



# Draft Service and Performance Plan 2021/22

Mareeba-Dimbulah Bulk Water Service Contract


24 March 2021

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# At a glance

## Our performance in 2019/20

 **Operating costs:**  
\$1.13 million (23.6% less than forecast)


Key drivers of cost variance:

- fewer non-direct costs allocated to the scheme
- reduction in labour costs.


 **Annuity-funded costs:**  
\$0.16 million (47.7% less than forecast)

Key drivers of cost variance:

- Tinaroo Falls Dam – Foundation drains. This project has been spread over two financial years.
- Tinaroo Falls Dam – Left abutment protection. This project was postponed due to budget constraints.


 **Total water deliveries:**  
150,268 ML

Water delivered to irrigators: 125,530 ML

 **Service targets: Met**


No exceptions

## Outlook for 2021/22

 **Forecast operating costs:**  
\$1.68 million

Significant areas of expenditure:

- insurance (\$0.25 million)
- operations (\$0.96 million)
- preventative maintenance (\$0.31 million)
- corrective maintenance (\$0.17 million).

 **Forecast annuity-funded costs:**  
\$0.42 million

Key projects planned:

- post tensioning testing and possible re-tensioning strand anchors at Tinaroo Falls Dam (\$0.28 million)
- comprehensive risk assessment of Tinaroo Falls Dam, based on inputs developed in previous years (\$0.10 million)
- replacement of customer meters, as required, in the Barron River system (\$0.04 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 Mareeba-Dimbulah Bulk Water Service Contract is to:

- present to customers Sunwater's projected costs<sup>1</sup> 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 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.

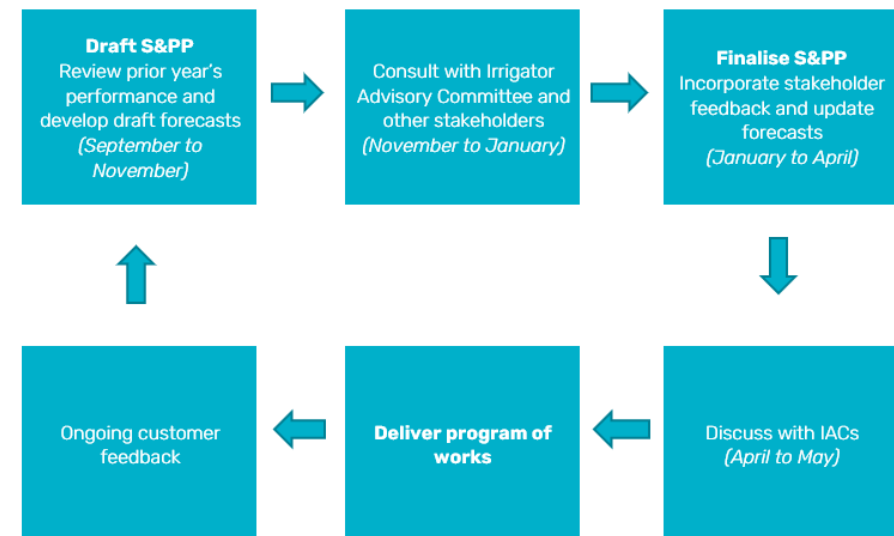
In addition to this S&PP, Sunwater has published an information sheet which explains the types of costs we incur in delivering water to our customers and how those costs are allocated to service contracts. The information sheet is available at:

[www.sunwater.com.au/customer/products-and-services/service-and-performance-plans/](http://www.sunwater.com.au/customer/products-and-services/service-and-performance-plans/)

<sup>1</sup> 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](mailto: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 2019/20. Historical total water usage is available in **Appendix 1**.

Table 1: Water allocations and usage data<sup>1</sup>

Customer segment	Total water allocations (ML)	High priority water allocations (ML)	Medium priority water allocations (ML)	Total water deliveries 2019/20 (ML)
Irrigation	151,342	0	151,342	125,530
Industrial	1421	135	1286	599
Urban	6657	5901	756	4043
Sunwater (excl. distribution losses)	4	0	4	3
Sunwater distribution losses	45,000	8000	37,000	20,095
<b>Total</b>	<b>204,424</b>	<b>14,036</b>	<b>190,388</b>	<b>150,268</b>

1. Includes distribution.

## Irrigation charges

The 2021/22 charges and cost per megalitre from the Queensland Competition Authority's (QCA) 2020–2024 irrigation price investigation are shown in Table 2. The Mareeba-Dimbulah Bulk Water Service Contract generally does not need additional subsidies to recover irrigation's share of future renewals, maintenance and operating costs.

Table 2: Irrigation charges for 2021/22<sup>1</sup>

Tariff group	Product	2021/22 (\$/ML) <sup>2</sup>	QCA cost-reflective (\$/ML) <sup>3</sup>	Subsidy (\$/ML)
River – Tinaroo / Barron	Allocation Charge – Part A	15.87	5.64	n/a
	Allocation Water – Part B	0.62	0.65	0.04 <sup>4</sup>
River – Supplemented Streams & Walsh River	Allocation Charge – Part A	5.64	5.64	n/a
	Allocation Water – Part B	0.65	0.65	n/a
Channel – Outside a relift up to 100ML	Allocation Charge – Part A	5.64	5.64	n/a
	Allocation Water – Part B	0.65	0.65	n/a
Channel – Outside a relift 100ML to 500ML	Allocation Charge – Part A	5.64	5.64	n/a
	Allocation Water – Part B	0.65	0.65	n/a
Channel – Outside a relift more than 500ML	Allocation Charge – Part A	5.64	5.64	n/a
	Allocation Water – Part B	0.65	0.65	n/a
Channel – Relift	Allocation Charge – Part A	5.64	5.64	n/a
	Allocation Water – Part B	0.62	0.65	0.04

1. This table includes bulk water charges only. For distribution charges, please refer to the Distribution Service Contract S&PP.
2. As recommended by QCA. The Queensland Government has not yet determined the irrigation charges to apply in 2021/22.
3. Reflects 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.
4. Sunwater does not expect to receive a Community Service Obligation for this tariff group, as the combined Part A and B price is greater than the combined QCA cost-reflective price.

In addition to these charges, an annual access charge of \$718.93 per customer is expected to apply in 2021/22.

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

[www.sunwater.com.au/customer/fees-and-charges/](http://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		
			2017/18	2018/19	2019/20
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 <sup>1</sup>	Unplanned shutdowns during Peak Demand Period	72 hours	2	0	0
	Unplanned shutdowns outside Peak Demand Period	5 working days			
Maximum number of interruptions <sup>2</sup>	Planned or unplanned interruptions per water year	10	7	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 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 <sup>1</sup>	80.00%	94.87%
Requests actioned within Service Level Agreement (SLA) timeframes <sup>2</sup>	> 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

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 an increase in revenue for the Mareeba-Dimbulah Bulk Water Service Contract in 2021/22.

In 2021/22, Sunwater expects to spend \$489 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. 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 scheme—2021/22 forecast (\$M)

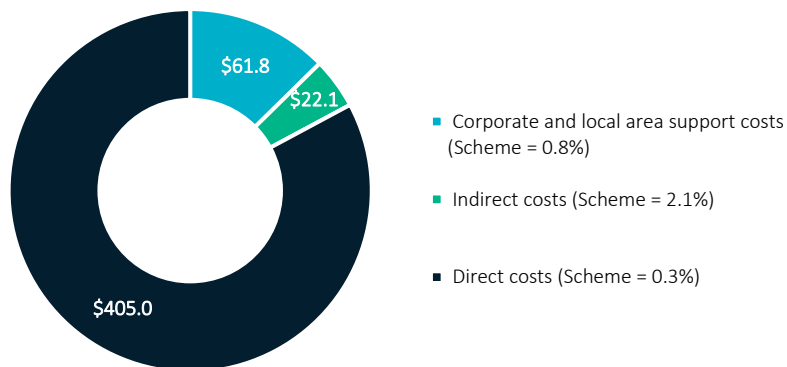


Table 5: Service contract financial summary

Mareeba-Dimbulah Bulk Water Service Contract	2017/18 Actual \$'000	2018/19 Actual \$'000	2019/20 Actual \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000
Revenue					
Irrigation	185.2	192.2	196.6	193.6	195.8
Community Service Obligation	-	-	-	-	-
Industrial <sup>1</sup>	852.5	3339.0	1917.1	563.8	578.4
Urban <sup>1</sup>	359.1	361.3	368.5	393.1	423.1
Revenue transfers <sup>2</sup>	927.0	933.2	950.8	1068.2	1094.9
Drainage	-	-	-	-	-
Other	(9.8)	0.4	3.6	2.0	2.1
<b>Revenue total</b>	<b>2314.0</b>	<b>4826.2</b>	<b>3436.6</b>	<b>2220.7</b>	<b>2294.3</b>
Less – Operating expenditure	1013.9	1404.6	1129.6	1659.2	1709.2
Less					
Annuity-funded	240.9	364.6	164.1	647.3	417.6
Non-annuity funded <sup>3</sup>	160.7	2.6	-	6.4	-
<b>Surplus (deficit)</b>	<b>898.4</b>	<b>3054.5</b>	<b>2143.0</b>	<b>(92.0)</b>	<b>167.5</b>

- 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 expenditure<sup>1</sup>

Mareeba-Dimbulah Bulk Water 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 <sup>2</sup>	Sunwater Forecast \$'000	QCA Target \$'000 <sup>2</sup>	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Operations	686.9	911.7	1021.6	751.2	(270.5)	1170.8	1054.4	1205.5	1076.8	1274.9	1281.9	1338.8	1334.9
Electricity	4.0	4.2	0.9	3.9	3.0	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1
Insurance	146.0	155.8	173.2	177.6	4.4	240.4	196.3	246.4	200.2	252.5	258.8	265.3	271.9
Operations	536.9	751.7	847.6	569.7	(277.9)	929.6	857.2	958.3	875.7	1021.4	1022.1	1072.4	1061.9
Preventative maintenance	308.5	409.7	291.0	297.2	6.2	298.0	302.2	307.3	308.7	330.9	328.5	347.2	349.1
Corrective maintenance	18.4	83.2	166.8	81.2	(85.6)	166.5	58.8	171.7	60.0	185.1	183.6	194.2	195.2
<b>Operating costs total<sup>3</sup></b>	<b>1013.9</b>	<b>1404.6</b>	<b>1479.4</b>	<b>1129.6</b>	<b>(349.9)</b>	<b>1635.3</b>	<b>1415.4</b>	<b>1684.6</b>	<b>1445.5</b>	<b>1790.9</b>	<b>1794.1</b>	<b>1880.1</b>	<b>1879.2</b>
Recreational facility costs <sup>4</sup>						23.9		24.6		26.4	26.3	27.7	27.5
<b>Operating costs total (incl. recreational facility costs)</b>	<b>1013.9</b>	<b>1404.6</b>	<b>1479.4</b>	<b>1129.6</b>	<b>(349.9)</b>	<b>1659.2</b>		<b>1709.2</b>		<b>1817.2</b>	<b>1820.4</b>	<b>1907.8</b>	<b>1906.8</b>

1. Sunwater's 2021/22 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. 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/](http://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 lower than our previous forecast.<sup>2</sup> This was primarily driven by fewer non-direct costs being allocated to the scheme in the operations and corrective maintenance cost categories, as well as a reduction in labour and contractor costs.

## Outlook for 2021/22

### Operations

Mareeba-Dimbulah Bulk Water Service Contract's total operations budget in 2021/22 is 12.0 per cent above the QCA's recommended cost target. This variance is primarily due to higher insurance costs (see below) and indirect costs. Sunwater will continue to seek efficient ways to deliver operations activities, with a view to aligning with the QCA target.

### 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.

### Preventative maintenance

The forecast preventative maintenance costs for the Mareeba-Dimbulah Bulk Water Service Contract are in line with the QCA's recommended cost target (0.5 per cent below the target).

### Corrective maintenance

In 2021/22, Sunwater anticipates spending \$0.17 million on corrective maintenance in the Mareeba-Dimbulah Bulk Water Service Contract. This is 186.1 per cent above the QCA's recommended cost target, primarily due to corrective maintenance activities that were not planned for when the QCA undertook its review and additional expenditure on chemical weed control for aquatic weeds.

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<sup>2</sup> See the 2019/20 Network Service Plan at [www.sunwater.com.au/schemes/Mareeba-Dimbulah/](http://www.sunwater.com.au/schemes/Mareeba-Dimbulah/)



## 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 7 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**.

Table 7: Annuity and non-annuity funded expenditure<sup>1,2</sup>

Mareeba-Dimbulah Bulk Water 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 <sup>3</sup>	Sunwater Actual \$'000 <sup>3</sup>	Sunwater Forecast \$'000	Sunwater Actual \$'000		Sunwater Forecast \$'000	QCA Target \$'000 <sup>4</sup>	Sunwater Forecast \$'000	QCA Target \$'000 <sup>4</sup>	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
<b>Annuity-funded</b>													
Operations	5.1	-	-	-	-	-	-	-	-	-	-	-	
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	
Planned corrective maintenance	235.8	364.6	314.0	164.1	(149.9)	647.3	323.1	417.6	563.4	105.4	341.8	178.9	889.4
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Annuity-funded total</b>	<b>240.9</b>	<b>364.6</b>	<b>314.0</b>	<b>164.1</b>	<b>(149.9)</b>	<b>647.3</b>	<b>323.1</b>	<b>417.6</b>	<b>563.4</b>	<b>105.4</b>	<b>341.8</b>	<b>178.9</b>	<b>889.4</b>
<b>Non-annuity funded</b>													
Dam Improvement Program	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational facility projects						6.4				38.8			26.1
Metered offtakes and dividend reinvestment	160.7	2.6	-	-	-	-							
<b>Non-annuity total</b>	<b>160.7</b>	<b>2.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.4</b>				<b>38.8</b>			<b>26.1</b>

1. Sunwater’s 2021/22 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.

## 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.<sup>3</sup>

Sunwater acknowledges there is room for improvement in our asset management system and is working on several initiatives to address specific potential improvements and the broader asset management and planning processes as outlined below. We will report on our progress on the implementation of these initiatives in the final S&PP for 2021/22.

## Asset management performance growth

This initiative provides the opportunity to improve predictive maintenance capability and focuses on monitoring asset performance data of critical assets. The asset data will provide a greater insight into asset performance, condition, and refurbishment and replacement planning.

## Asset management planning

A change to Sunwater’s asset planning cycle has improved the near-term cost estimation of annuity-funded work. The change targets 18 months of fully cost-estimated work and will help improve future asset replacement values.

## Asset management improvement

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 we identify and deliver maintenance work. 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 Portfolio, Program and Project Management Framework (P3MF). P3MF defines the management and governance of projects including when an options analysis is required.

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<sup>3</sup> See pages 58 to 60, [www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-part-b-sunwater-final-report.pdf](http://www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-part-b-sunwater-final-report.pdf)

# 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 what we expect to spend thereafter.

Table 8: Annuity balance

Mareeba-Dimbulah Bulk Water 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 <sup>1</sup>	(29.3)	(149.1)	(398.6)	(463.0)	(461.7)	(224.3)	351.2	732.0	1253.6
Spend <sup>2</sup>	(240.9)	(364.6)	(164.1)	(647.3)	(417.6)	(105.4)	(341.8)	(178.9)	(889.4)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-	-
Annuity contribution <sup>3</sup>	123.2	126.3	129.5	668.8	675.1	690.7	707.3	668.4	671.9
Interest/financing costs	(2.2)	(11.2)	(29.9)	(20.2)	(20.2)	(9.8)	15.4	32.0	54.8
<b>Sunwater – Closing balance</b>	<b>(149.1)</b>	<b>(398.6)</b>	<b>(463.0)</b>	<b>(461.7)</b>	<b>(224.3)</b>	<b>351.2</b>	<b>732.0</b>	<b>1253.6</b>	<b>1090.9</b>
<b>QCA – Closing balance</b>	<b>(149.1)</b>	<b>(398.6)</b>	<b>(579.9)</b>	<b>(259.6)</b>	<b>(159.1)</b>	<b>139.2</b>	<b>504.9</b>		
Difference	-	-	116.9	(202.2)	(65.2)	212.0	227.1		

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.
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 18-year average for the 2002/03 to 2019/20 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
<b>18-year historical average</b>	<b>132,963</b>

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

Mareeba-Dimbulk Bulk Water Service Contract	2017/18	2018/19	Sunwater Forecast \$'000	2019/20	Variance \$'000	2020/21	QCA Target \$'000	2021/22	QCA Target \$'000	2022/23	2023/24	2024/25	2025/26
	Sunwater Actual \$'000	Sunwater Actual \$'000		Sunwater Actual \$'000		Sunwater Forecast \$'000		Sunwater Forecast \$'000		Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
<b>Operating costs</b>													
Operations	686.9	911.7	1021.6	751.2	(270.5)	1170.8	1054.4	1205.5	1076.8	1274.9	1281.9	1338.8	1334.9
Labour	119.1	178.8	167.3	148.1	(19.2)	183.2	167.4	188.7	171.3	194.3	199.2	204.2	209.3
Contractors	10.0	13.4	12.0	7.9	(4.1)	11.8	9.6	12.1	9.8	12.4	12.7	13.0	13.3
Materials	0.5	11.0	3.0	5.8	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.3
Electricity	4.0	4.2	0.9	3.9	3.0	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1
Insurance	146.0	155.8	173.2	177.6	4.4	240.4	196.3	246.4	200.2	252.5	258.8	265.3	271.9
Other	131.0	82.6	185.4	111.9	(73.5)	177.1	168.9	180.9	172.3	184.7	190.3	194.3	198.4
Local area support costs	89.8	156.7	101.0	90.0	(11.0)	106.9	119.1	110.1	121.6	113.4	116.3	119.2	122.2
Corporate support costs	59.3	173.8	124.9	106.9	(18.0)	137.4	129.4	141.5	132.2	145.8	149.4	153.1	157.0
Indirect costs	127.3	135.5	254.0	99.1	(155.0)	310.2	259.8	322.0	265.4	367.7	351.0	385.3	358.3
Preventative maintenance	308.5	409.7	291.0	297.2	6.2	298.0	302.2	307.3	308.7	330.9	328.5	347.2	349.1
Labour	91.8	99.4	75.0	91.6	16.5	75.3	81.6	77.6	83.5	79.9	81.9	84.0	86.1
Contractors	24.5	62.5	25.0	11.5	(13.5)	24.6	15.6	25.2	15.9	25.8	26.5	27.1	27.8
Materials	2.3	4.0	3.0	2.3	(0.7)	2.9	2.0	3.0	2.1	3.1	3.2	3.3	3.3
Other	11.7	2.6	32.0	4.8	(27.2)	37.4	23.7	38.3	24.2	39.3	40.2	41.2	42.3
Local area support costs	71.4	102.0	47.8	55.6	7.8	43.1	58.0	44.4	59.3	45.8	46.9	48.1	49.3
Corporate support costs	37.5	87.4	56.0	67.7	11.7	56.5	63.0	58.2	64.4	59.9	61.4	63.0	64.6
Indirect costs	69.3	51.8	52.1	63.6	11.5	58.1	58.2	60.6	59.4	77.1	68.4	80.5	75.8
Corrective maintenance	18.4	83.2	166.8	81.2	(85.6)	166.5	58.8	171.7	60.0	185.1	183.6	194.2	195.2
Labour	4.9	21.6	44.3	18.7	(25.6)	42.9	6.8	44.2	6.9	45.5	46.7	47.8	49.0
Contractors	1.7	11.8	25.0	14.3	(10.7)	19.7	32.2	20.2	32.8	20.7	21.2	21.7	22.2
Materials	2.1	5.7	3.0	10.3	7.3	2.9	2.1	3.0	2.2	3.1	3.2	3.3	3.3
Other	0.0	0.5	2.0	(0.1)	(2.1)	10.8	2.9	11.1	3.0	11.4	11.6	11.9	12.2
Local area support costs	3.8	15.2	28.6	11.6	(17.0)	24.9	4.8	25.6	4.9	26.4	27.1	27.7	28.4
Corporate support costs	2.1	17.9	33.1	13.8	(19.3)	32.2	5.2	33.1	5.3	34.1	35.0	35.9	36.8
Indirect costs	3.7	10.5	30.8	12.6	(18.2)	33.1	4.8	34.5	4.9	43.9	38.9	45.9	43.2
<b>Operating costs total</b>	<b>1013.9</b>	<b>1404.6</b>	<b>1479.4</b>	<b>1129.6</b>	<b>(349.9)</b>	<b>1635.3</b>	<b>1415.4</b>	<b>1684.6</b>	<b>1445.5</b>	<b>1790.9</b>	<b>1794.1</b>	<b>1880.1</b>	<b>1879.2</b>
<b>Annuity-funded costs</b>													
Labour			30.5	26.1	(4.4)	73.5	36.7	61.7	83.3	9.9	40.6	18.1	147.1
Contractors			128.8	46.3	(82.4)	349.7	174.6	217.3	293.2	51.4	95.8	36.0	172.2
Materials			91.3	23.6	(67.8)	70.9	35.4	7.4	10.0	21.3	118.5	83.7	161.6
Other			(0.0)	14.4	14.4	-	-	-	-	-	-	-	83.5
Local area support costs			19.3	16.4	(2.8)	41.2	20.6	36.7	49.5	5.9	22.5	10.0	85.2
Corporate support costs			22.8	21.1	(1.8)	55.1	27.5	46.3	62.5	7.4	30.5	13.6	110.3
Indirect costs			21.2	16.2	(5.1)	56.7	28.3	48.2	65.0	9.5	33.9	17.4	129.5
<b>Annuity-funded total<sup>1</sup></b>	<b>240.9</b>	<b>364.6</b>	<b>314.0</b>	<b>164.1</b>	<b>(149.9)</b>	<b>647.3</b>	<b>323.1</b>	<b>417.6</b>	<b>563.4</b>	<b>105.4</b>	<b>341.8</b>	<b>178.9</b>	<b>889.4</b>
<b>Total costs<sup>2</sup></b>	<b>1254.8</b>	<b>1769.1</b>	<b>1793.4</b>	<b>1293.6</b>	<b>(499.7)</b>	<b>2282.5</b>	<b>1738.5</b>	<b>2102.1</b>	<b>2008.9</b>	<b>1896.3</b>	<b>2135.9</b>	<b>2059.0</b>	<b>2768.6</b>

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 Mareeba-Dimbulah Bulk Water Service Contract in 2019/20 and the actual projects undertaken.

Project	Forecast \$'000	Actual \$'000	Commentary
Tinaroo Falls Dam – Foundation drains (20TIN02)	195	60	This project has been spread over two financial years, to enable a staged approach of testing, fine tuning the methodology and cleaning the drains. Testing was completed and the methodology was under development as at 30 June 2020.
Customer meter replacements (20TIN05)	32	43	Supply and installation costs were higher than forecast due to a meter failure on the Barron River, taking the total number of meters replaced to four (as opposed to the planned three).
Tinaroo Falls Dam – Left abutment protection (20TIN01)	32	4	After developing a detailed scope and cost estimate for this project, Sunwater decided to defer the project to 2020/21. This is because the budget allowance of \$32k was insufficient to complete the work.
Tinaroo Falls Dam – Compensator gates (20TIN03)	31	61	Upon de-watering, the condition was worse than anticipated and the scope for refurbishment was greater than originally planned. Consequently, contractor costs were significantly higher than forecast.
Other works	24	-	The scheme's contingency budget was not used.
Non-scheduled works	-	(3)	The negative adjustment relates to an accrual issue for the previous financial year's meter replacement program.
<b>2019/20 Total</b>	<b>314</b>	<b>164</b>	

## 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. 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	Project title	Project scope	Forecast \$'000
2020/21	Tinaroo Falls Dam – Comprehensive risk assessment (CRA) inputs	The CRA is a dam safety condition and is scheduled for 2022. This project will undertake investigation, analysis and reporting as inputs to the CRA.	137
	Tinaroo Falls Dam – Protection works	Reinstate the upstream left abutment rock protection system (rip rap) to redress erosion damage in accordance with the 2017 dam safety report recommendations.	98
	Tinaroo Falls Dam – Screen refurbishments	Scheduled refurbishment of 36 river inlet trash screens to restore condition and maintain function.	80
	Tinaroo Falls Dam – Foundation drain cleaning	Undertake scheduled foundation drain cleaning to ensure uplift pressures and dam stability factors are managed effectively.	66
	Tinaroo Falls Dam – Seismic study	Undertake a dam seismic study to provide additional information to the Tinaroo Falls Dam CRA and related dam safety investigations.	58
	Meter replacements	This is an allowance to replace failed customer meters in the Barron River system with Australian Standard (AS) 4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	33
	Tinaroo Falls Dam – Radial gate refurbishment	Blast and paint the standby radial gate to enable quick change out of the irrigation regulator and rotate units by condition.	33
	Tinaroo Falls Dam – Control system strategy	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
	Arc flash study	Audit and review of all scheme switchboards and distribution boards to reassess arc flash rating in accordance with Australian Standards.	26
	Tinaroo Falls Dam – Saddle dam gates	Install gates and bollards to prevent unauthorised access and damage to the upstream abutments and groins.	23
	Other works	The balance of the 2020/21 program of works includes a contingency amount for unplanned capital replacements, an asset revaluation and saddle dam drainage works.	68
		<b>2020/21 Total</b>	
2021/22	Tinaroo Falls Dam – Post tensioning	The Australian National Committee on Large Dams Incorporated (ANCOLD) Guidelines on post tensioned dams recommends that they are tested every five years to determine if the tensioning has decreased or slipped. If it has, the anchors will need to be re-tensioned to maintain the required level of safety.	282
	Tinaroo Falls Dam – CRA	This is a dam safety condition. The assessment will use the inputs, reports and analysis completed in 2021.	101

Year	Project title	Project scope	Forecast \$'000
	Meter replacements	This is an allowance to replace failed customer meters in the Barron River system with AS4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	35
	Other works	There are no other annuity-funded projects planned for 2021/22.	-
	<b>2021/22 Total</b>		<b>418</b>
2022/23	Tinaroo Falls Dam – Outlet works	Refurbish, paint and re-seal irrigation and river outlet valve house roofs and walls to ensure continued structure function and equipment protection.	69
	Meter replacements	This is an allowance to replace failed customer meters in the Barron River system with AS4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	36
	Other works	There are no other annuity-funded projects planned for 2022/23.	-
	<b>2022/23 Total</b>		<b>105</b>
2023/24	Tinaroo Falls Dam – Comprehensive inspection	Sunwater conducts comprehensive inspections on each dam every five years to identify defects and plan for their repair. Keeping the condition and risk data current allows us to defer projects if they can be deferred and bring forward higher risk projects if required. This is also a requirement of the dam safety condition schedule for each dam.	176
	Tinaroo Falls Dam – Irrigation inlet	The steel-bell mouth is starting to corrode and will need to be repainted in-situ to extend its life. The condition will be assessed, and the timing and scope of works amended to achieve least whole-of-life cost.	108
	Tinaroo Falls Dam – Compensator gate	The compensator gate in the irrigation channel is in a similar condition to the vertical lift gates and will be removed, blasted and painted before being returned to service.	40
	Other works	The balance of the 2023/24 program of works includes cleaning the Tinaroo Falls Dam spillway weep hole, and cleaning and repairing spillway surface defects.	18
	<b>2023/24 Total</b>		<b>342</b>
2024/25	Tinaroo Falls Dam – Foundation drain cleaning	Undertake foundation drain cleaning (scheduled to be reviewed post 2021/22 works) to ensure uplift pressures and dam stability factors are managed effectively. Scope and timing are subject to a review of drain performance.	148
	Tinaroo Falls Dam – Signs	Allocation for system wide replacement of obsolete signage with current Sunwater standard arrangements to ensure continued management of operational and public risks.	23
	Tinaroo Falls Dam – Capstan winch	Refurbishment of the capstan winch located on the anchor stressing platform to ensure continued safe and effective operation during tensioning of the anchors.	8
	Other works	There are no other annuity-funded projects planned for 2024/25.	-
	<b>2024/25 Total</b>		<b>179</b>
2025/26	Tinaroo Falls Dam – Gallery lighting	Scheduled refurbishment of upper and lower gallery lighting system to retain safe and effective general and emergency lighting system.	246
	Tinaroo Falls Dam – Irrigation outlet works	Scheduled replacement of bleed, filling and aerator valves for the irrigation conduit to ensure continued safe operation of the outlet works.	181



Year	Project title	Project scope	Forecast \$'000
	Tinaroo Falls Dam – River outlet	Scheduled replacement of the river regulating valve control system to ensure continued safe and effective river releases.	135
	Tinaroo Falls Dam – Hydro and irrigation valves	Scheduled refurbishment of the irrigation and hydro guard valve to ensure continued safe and effective isolation and control of the outlet works.	55
	Tinaroo Falls Dam – Channel compensator	Refurbishment of the channel compensator siphon pipes, inlets and outlet arrangements. Timing and scope of works subject to the 2020 inspection.	68
	Tinaroo Falls Dam – Intruder detection system	Replacement of the aged intruder detection system to ensure site security and monitoring services are maintained.	62
	Tinaroo Falls Dam – Flume regulating structure	Replacement of the aged electrical switchboard located on the downstream regulating structure to ensure continued safe and effective control of the slide gates and channel flow.	45
	Asset revaluation	Sunwater re-values our assets every five years for insurance purposes and to assist with cost estimates for annuity-funded projects.	21
	Other works	The balance of the 2025/26 program consists of minor metal works, and electrical and valve replacements.	76
	<b>2025/26 Total</b>		<b>889</b>

## 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.