



Final Service and Performance Plan

2022/23

Mareeba-Dimbulah Bulk Water Service Contract


1 August 2022

Contents

- At a glance 2
- Introduction 3
- Delivering services to our customers..... 4
- Financial summary—Revenue and expenditure..... 6
- Cost of delivering services—Operating expenditure..... 7
- Cost of delivering services—Annuity and non-annuity funded expenditure 9
- Annuity balance..... 12
- Appendix 1—Historical water usage..... 13
- Appendix 2—Operating and annuity-funded costs by expense type 14
- Appendix 3—Comparison of forecast and actual annuity-funded projects for 2020/21 15
- Appendix 4—Annuity-funded projects for 2022/23 to 2026/27 16


At a glance

Our performance in 2020/21

 **Operating costs:**
\$1.15 million (19.0% less than QCA target)


Key drivers of cost variance:

- lower operations labour and associated non-direct costs
- lower other costs.


 **Annuity-funded costs:**
\$0.62 million (91.6% more than QCA target)

Key drivers of cost variance:

- refurbishing 36 river inlet trash screens that are necessary for preventing debris from entering waterways
- undertaking an arc flash study analysis to review ratings on all scheme switchboards and distribution boards
- refurbishment of the left abutment protection system at Tinaroo Falls Dam, which was originally planned for 2019/20
- comprehensive risk assessment input studies.


 **Total water deliveries:**
121,329 ML

Water delivered to irrigators: 102,524 ML

 **Service targets: Met**


No exceptions

Outlook for 2022/23

 **Forecast operating costs:**
\$1.70 million

Significant areas of expenditure budgeted:

- insurance (\$0.26 million)
- operations (\$0.96 million)
- preventative maintenance (\$0.28 million)
- corrective maintenance (\$0.18 million).

 **Forecast annuity-funded costs:**
\$2.35 million

Key projects planned:

- dam safety risk reduction program (\$1.72 million)
- upgrade river, irrigation and hydro control equipment and telemetry (\$0.29 million)
- replace irrigation structure control equipment (\$0.12 million)
- fencing works (\$0.06 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 Mareeba-Dimbulah 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 Tinaroo Falls Dam are implemented safely, timely and efficiently. Ongoing control of aquatic weed will continue to play a part in dam operations.

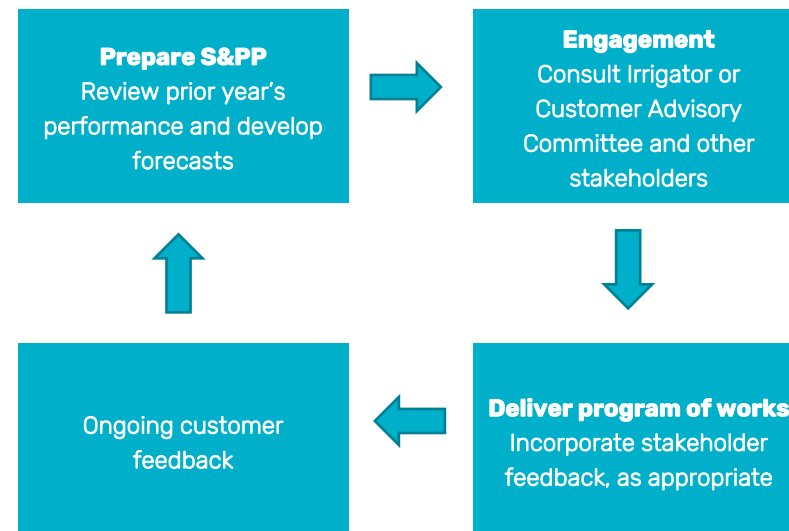
In addition to this S&PP, Sunwater has published an information sheet which explains the types of costs we incur in delivering water to our customers and how those costs are allocated to service contracts. The information sheet is available at:

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

This service contract provides water for several uses including irrigation, grazing and hydro power generation. Water is also supplied to the townships of Tinaroo, Mareeba, Kuranda, and Yungaburra.

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	151,355	0	151,355	102,524
Urban	6658	5901	757	3514
Industrial	1408	135	1273	978
Sunwater (excl. distribution losses)	3	0	3	16
Sunwater distribution losses	45,000	8000	37,000	14,297
Total	204,424	14,036	190,388	121,329

1. Includes distribution.

Irrigation charges

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

Table 2: Irrigation charges for 2022/23¹

Tariff group	Product	2022/23 (\$/ML) ²	QCA cost-reflective (\$/ML) ³
River – Tinaroo / Barron	Allocation Charge – Part A	13.49	5.77
	Allocation Water – Part B	0.53	0.67
River – Supplemented Streams & Walsh River	Allocation Charge – Part A	4.79	5.77
	Allocation Water – Part B	0.55	0.67
Channel – Outside a relift up to 100ML	Allocation Charge – Part A	4.79	5.77
	Allocation Water – Part B	0.55	0.67
Channel – Outside a relift 100ML to 500ML	Allocation Charge – Part A	4.79	5.77
	Allocation Water – Part B	0.55	0.67
Channel – Outside a relift more than 500ML	Allocation Charge – Part A	4.79	5.77
	Allocation Water – Part B	0.55	0.67
Channel – Relift	Allocation Charge – Part A	4.79	5.77
	Allocation Water – Part B	0.53	0.67

1. This table includes bulk water charges only. For distribution charges, please refer to the Distribution Service Contract S&PP.
2. Includes the Queensland Government's 15 per cent discount for irrigation customers. Refer to www.rdmw.qld.gov.au for more information.
3. Is the cost-reflective price determined by the 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.

In addition to these charges, an annual access charge of \$611.09 per customer will apply in 2022/23 (inclusive of the 15 per cent discount).

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 Mareeba-Dimbulah 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	6 months	0	0	0
	For shutdowns planned to exceed 3 days	4 weeks	0	0	0
	For shutdowns planned to be less than 4 days	5 days	0	0	0
Unplanned shutdowns – duration ¹	Unplanned shutdowns during Peak Demand Period	72 hours	0	0	0
	Unplanned shutdowns outside Peak Demand Period	5 working days			
Maximum number of interruptions ²	Planned or unplanned interruptions per water year	10	0	0	0

1. This is the number of times that the unplanned shutdown has exceeded the shortest of the peak/off peak periods.
2. 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

Tinaroo Falls Dam is the key infrastructure used to deliver bulk water services to our customers in Mareeba-Dimbulah, with a total storage capacity of 438,920 ML. It is classified as a referable dam under the *Water Supply (Safety and Reliability) Act 2008*.

Financial summary—Revenue and expenditure

A high-level summary of the budgeted financial performance of the Mareeba-Dimbulah Bulk Water Service Contract is presented in Table 5.

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 Mareeba-Dimbulah 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 Mareeba-Dimbulah 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 scheme—2022/23 forecast (\$M)

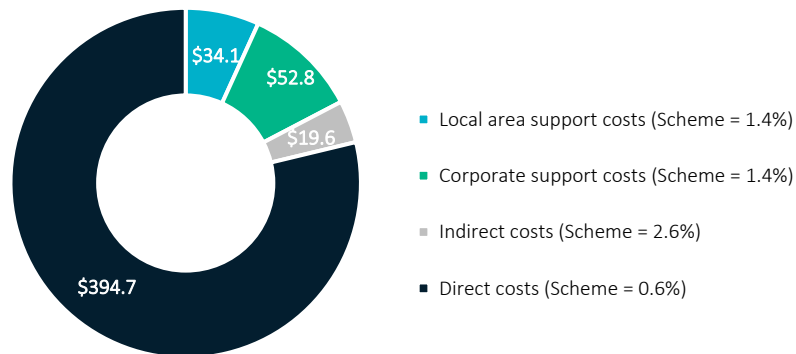


Table 5: Service contract financial summary

Mareeba-Dimbulah 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	192.2	196.6	197.6	220.8	189.1
Community Service Obligation	-	-	-	-	-
Industrial ¹	3339.0	1917.1	1392.3	764.2	764.1
Urban ¹	361.3	368.5	376.1	380.0	379.9
Revenue transfers ²	933.2	950.8	932.7	910.6	931.7
Drainage	-	-	-	-	-
Other	0.4	3.6	68.1	-	-
Revenue total	4826.2	3436.6	2966.8	2275.6	2264.8
Less – Operating expenditure	1404.6	1129.6	1148.7	1545.5	1725.3
Less					
Annuity-funded	364.6	164.1	619.2	452.2	2352.9
Non-annuity funded ³	2.6	-	10.0	-	145.0
Surplus (deficit)	3054.5	2143.0	1189.0	278.0	(1958.5)

- 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.
- This is expenditure which has not been funded by irrigation customers. An example of this in the Mareeba-Dimbulah Bulk Water Service Contract is recreational facility projects from 2020/21.

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 6 sets out actual and forecast operating expenditure for the Mareeba-Dimbulah Bulk Water Service Contract. For a more detailed breakdown by cost category, refer to **Appendix 2**.

Table 6: Operating expenditure¹

Mareeba-Dimbulah 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	911.7	751.2	1054.4	712.4	(342.0)	1044.4	1076.8	1232.3	1102.6	1288.0	1334.2	1383.3	1444.0
Electricity	4.2	3.9	0.9	3.8	2.9	1.0	0.9	4.0	1.0	4.1	4.2	4.3	4.5
Insurance	155.8	177.6	196.3	237.5	41.3	315.5	200.2	264.9	204.8	285.8	308.4	332.7	358.9
Operations	751.7	569.7	857.2	471.1	(386.2)	727.9	875.7	963.4	896.9	998.1	1021.6	1046.3	1080.6
Preventative maintenance	409.7	297.2	302.2	369.7	67.5	348.9	308.7	284.5	316.3	293.6	301.6	309.0	319.4
Corrective maintenance	83.2	81.2	58.8	64.6	5.8	131.4	60.0	183.9	61.5	189.7	194.9	199.7	206.5
Operating costs total³	1404.6	1129.6	1415.4	1146.6	(268.7)	1524.8	1445.5	1700.7	1480.4	1771.4	1830.7	1891.9	1969.9
Recreational facility costs ⁴				2.0		20.7		24.5		25.4	26.0	26.7	27.5
Operating costs total (incl. recreational facility costs)	1404.6	1129.6		1148.7		1545.5		1725.3		1796.7	1856.7	1918.6	1997.5

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. In its 2020–2024 irrigation price investigation final recommendations, the QCA allocated 18 per cent of operating expenditure in the Mareeba-Dimbulah Bulk Water Service Contract to the Barron Falls hydro-electric facility. This table includes all operating costs for the service contract, including the Barron Falls hydro-electric facility cost allocation amount. Refer to section 6.4.3 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, total operating costs were lower than the QCA's recommended cost target due to lower operations costs. This was driven by embedding structural change in staff resourcing, with staff now working across the scheme as well as the dam.

Outlook for 2022/23

Operations

Mareeba-Dimbulah Bulk Water Service Contract's total operations budget in 2022/23 is 11.8 per cent above the QCA's recommended cost target. This is primarily due to higher insurance costs (see below).

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.

Our insurance broker has indicated that prior to the early 2022 flood events, premium increases were trending downwards from a peak in late 2020 (with some exceptions). However, with another significant natural disaster in Australia, this is now likely to change. Insurance premiums in 2022/23 are therefore expected to be higher than the QCA's recommended allowance and historical costs.

Preventative maintenance

The forecast preventative maintenance costs for the Mareeba-Dimbulah Bulk Water Service Contract are 10.0 per cent below the QCA's recommended cost target. However, when combined with corrective maintenance expenditure, costs are expected to be broadly in line with the QCA's target.

Corrective maintenance

In 2022/23, Sunwater anticipates spending \$0.18 million on corrective maintenance in the Mareeba-Dimbulah Bulk Water Service Contract. This is significantly above the QCA's recommended cost target, because of maintenance activities associated with weed control for aquatic weeds and the need to undertake additional activities to ensure efficient operations into the future.

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 7 outlines the annuity and non-annuity funded expenditure for this service contract.

Table 7: Annuity and non-annuity funded expenditure^{1,2}

Mareeba-Dimbulah Bulk Water Service Contract	2018/19	2019/20	2020/21			2021/22		2022/23		2023/24	2024/25	2025/26	2026/27
	Sunwater / QCA Actual \$'000 ³	Sunwater Actual \$'000	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	364.6	164.1	323.1	619.2	296.1	452.2	563.4	2352.9	385.4	1895.2	1203.1	1154.1	384.7
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Annuity-funded total	364.6	164.1	323.1	619.2	296.1	452.2	563.4	2352.9	385.4	1895.2	1203.1	1154.1	384.7
Non-annuity funded													
Dam Improvement Program	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational facility projects	-	-	-	7.1	-	-	-	145.0	-	-	7.5	-	7.9
Metered offtakes and dividend reinvestment	2.6	-	-	2.9	-	-	-	-	-	-	-	-	-
Non-annuity total	2.6	-	-	10.0	-	-	-	145.0	-	-	7.5	-	7.9

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.

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 higher than the QCA's recommended cost target. This was primarily driven by various projects that were not part of the program of works assessed by the QCA, including:

- refurbishing 36 river inlet trash screens, which are necessary for preventing debris from entering waterways (\$80.2k)
- undertaking an arc flash study to review ratings on all scheme switchboards and distribution boards (\$26.7k)
- refurbishing the left abutment rock protection system at Tinaroo Falls Dam, which was originally planned for 2019/20 (\$105.7k).

The input studies to inform the comprehensive risk assessment of Tinaroo Falls Dam exceeded the QCA's recommended costs (\$144.8k more) due to an increase in the scope of work required.

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.

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

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 commence a risk reduction program at Tinaroo Falls Dam and upgrade river, irrigation and hydro control equipment and telemetry.

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

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 8 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 2020/21 and what we expect to spend thereafter.

Table 8: Annuity balance

Mareeba-Dimbulah 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	(149.1)	(398.6)	(463.0)	(433.6)	(229.6)	(1901.9)	(3173.0)	(3871.4)	(4546.2)
Spend ²	(364.6)	(164.1)	(619.2)	(452.2)	(2352.9)	(1895.2)	(1203.1)	(1154.1)	(384.7)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-	-
Annuity contribution ³	126.3	129.5	668.8	675.1	690.7	707.3	643.5	648.5	650.6
Interest/financing costs	(11.2)	(29.9)	(20.2)	(19.0)	(10.0)	(83.2)	(138.7)	(169.3)	(198.8)
Sunwater – Closing balance	(398.6)	(463.0)	(433.6)	(229.6)	(1901.9)	(3173.0)	(3871.4)	(4546.2)	(4479.0)
QCA – Closing balance	(398.6)	(579.9)	(259.6)	(159.1)	139.2	504.9			
Difference	-	116.9	(174.1)	(70.5)	(2041.0)	(3677.9)			

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. 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.

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.

Year	Usage (ML)
2010/11	98,742
2011/12	122,934
2012/13	151,801
2013/14	127,464
2014/15	155,874
2015/16	161,879
2016/17	138,918
2017/18	117,886
2018/19	121,486
2019/20	150,268
2020/21	121,329
19-year historical average	132,351

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

Mareeba-Dimbulk Bulk Water Service Contract	2018/19	2019/20	2020/21			2021/22		2022/23		2023/24	2024/25	2025/26	2026/27
	Sunwater / QCA Actual \$'000	Sunwater Actual \$'000	QCA Target \$'000	Sunwater Actual \$'000	Variance \$'000	Sunwater Forecast \$'000	QCA Target \$'000	Sunwater Forecast \$'000	QCA Target \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Operating costs													
Operations	911.7	751.2	1054.4	712.4	(342.0)	1044.4	1076.8	1232.3	1102.6	1288.0	1334.2	1383.3	1444.0
Labour	178.8	148.1	167.4	105.3	(62.2)	136.6	171.3	217.2	175.6	223.7	230.4	237.3	244.4
Contractors	13.4	7.9	9.6	12.5	2.9	12.8	9.8	11.8	10.1	12.1	12.5	12.8	13.2
Materials	11.0	5.8	3.0	2.4	(0.7)	4.9	3.1	2.9	3.2	3.0	3.1	3.2	3.3
Electricity	4.2	3.9	0.9	3.8	2.9	1.0	0.9	4.0	1.0	4.1	4.2	4.3	4.5
Insurance	155.8	177.6	196.3	237.5	41.3	315.5	200.2	264.9	204.8	285.8	308.4	332.7	358.9
Other	82.6	111.9	168.9	73.0	(95.9)	176.7	172.3	179.2	176.2	185.2	189.5	193.9	198.5
Local area support costs	156.7	90.0	119.1	57.8	(61.3)	89.2	121.6	141.6	124.6	145.8	150.2	154.7	159.4
Corporate support costs	173.8	106.9	129.4	95.9	(33.5)	129.7	132.2	206.3	135.4	212.5	218.9	225.4	232.2
Indirect costs	135.5	99.1	259.8	124.2	(135.6)	178.1	265.4	204.4	271.8	215.7	217.1	218.8	229.6
Preventative maintenance	409.7	297.2	302.2	369.7	67.5	348.9	308.7	284.5	316.3	293.6	301.6	309.0	319.4
Labour	99.4	91.6	81.6	103.8	22.3	88.4	83.5	69.3	85.6	71.3	73.5	75.7	77.9
Contractors	62.5	11.5	15.6	2.1	(13.5)	24.6	15.9	24.6	16.3	25.3	25.9	26.7	27.4
Materials	4.0	2.3	2.0	0.2	(1.8)	2.9	2.1	2.9	2.1	3.0	3.1	3.2	3.3
Other	2.6	4.8	23.7	17.3	(6.4)	31.5	24.2	37.4	24.8	38.4	39.4	40.5	41.6
Local area support costs	102.0	55.6	58.0	62.1	4.1	57.5	59.3	45.0	60.7	46.4	47.8	49.2	50.7
Corporate support costs	87.4	67.7	63.0	102.3	39.3	84.0	64.4	65.8	66.0	67.8	69.8	71.9	74.0
Indirect costs	51.8	63.6	58.2	81.9	23.7	60.0	59.4	39.6	60.9	41.4	42.1	41.8	44.5
Corrective maintenance	83.2	81.2	58.8	64.6	5.8	131.4	60.0	183.9	61.5	189.7	194.9	199.7	206.5
Labour	21.6	18.7	6.8	15.1	8.4	31.7	6.9	47.4	7.1	48.8	50.3	51.8	53.4
Contractors	11.8	14.3	32.2	4.3	(27.9)	16.7	32.8	19.7	33.6	20.2	20.8	21.3	21.9
Materials	5.7	10.3	2.1	1.3	(0.8)	2.9	2.2	2.9	2.2	3.0	3.1	3.2	3.3
Other	0.5	(0.1)	2.9	7.4	4.5	7.9	3.0	10.8	3.0	11.1	11.4	11.7	12.1
Local area support costs	15.2	11.6	4.8	8.8	4.0	20.6	4.9	30.8	5.0	31.8	32.7	33.7	34.7
Corporate support costs	17.9	13.8	5.2	15.7	10.5	30.1	5.3	45.1	5.5	46.4	47.8	49.2	50.7
Indirect costs	10.5	12.6	4.8	12.0	7.2	21.5	4.9	27.1	5.0	28.4	28.8	28.7	30.4
Operating costs total	1404.6	1129.6	1415.4	1146.6	(268.7)	1524.8	1445.5	1700.7	1480.4	1771.4	1830.7	1891.9	1969.9
Annuity-funded costs													
Labour		26.1	27.6	52.9	25.3	65.9	82.1	399.9	65.5	404.0	225.8	211.1	64.7
Contractors		46.3	223.0	427.3	204.4	218.6	272.4	861.6	141.1	517.7	455.5	350.0	70.5
Materials		23.6	0.7	1.4	0.6	13.8	17.2	134.4	22.0	71.8	37.9	100.7	70.5
Other		14.4	6.1	11.8	5.6	3.6	4.5	120.4	19.7	85.4	41.7	68.0	38.5
Local area support costs		16.4	15.4	29.5	14.1	42.9	53.4	228.1	37.4	197.8	98.3	107.0	42.1
Corporate support costs		21.1	29.0	55.5	26.6	62.6	78.0	379.9	62.2	383.8	214.5	200.5	61.5
Indirect costs		16.2	21.3	40.8	19.5	44.8	55.8	228.7	37.5	234.8	129.4	116.7	36.9
Annuity-funded total¹	364.6	164.1	323.1	619.2	296.1	452.2	563.4	2352.9	385.4	1895.2	1203.1	1154.1	384.7
Total costs²	1769.1	1293.6	1738.5	1765.8	27.4	1976.9	2008.9	4053.7	1865.8	3666.6	3033.8	3046.0	2354.6

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 Mareeba-Dimbulah Bulk Water Service Contract in 2020/21³ and the actual projects undertaken.

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
Tinaroo Falls Dam	Study – input studies to inform the comprehensive risk assessment (CRA).	137	327	The original budget was insufficient for the scope of work required.
Tinaroo Falls Dam	Refurbish – reinstate the upstream left abutment rock protection system (rip rap).	98	106	This project was completed broadly in line with the forecast.
Tinaroo Falls Dam	Refurbish – 36 river inlet trash screens.	80	80	This project was completed within budget.
Tinaroo Falls Dam	Refurbish – foundation drain cleaning to ensure uplift pressures and dam stability factors are managed effectively.	66	35	Works were not fully completed during the financial year, as an extended period of pressure testing across all foundation drains was required. This project was carried over to 2021/22.
Tinaroo Falls Dam	Study – a dam seismic study to provide additional information to inform the CRA and related dam safety investigations.	58	0	The seismic investigation was completed. Costs are shown against the CRA project above.
Barron River	Replace – customer meters.	33	1	Works were carried over to 2021/22.
Tinaroo Falls Dam	Refurbish – standby radial gate (blast and paint).	33	20	The market value of procured items was lower than estimated.
Tinaroo Falls Dam	Study – investigate a supervisory control and data acquisition (SCADA) telemetry and controls strategy for five sites to ensure continued effective control and surveillance over dam river and outlet works assets.	26	13	Work was completed internally, eliminating the need for consultancy costs.
Scheme	Study – audit and review of all scheme switchboards and distribution boards to reassess arc flash rating in accordance with Australian Standards.	26	27	This project was completed broadly in line with the forecast.
Tinaroo Falls Dam	Install – gates and bollards to prevent unauthorised access and damage to the upstream abutments and groins.	23	0	This project was no longer required as it was previously funded by operating costs.
Multiple	Various projects.	68	9	The asset revaluation was not completed as part of the annuity-funded program of works and the service contract's contingency amount of \$30k was not required. Refurbishment of the drain outlet concrete shutes at the Tinaroo Falls Dam saddle dam cost less than anticipated due to the market value of the procured items.
2020/21 Total		648	619	

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

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	Tinaroo Falls Dam	Risk reduction program – investigation phase.	1723
	Tinaroo Falls Dam	Replace – upgrade river, irrigation and hydro control equipment and telemetry.	288
	Tinaroo Falls Dam	Replace – irrigation structure control equipment at distance 320.04 m based on known asset condition and age.	121
	Scheme	Replace – customer meters to Australian Standard (AS) 4747 to meet regulatory compliance.	40
	Tinaroo Falls Dam	Refurbish – paint and seal irrigation valve house roof based on known asset condition and age.	57
	Tinaroo Falls Dam	Replace – public safety fencing along the right abutment based on known asset condition and age.	60
	Tinaroo Falls Dam	Refurbish – paint and seal river outlet valve house roof based on known asset condition and age.	57
	Tinaroo Falls Dam	Investigate – pipe thickness testing to mitigate known safety risk.	7
		2022/23 Total	
2023/24	Tinaroo Falls Dam	Risk reduction program – evaluation phase.	1504
	Tinaroo Falls Dam	Study – comprehensive inspection to meet regulatory compliance.	209
	Tinaroo Falls Dam	Study – investigate and test main wall passive anchor tension.	123
	Tinaroo Falls Dam	Refurbish – vertical lift gate and seal on the irrigation compensator outlet at 307.85 m based on known asset condition and age.	47
	Tinaroo Falls Dam	Refurbish – clear weep holes on the left and right-hand bank spillway retaining walls based on known asset condition and age.	12
		2023/24 Total	
2024/25	Tinaroo Falls Dam	Risk reduction program – definition phase.	1003
	Tinaroo Falls Dam	Refurbish – blast and repaint irrigation outlet works bell mouth based on known asset condition and age.	129
	Tinaroo Falls Dam	Refurbish – spillway access platform based on known asset condition and age.	38
	Tinaroo Falls Dam	Replace – site signs based on known asset condition and age.	26
	Tinaroo Falls Dam	Investigate – pipe thickness testing to mitigate known safety risk.	8

Year	Facility	Activity description	Forecast \$'000
	2024/25 Total		1203
2025/26	Tinaroo Falls Dam	Risk reduction program – execution phase.	607
	Tinaroo Falls Dam	Replace – river outlet cone valve electrical controls based on known asset condition and age.	128
	Tinaroo Falls Dam	Replace – outlet works 1 filling valves, air bleed valves, aerator valves, dissipator scour isolation valve, bypass isolation valve, drain line isolation valve and filling line isolation valve based on known asset condition and age.	169
	Tinaroo Falls Dam	Replace – intruder detection system (CCTV equipment) based on known asset condition and age.	59
	Tinaroo Falls Dam	Replace – switchboard (regulating gates 320 m) based on known asset condition and age.	43
	Tinaroo Falls Dam	Refurbish – abutment, river outlet and irrigation building power and lighting based on known asset condition and age	29
	Scheme	Study – asset revaluation to define asset value for insurance purposes and future expenditure profiles.	25
	Tinaroo Falls Dam	Refurbish – regulating structure 320 m (blast, clean and repaint stairs and handrails) based on known asset condition and age.	17
	Multiple	There are 10 other annuity funded projects planned for 2025/26 related to Tinaroo Falls Dam general handrails and ladder refurbishments; gantry crane works; small valve replacements; and other minor works.	78
		2025/26 Total	
2026/27	Tinaroo Falls Dam	Study – tension testing of main dam (wall and spillway) stressed anchors.	377
	Tinaroo Falls Dam	Investigate – pipe thickness testing to mitigate known safety risk.	8
		2026/27 Total	385

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.