment protection works joint seal and patch the spalling and treat spillway end sill with reo.	320	364	The project to refurbish the joint seals and concrete was undertaken in line with the budget, while refurbishment of the end sill concrete cost \$40k more than estimated. This is because Sunwater identified additional works during the repair works and decided to undertake these additional works at the same time to save on future mobilisation costs.
Scheme	Replace – customer meters.	144	24	Fewer meters required replacement than planned.
Ned Churchward Weir	Replace – fishway gates 1, 2 and 3.	82	0	Commencement was delayed to minimise the impact on fish transfers. Work was completed in 2021/22.
Multiple	Various projects.	444	196	Some projects were deferred (e.g. due to site conditions or a decision to bundle with other future works) or removed from the program of works following further review. In addition, the service contract's contingency amount of \$52k was not required.
Multiple	Various projects.	0	5	Minor carryover expenditure related to projects completed in the previous financial year.
2020/21 Total		6591	5335	

³ Based on information extracted from Sunwater's systems in mid-2020. See the 2021/22 S&PP at www.sunwater.com.au/schemes/Bundaberg/

Appendix 4—Annuity-funded projects for 2022/23 to 2026/27

The below table sets out Sunwater’s currently planned annuity-funded projects for the 2022/23 to 2026/27 period for this scheme. 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
2022/23	Ben Anderson Barrage	Replace – build eight new shutters and commence an options study on the rail, thrust plate and slides replacement.	343
	Ben Anderson Barrage	Replace – sluice gates 1 and 2 based on known asset condition and age.	119
	Scheme	Replace – customer meters based on known asset condition and age.	284
	Ben Anderson Barrage	Study – options study to replace upstream crane rail.	63
	Kolan Barrage	Replace – fishway baffle supports based on known asset condition and age.	61
	Multiple	There are 10 other annuity-funded projects planned for 2022/23. The projects include comprehensive inspections at Ben Anderson Barrage and Ned Churchward Weir; refurbishing valves at Fred Haigh Dam; external painting of the main outlet pipe and subsidiary pipes at Fred Haigh Dam; a remote operated vehicle inspection of the bulkhead gate slots at Fred Haigh Dam due to suspected concrete damage; and a study to assess emergency lighting in the outlet building at Fred Haigh Dam.	289
	2022/23 Total		1160
2023/24	Ben Anderson Barrage	Replace – build 16 shutters and complete an options study on the rail, thrust plate and slides replacement.	744
	Scheme	Replace – customer meters based on known asset condition and age.	293
	Ben Anderson Barrage	Replace – upstream crane rail based on the outcomes of the options study.	123
	Fred Haigh Dam – intake tower and spillway bridges	Study – Level 2 Bridge inspection based on Department of Transport and Main Roads’ Structures Inspection Manual.	110
	Multiple	There are two other annuity-funded projects planned for 2023/24. The projects include refurbishing drain and fill valves and refurbishing the valve house access road at Fred Haigh Dam.	195
	2023/24 Total		1465
2024/25	Ben Anderson Barrage	Replace – build 32 shutters and install 24 shutters. Replace half of the rail, thrust plate and slides.	1655
	Scheme	Replace – customer meters based on known asset condition and age.	301
	Ben Anderson Barrage	Replace – upstream crane rail based on the outcomes of the options study.	126

Year	Facility	Activity description	Forecast \$'000
	Ben Anderson Barrage	Replace – cathodic protection components based on known asset condition and age.	461
	Multiple	There are 10 other annuity-funded projects planned for 2024/25. The projects include a comprehensive inspection of Bucca Weir; refurbishing the inlet tower access road at Fred Haigh Dam; electrical work at Ned Churchward Weir, Ben Anderson Barrage and Fred Haigh Dam; and refurbishing or replacing trash screens and guides at Bucca Weir.	281
	2024/25 Total		2824
2025/26	Ben Anderson Barrage	Replace – complete the rail, thrust plate and slides upgrade. Build 32 shutters.	1671
	Scheme	Replace – customer meters based on known asset condition and age.	309
	Ben Anderson Barrage	Replace – switchboard 1 based on known asset condition and age.	58
	Ben Anderson Barrage	Replace – switchboard 2 based on known asset condition and age.	58
	Multiple	There are six other annuity-funded projects planned for 2025/26. The projects include refurbishing a low-level guard valve at Fred Haigh Dam; replacing a water level recorder; an asset valuation; refurbishing the left bank access road at Ned Churchward Weir; refurbishing weep holes at Kolan Barrage; and pre-planning costs for the Fred Haigh Dam comprehensive inspection.	166
	2025/26 Total		2262
2026/27	Fred Haigh Dam	Study – comprehensive inspection to comply with the dam safety condition schedules and better understand the asset’s condition.	199
	Scheme	Replace – customer meters based on known asset condition and age.	318
	Ben Anderson Barrage	Study – ground penetrating radar survey of the downstream face to check for voids.	106
	Ben Anderson Barrage	Replace – install 64 shutters based on condition and age.	93
	Ned Churchward Weir	Replace – control system based on condition. Covers design and procurement.	46
	Multiple	There are nine other annuity-funded projects planned for 2026/27. The projects include cathodic protection tests at Ben Anderson Barrage; refurbishing protection works at Ned Churchward Weir and Kolan Barrage; refurbishing fencing at Fred Haigh Dam; a comprehensive inspection of Kolan Barrage; and refurbishing stream gauging equipment.	236
	2026/27 Total		999

Appendix 5—Comparison of Gin Gin main channel and Monduran pump station forecast and actual annuity-funded projects for 2020/21

The below table sets out the major annuity-funded projects planned for Gin Gin main channel and Monduran pump station in 2020/21⁴ and the actual projects undertaken. Customers in the Bundaberg Bulk Water Service Contract contributed towards 5 per cent of these costs.

Facility	Activity description	Total forecast project costs \$'000	Bulk water share of forecast project costs \$'000	Total actual project costs \$'000	Bulk water share of actual project costs \$'000	Commentary
Monduran pump station	Refurbish – pump unit 1.	245	12	92	5	Works commenced but were carried over to 2021/22.
Monduran pump station	Replace – access stairs.	100	5	108	5	This project was completed within budget.
Monduran pump station	Study – options study to assess the cost effectiveness of installing variable speed drives.	21	1	0	0	Sunwater decided that this project is no longer required.
Monduran pump station	Study – identify options to address minor safety hazards associated with the high voltage (HV) switchboard.	14	1	0	0	This project was deferred to align with a major inspection planned for 2021/22.
Gin Gin main channel	Repair – minor bank slips.	38	2	174	9	Repairs were significantly more extensive than planned. The damage had to be addressed as a matter of safety and significant earthworks were undertaken to stabilise the bank and channel.
Gin Gin main channel	Replace – sections of fencing along the main channel.	27	1	37	2	More repairs were required than planned.
Monduran pump station	Replace – cooling system and modify switchboard/control system.	0	0	90	4	Expenditure relates to a project carried over from 2019/20.
2020/21 Total		445	22	501	25	

⁴ Based on information extracted from Sunwater's systems in mid-2020. See the 2021/22 S&PP at www.sunwater.com.au/schemes/Bundaberg/

Appendix 6—Gin Gin main channel and Monduran pump station annuity-funded projects for 2022/23 to 2026/27

The below table sets out Sunwater’s currently planned Gin Gin main channel and Monduran pump station annuity-funded projects for the 2022/23 to 2026/27 period. Customers in the Bundaberg Bulk Water Service Contract contribute towards 5 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	Bulk water share of forecast project costs \$'000
2022/23	Monduran pump station	Refurbish – pump unit 4 suction valve based on known asset condition and age.	22	1
	Monduran pump station	Refurbish – pump unit 4 discharge valve based on known asset condition and age.	27	1
	Monduran pump station	Study – electrical meter compliance tests based on regulatory requirements.	8	0
	Monduran pump station	Inspect and test – HV equipment in accordance with Asset Management Standard AM26.	27	1
	Monduran pump station	Study – calculate new pump impeller diameter to improve pump efficiency.	29	1
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 2).	115	6
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 2).	46	2
		2022/23 Total		273
2023/24	Monduran pump station	Refurbish – control system based on known asset condition and age.	128	6
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 3).	59	3
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 3).	47	2
		2023/24 Total		234
2024/25	Monduran pump station	Replace – supervisory control and data acquisition computer based on known asset condition and age.	16	1
	Monduran pump station	Replace – 415 v station services based on known asset condition and age.	97	5
	Monduran pump station	Refurbish – town water pump unit 2 and electric motor based on known asset condition and age.	21	1
	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 4).	61	3

Year	Facility	Activity description	Total forecast project costs \$'000	Bulk water share of forecast project costs \$'000
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 4).	49	2
	2024/25 Total		243	12
2025/26	Gin Gin main channel	Refurbish – concrete lining based on known asset condition and age (Stage 5).	62	3
	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 5).	50	3
	Monduran pump station	Replace – uninterruptible power supply based on known asset condition and age.	22	1
	Gin Gin main channel	Replace – weed deflector based on known asset condition and age.	19	1
	Gin Gin main channel	Refurbish – siphon 4 fencing based on known asset condition and age.	20	1
	Monduran pump station	Inspect and test – HV equipment in accordance with Asset Management Standard AM26.	15	1
	Gin Gin main channel	Replace – water level sensor and stilling well based on known asset condition and age.	12	1
	2025/26 Total		201	10
2026/27	Gin Gin main channel	Refurbish – fencing, gates and grids based on known asset condition and age (Stage 6).	51	3
	2026/27 Total		51	3

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.