



Final Service and Performance Plan

2022/23

Mareeba-Dimbulah Distribution Service Contract


21 July 2022

Contents

At a glance.....	2
Introduction	3
Delivering services to our customers.....	4
Financial summary—Revenue and expenditure.....	7
Cost of delivering services—Operating expenditure.....	8
Cost of delivering services—Annuity and non-annuity funded expenditure	11
Annuity balance.....	14
Appendix 1—Historical water usage.....	15
Appendix 2—Operating and annuity-funded costs by expense type	16
Appendix 3—Comparison of forecast and actual annuity-funded projects for 2020/21	17
Appendix 4—Annuity-funded projects for 2022/23 to 2026/27	18


At a glance

Our performance in 2020/21

 **Operating costs:**
\$6.67 million (5.3% more than QCA target)


Key drivers of cost variance:

- electricity
- insurance
- operations labour.


 **Annuity-funded costs:**
\$0.64 million (49.3% less than QCA target)

Key drivers of cost variance:

- apportioning the concrete channel lining project over multiple years, rather than a single year
- some planned projects being undertaken as part of the modernisation works.


 **Total water deliveries:**
115,284 ML

Water delivered to irrigators: 99,539 ML

 **Service targets: 2 exceedances**

While two unplanned shutdowns failed to be rectified in time due to the extent of works required, the impact on customers was not material. Six customers were interrupted more than 10 times, largely due to pipe breaks on ageing infrastructure and modernisation work.

Outlook for 2022/23

 **Forecast operating costs:**
\$7.88 million

Significant areas of expenditure budgeted:

- insurance (\$0.59 million)
- operations (\$3.63 million)
- preventative maintenance (\$1.10 million)
- corrective maintenance (\$2.03 million).

 **Forecast annuity-funded costs:**
\$3.05 million

Key projects planned:

- refurbish an access bridge in the West Barron system (\$0.75 million)
- replace pipeline sections in the North Walsh channel 1/4 (\$0.55 million) and North Walsh channel 1 (\$0.21 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 Mareeba-Dimbulah Distribution 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 operations activities are implemented safely, timely and efficiently. We will also concentrate on water order compliance and implementing new channel control infrastructure. In addition, we are continuing to implement an efficient and effective preventative maintenance program, with a focus on ensuring the service contract’s assets continue to perform reliably.

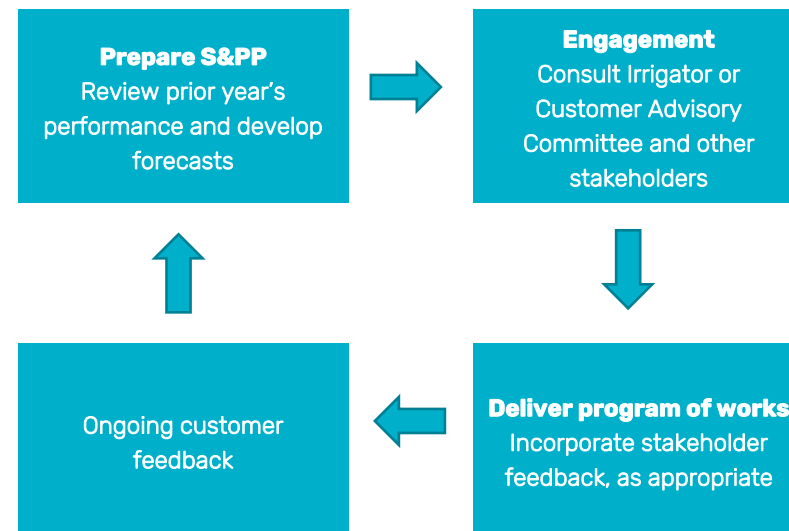
In addition to this S&PP, Sunwater has published an information sheet which explains the types of costs we incur in delivering water to our customers and how those costs are allocated to service contracts. The information sheet is available at:

www.sunwater.com.au/customer/products-and-services/service-and-performance-plans/

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

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

Figure 1: Customer consultation and S&PPs



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

Email: sppfeedback@sunwater.com.au

Post: S&PP Feedback
PO Box 15536
City East Qld 4002

Delivering services to our customers

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

Our customers

The Mareeba-Dimbulah Distribution Service Contract is one of Sunwater’s largest service contracts. The majority of the 957 customers in this service contract are irrigators who grow a variety of crops including mangoes, bananas, paw paws, citrus, avocados, general horticulture, sugar cane, tea-trees and coffee. Water is also supplied to the townships of Walkamin, Mareeba, Mutchilba, and Dimbulah.

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	144,587	0	144,587	99,539
Urban	1168	431	737	478
Industrial	1204	135	1069	970
Sunwater (excl. distribution losses)	0	0	0	0
Sunwater distribution losses	45,000	8000	37,000	14,297
Total	191,959	8566	183,393	115,284

1. Distribution system only.

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 – Supplemented Streams & Walsh River	Allocation Charge – Part C	22.09	26.57
	Allocation Water – Part D	3.09	3.70
Channel – Outside a relift up to 100ML	Allocation Charge – Part C	46.67	56.25
	Allocation Water – Part D	5.13	6.17
Channel – Outside a relift 100ML to 500ML	Allocation Charge – Part C	41.14	49.59
	Allocation Water – Part D	5.13	6.17
Channel – Outside a relift more than 500ML	Allocation Charge – Part C	31.89	38.48
	Allocation Water – Part D	5.13	6.17
Channel – Relift	Allocation Charge – Part C	37.35	54.95
	Allocation Water – Part D	76.60	93.09

1. This table includes distribution charges only. For bulk water charges, please refer to the Bulk Water 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 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.

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 Distribution Service Contract. Table 3 below sets out our recent performance against selected service targets for this scheme.

Table 3: Scheme service targets and performance

Service target		Target	Number of exceptions		
			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	2	2
	Unplanned shutdowns outside Peak Demand Period	5 working days			
Maximum number of interruptions ²	Planned or unplanned interruptions per water year	10	21	15	6

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 distribution customers in the scheme that have been interrupted in excess of the target.

In 2020/21, two exceedances of the unplanned shutdown (duration) service target were recorded. These exceedances related to unplanned shutdowns 104358 and 104381, which were both extended due to the severity of the pipe breaks. Despite this, no material impact was experienced by customers on these occasions.

Six customers were interrupted more than 10 times. This was largely due to finalisation of modernisation works as well as corrective maintenance activities.

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 distribution services to our customers in Mareeba-Dimbulah. We also maintain a large network of channels and pipelines.

Table 5: Key infrastructure

Asset	Description	Capacity
Bruce Weir	Mass concrete gravity weir with central ogee spillway.	970 ML
Collins Weir	Mass concrete gravity weir with central ogee spillway.	600 ML
Dulbil Weir	Mass concrete gravity weir with centre and right bank ogee spillways.	271 ML
Granite Creek Weir	Mass concrete gravity weir with centre, right and left ogee spillways.	244 ML
Leafgold Weir	Mass concrete gravity weir with central ogee spillway.	260 ML
Solanum Weir	Mass concrete gravity weir with central ogee spillway	345 ML
Price Creek A pump station	Two pumps and a 1 ML balancing storage.	22 ML/day 12 ML/day (pumps)
Price Creek B pump station	Two pumps and a 1 ML balancing storage.	17 ML/day 7 ML/day (pumps)
WB10 pump station	One pump.	3.5 ML/day
Paddy's Green A pump station	Three pumps and 1 ML storage.	18 ML/day (pumps)
Paddy's Green B pump station	Three pumps and 1 ML storage.	16 ML/day (pumps)

Financial summary—Revenue and expenditure

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

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

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 Distribution 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)

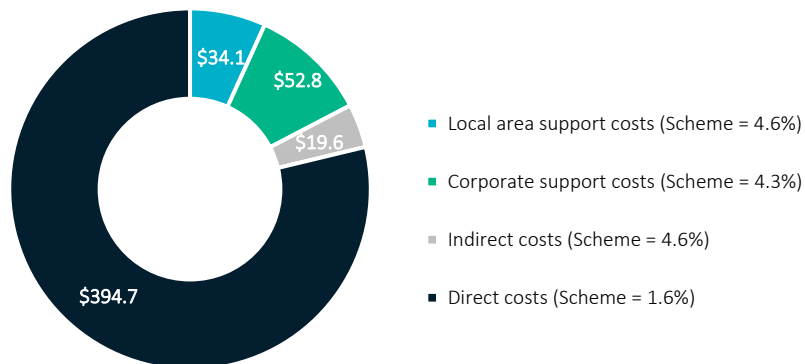


Table 6: Service contract financial summary

Mareeba-Dimbulah Distribution 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	7805.9	8134.4	7962.4	8932.2	7171.3
Community Service Obligation	30.4	11.8	684.0	-	-
Industrial ¹	254.9	264.9	284.4	232.1	235.7
Urban ¹	206.1	211.3	213.2	214.7	214.6
Revenue transfers ²	(933.2)	(950.8)	(932.7)	(910.5)	(931.5)
Drainage	-	-	-	-	-
Other	37.4	42.8	69.5	10.0	10.0
Revenue total	7401.4	7714.3	8280.8	8478.5	6700.1
Less – Operating expenditure	5793.4	6145.7	6665.0	7183.8	7878.4
Less					
Annuity-funded	1048.7	991.6	640.2	1336.3	3054.8
Non-annuity funded	15.3	-	20.0	-	-
Surplus (deficit)	544.0	577.0	955.6	(41.6)	(4233.1)

- 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.

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 Mareeba-Dimbulah Distribution Service Contract. For a more detailed breakdown by cost category, refer to **Appendix 2**.

Our performance in 2020/21

In 2020/21, operating costs were higher than the QCA’s recommended cost target. This was driven by higher insurance, electricity, and operations labour costs, though was in line with Sunwater’s budget projections. Higher operations costs were partially offset by a decrease in preventative maintenance costs due to retiring of assets associated with the modernization works and lower corrective maintenance costs.

Table 7: Operating expenditure¹

Mareeba-Dimbulah Distribution 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	3316.7	3402.2	3494.5	4605.6	1111.1	4135.9	3603.3	4744.1	3684.8	4873.0	5039.1	5197.9	5386.8
Electricity	532.7	573.5	484.2	552.5	68.4	586.0	528.7	524.0	536.1	538.4	553.2	568.4	584.1
Insurance	369.2	423.3	465.0	562.5	97.5	748.8	474.3	591.2	485.2	637.8	688.1	742.4	800.9
Operations	2414.8	2405.5	2545.3	3490.6	945.3	2801.1	2600.3	3628.9	2663.5	3696.8	3797.7	3887.0	4001.8
Preventative maintenance	930.8	936.0	1010.2	310.1	(700.1)	1030.8	1032.1	1100.8	1057.3	1136.1	1168.7	1197.7	1235.1
Corrective maintenance	1545.8	1807.5	1822.1	1749.3	(72.8)	2017.1	1861.1	2033.4	1906.1	2097.9	2157.8	2211.8	2280.2
Operating costs total	5793.4	6145.7	6326.8	6665.0	338.2	7183.8	6496.5	7878.4	6648.3	8107.0	8365.6	8607.4	8902.1
Recreational facility costs ³				-		-		-		-	-	-	-
Operating costs total (incl. recreational facility costs)	5793.4	6145.7		6665.0		7183.8		7878.4		8107.0	8365.6	8607.4	8902.1

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. 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.

Electricity

Sunwater continues to proactively manage the cost of electricity. In 2020/21, Sunwater undertook the following energy improvement initiatives in the Mareeba-Dimbulah Distribution Service Contract:

- a review of our electricity tariff selections, to ensure that we are using the most cost-effective tariffs. The review focused on pump stations as these assets consume the most electricity and resulted in tariff changes in the later months of 2020/21. The average cost based on 2021/22 rates decreased from 25.40 c/kWh to 24.13 c/kWh.
- an energy audit (finalised in 2021/22)
- commencement of Operational Electricity Dashboard Reporting with key electricity metrics monitored on a continual basis to identify efficiency opportunities.²

Outlook for 2022/23

Operations

Mareeba-Dimbulah Distribution Service Contract's total operations budget in 2022/23 is 28.7 per cent above the QCA's recommended cost target. This is driven by higher insurance (see below), labour and non-direct costs. Some of the additional expenditure that is expected to be incurred, when compared to historical expenditure and the QCA target, is attributed to additional staffing levels related to modernisation which will equate to additional water sales into the future.

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.

² Some measuring points are not currently available at all pump stations. Sunwater is working towards capturing this information in the future.

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.

Electricity

In 2022/23, Sunwater will continue our focus on managing the cost of electricity in this service contract. The following energy improvement initiatives are currently planned:

- annual tariff optimisation analysis
- potential implementation of energy audit recommendations (as required)
- monitoring of asset energy operational performance.

Preventative maintenance

The forecast preventative maintenance costs for the Mareeba-Dimbulah Distribution Service Contract are broadly in line with the QCA's recommended cost target (4.1 per cent above the target).

Corrective maintenance

In 2022/23, Sunwater anticipates spending \$2.03 million on corrective maintenance in the Mareeba-Dimbulah Distribution Service Contract. This is 6.7 per cent above the QCA's recommended cost target. This increase is related to ageing infrastructure and the need to undertake additional activities to ensure efficient operations continue into the future.

Electricity metrics

Table 8 sets out electricity usage and efficiency-related information for the relift section in the Mareeba-Dimbulah Distribution Service Contract.

Table 8: Electricity usage and efficiency-related metrics – Relift section

Metric	2017/18	2018/19	2019/20	2020/21
Electricity usage (kWh) – pump stations	1,812,023	2,195,965	2,359,432	2,088,520
Volume pumped (ML)	10,886	12,472	13,651	13,027
Actual electricity cost (\$)¹	541,749	531,206	572,293	550,332
Actual electricity cost per ML (\$/ML pumped)	49.77	42.59	41.92	42.25
Average pump energy indicator² (kWh/ML/per metre of head)	4.63	4.69	5.02	4.41

1. Pump station costs only. Electricity costs do not reconcile to figures presented elsewhere in this S&PP, which are scheme wide.
2. The industry guidelines are 3.4 to 4.5, depending on the size and design of the pump station with the benchmark for larger pump stations being more efficient.

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

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

Annuity-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 9 outlines our annuity and non-annuity funded expenditure for this service contract.

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

Mareeba-Dimbulah Distribution 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	98.4	141.6	-	-	-	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	950.3	850.1	1262.4	640.2	(622.2)	1336.3	831.4	3054.8	1307.6	2082.1	862.1	1677.5	481.1
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Annuity-funded total	1048.7	991.6	1262.4	640.2	(622.2)	1336.3	831.4	3054.8	1307.6	2082.1	862.1	1677.5	481.1
Non-annuity funded													
Dam Improvement Program	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational facility projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Metered offtakes and dividend reinvestment	15.3	-	-	20.0	-	-	-	-	-	-	-	-	-
Non-annuity total	15.3	-	-	20.0	-	-	-	-	-	-	-	-	-

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 lower than the QCA's recommended cost target. This was primarily driven by apportioning concrete lining repairs over several years rather than a single year. Some activities were not required as they were made redundant a part of the modernisation project.

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 various sections of pipelines in the North Walsh system and refurbish an access bridge in the West Barron system.

³ 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.³

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

Predictive maintenance and asset condition reporting

A focus during 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.

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 10 below.

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

Table 10: Annuity balance

Mareeba-Dimbulah Distribution 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	8674.5	10,556.5	12,693.7	13,437.7	13,598.4	12,076.0	11,509.3	11,594.4	10,875.2
Spend ²	(1048.7)	(991.6)	(640.2)	(1336.3)	(3054.8)	(2082.1)	(862.1)	(1677.5)	(481.1)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-	-
Annuity contribution ³	2281.0	2338.1	829.2	909.5	937.8	987.5	444.0	451.3	478.7
Interest/financing costs	649.7	790.7	555.0	587.5	594.6	528.0	503.2	506.9	475.5
Sunwater – Closing balance	10,556.5	12,693.7	13,437.7	13,598.4	12,076.0	11,509.3	11,594.4	10,875.2	11,348.3
QCA – Closing balance	10,556.5	12,799.3	12,925.8	13,569.1	13,792.5	14,534.5			
Difference	-	(105.7)	511.9	29.3	(1716.6)	(3025.1)			

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	93,971
2011/12	117,164
2012/13	145,206
2013/14	121,589
2014/15	148,111
2015/16	154,442
2016/17	132,084
2017/18	111,947
2018/19	115,303
2019/20	142,652
2020/21	115,284
19-year historical average	125,316

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

Mareeba-Dimbulk Distribution Service Contract	2018/19 Sunwater / QCA Actual \$'000	2019/20 Sunwater Actual \$'000	2020/21 QCA Target \$'000	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	3316.7	3402.2	3494.5	4605.6	1111.1	4135.9	3603.3	4744.1	3684.8	4873.0	5039.1	5197.9	5386.8
Labour	709.5	796.8	671.6	983.0	311.4	776.8	687.0	1056.1	704.5	1087.8	1120.4	1154.0	1188.7
Contractors	29.4	4.1	5.2	64.8	59.7	15.0	5.3	8.0	5.4	8.2	8.4	8.7	8.9
Materials	4.9	8.7	5.6	37.3	31.7	8.0	5.7	8.0	5.8	8.2	8.4	8.7	8.9
Electricity	532.7	573.5	484.2	552.5	68.4	586.0	528.7	524.0	536.1	538.4	553.2	568.4	584.1
Insurance	369.2	423.3	465.0	562.5	97.5	748.8	474.3	591.2	485.2	637.8	688.1	742.4	800.9
Other	118.3	126.6	518.7	322.2	(196.6)	418.3	529.1	466.3	541.3	429.7	436.1	444.0	448.5
Local area support costs	570.1	484.1	477.7	564.6	87.0	505.2	487.9	686.7	499.8	707.3	728.6	750.4	772.9
Corporate support costs	675.3	610.2	519.0	976.4	457.4	737.9	530.2	1003.3	543.1	1033.4	1064.4	1096.3	1129.2
Indirect costs	307.4	375.0	347.6	542.3	194.6	339.9	355.1	400.5	363.7	422.2	431.4	424.9	444.7
Preventative maintenance	930.8	936.0	1010.2	310.1	(700.1)	1030.8	1032.1	1100.8	1057.3	1136.1	1168.7	1197.7	1235.1
Labour	214.8	248.1	278.7	92.4	(186.4)	273.5	285.1	302.4	292.4	311.4	320.8	330.4	340.3
Contractors	218.9	80.8	115.5	5.3	(110.2)	95.0	117.9	95.0	120.6	97.6	100.3	103.1	105.9
Materials	39.0	41.9	54.8	5.7	(49.1)	30.0	55.9	30.0	57.2	30.8	31.7	32.5	33.4
Other	8.2	102.9	3.2	13.6	10.5	75.0	3.2	75.0	3.3	77.1	79.2	81.4	83.6
Local area support costs	176.2	155.8	198.3	53.8	(144.5)	177.8	202.5	196.5	207.4	202.4	208.5	214.8	221.2
Corporate support costs	189.1	189.4	215.4	88.0	(127.4)	259.8	220.1	287.3	225.4	295.9	304.7	313.9	323.3
Indirect costs	84.6	117.1	144.3	51.3	(93.0)	119.7	147.4	114.7	151.0	120.9	123.5	121.7	127.3
Corrective maintenance	1545.8	1807.5	1822.1	1749.3	(72.8)	2017.1	1861.1	2033.4	1906.1	2097.9	2157.8	2211.8	2280.2
Labour	335.2	412.6	422.9	367.5	(55.5)	497.1	432.7	514.0	443.7	529.4	545.3	561.7	578.5
Contractors	178.7	171.5	83.6	68.4	(15.2)	100.0	85.4	90.0	87.4	92.5	95.0	97.6	100.3
Materials	373.0	417.7	363.4	450.2	86.8	330.0	370.7	330.0	379.2	339.1	348.4	358.0	367.8
Other	12.2	34.7	105.4	76.7	(28.7)	77.0	107.6	82.1	110.0	84.4	86.7	89.1	91.5
Local area support costs	306.9	259.0	300.8	212.6	(88.2)	323.1	307.3	334.1	314.7	344.1	354.4	365.1	376.0
Corporate support costs	244.5	312.6	326.9	368.5	41.6	472.3	333.9	488.3	342.0	502.9	518.0	533.6	549.6
Indirect costs	95.4	199.2	218.9	205.4	(13.6)	217.5	223.6	194.9	229.1	205.5	209.9	206.8	216.4
Operating costs total	5793.4	6145.7	6326.8	6665.0	338.2	7183.8	6496.5	7878.4	6648.3	8107.0	8365.6	8607.4	8902.1
Annuity-funded costs													
Labour		244.4	168.7	85.6	(83.2)	160.7	100.0	528.6	226.3	360.1	149.4	291.8	83.7
Contractors		206.2	429.8	218.0	(211.8)	446.3	277.7	581.4	248.9	395.2	163.5	318.7	91.2
Materials		95.8	298.5	151.4	(147.1)	396.9	247.0	581.4	248.9	395.2	163.5	318.7	91.2
Other		11.6	9.2	4.6	(4.5)	4.8	3.0	317.2	135.8	215.6	89.2	173.8	49.7
Local area support costs		133.1	95.4	48.4	(47.0)	104.7	65.1	343.6	147.1	234.1	97.1	189.7	54.4
Corporate support costs		191.8	169.3	85.9	(83.4)	152.6	95.0	502.2	214.9	342.1	141.9	277.3	79.5
Indirect costs		108.7	91.4	46.4	(45.1)	70.3	43.7	200.4	85.8	139.8	57.5	107.5	31.3
Annuity-funded total¹	1048.7	991.6	1262.4	640.2	(622.2)	1336.3	831.4	3054.8	1307.6	2082.1	862.1	1677.5	481.1
Total costs²	6842.1	7137.3	7589.2	7305.2	(284.0)	8520.1	7327.9	10,933.2	7955.9	10,189.1	9227.7	10,284.8	9383.1

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 Distribution Service Contract in 2020/21⁴ and the actual projects undertaken.

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
Mareeba system	Refurbish – concrete channel lining.	610	36	A number of factors hindered implementation of several planned shutdowns, with works carried over into the following financial year.
East Barron and North Walsh	Replace – customer meters.	228	142	Part of the works were not completed and were carried over to the following financial year.
West Barron main channel	Refurbish – float and vertical slide type regulating gates.	173	212	The market value of procured items was higher than estimated, due to site conditions. One of the gate replacements was undertaken as part of the National Water Infrastructure Development Fund (NWIDF) project.
Scheme	Study – audit and review of all scheme switchboards and distribution boards to reassess arc flash rating in accordance with Australian Standards.	78	24	A number of factors hindered implementation of several planned shutdowns, with works carried over into the following financial year.
Mareeba system	Refurbish – channel and access roads (regrade and surface).	59	56	This project was completed within budget.
Mareeba system	Refurbish – fences.	47	0	No fencing refurbishments were required.
South Walsh and West Barron	Replace – control system equipment at the overflow and control gate structures to ensure continued control and communications functions.	38	21	Work at South Walsh main channel was undertaken as part of the NWIDF project, while the market value of procured items was lower than estimated for the West Barron main channel works.
Scheme	Study – investigation, risk assessment and review of float regulating gate access arrangements.	35	0	This project was deferred to 2021/22.
Multiple	Various projects.	205	118	Works were either deferred or undertaken as part of the NWIDF project or another project listed above. In addition, the service contract's contingency amount of \$79k was not required. Some project costs were higher than estimated due to the market value of procured items.
Multiple	Various projects.	0	31	Most of this expenditure relates to a carryover project from 2019/20 which involved the refurbishment of an overhaul gate actuator.
2020/21 Total		1473	640	

⁴ 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	West Barron main channel	Replace – access bridge AC07 based on known asset condition and age.	751
	North Walsh channel 1/4	Replace – pipeline section P002 (700 to 1900 m) based on known asset condition and age.	549
	North Walsh channel 1	Replace – pipeline section P005 (3500 to 3740 m) based on known asset condition and age.	208
	Atherton, East Barron, Mareeba, Southedge and West Barron	Replace – customer meters to Australian Standard (AS) 4747 to meet regulatory compliance.	279
	West Barron system	Replace – regulating gate RG26 based on known asset condition and age.	231
	North Walsh channel 1/5	Replace – pipeline section P004 (2416 to 2496 m) based on known asset condition and age.	150
	Mareeba system	Refurbish – concrete channel lining based on known asset condition and age.	149
	South Walsh main channel	Replace – eight pipeline scour valves based on known asset condition and age.	116
	West Barron main channel	Study – investigate the relocation of access bridge AC09.	116
	Atherton channel	Replace – pipeline AC02A based on known asset condition and age.	104
	South Walsh main channel	Refurbish – bench flume based on known asset condition and age.	99
	Mareeba main channel	Refurbish – regulating gates No. 1 and 2 based on known asset condition and age.	71
	Mareeba system	Replace – public safety fencing based on known asset condition and age.	58
	Multiple	There are twelve other annuity-funded projects planned for 2022/23 including replacement of a motor starter at Biboohra WB10 pump station; West Barron WB7 isolation gate; investigation into pipeline replacements at West Barron WB17, East Barron EB8, Mareeba channels M4, 11 & 13 and Atherton Creek AC4; and refurbishment of pump units at Paddy’s Green A & B pump stations.	175
		2022/23 Total	
2023/24	West Barron main channel	Replace – access bridge AC09 based on known asset condition and age.	595
	Mareeba channel M4	Replace – duplicate pipeline P002 based on business case and known asset condition and age.	431
	South Walsh and Walsh Bluff main channels	Replace – customer meters to AS4747 to meet regulatory compliance.	234
	West Barron main channel	Refurbish – channel 11 bracing beams based on known asset condition and age (Stage 1).	203
	Mareeba main channel	Replace – pipeline P025 based on business case and known asset condition and age.	156

Year	Facility	Activity description	Forecast \$'000
	Mareeba system	Refurbish – concrete channel lining based on known asset condition and age.	153
	West Barron main channel	Refurbish – three amil gates based on known asset condition and age.	81
	South Walsh channels	Replace – three scour valves on the main channel and two at SW30 based on asset condition and age.	74
	Scheme	Study – scheme wide bridge and access crossing inspection and reporting project.	60
	Multiple	There are 10 other annuity-funded projects planned for 2023/24 including, for example, Mareeba main channel regulating gate refurbishments; non-return valve and isolating valve refurbishments at Price Creek A pump station; supervisory control and data acquisition (SCADA) software updates; and an options study into replacing control equipment across the scheme.	94
	2023/24 Total		2082
2024/25	West Barron main channel	Refurbish – channel 11 bracing beams based on asset condition and age (Stage 2).	154
	Mareeba system	Refurbish – concrete channel lining based on known asset condition and age.	157
	South Walsh channel and main channel	Replace – customer meters to AS4747 to meet regulatory compliance.	229
	Mareeba system	Replace – SCADA system based on known asset condition and age.	130
	West Barron main channel	Replace – safety screens based on known asset condition and age.	53
	Granite Creek, Dulbil, Collins, Solanum, Bruce and Leafgold weirs	Study – comprehensive inspections to meet asset management, condition, and risk standards.	46
	Multiple	There are six other annuity-funded projects planned for 2024/25 including, for example, an actuator replacement at West Barron main channel; a sliding gate replacement at Solanum Weir; signage updates; and an air vent replacement.	93
2024/25 Total		862	
2025/26	Mareeba system	Refurbish – concrete channel lining based on known asset condition and age.	162
	Mareeba, Southedge and West Barron channels	Replace – customer meters to AS4747 to meet regulatory compliance.	283
	Mareeba and Biboohra main channels	Refurbish – standpipe baffles based on known asset condition and age.	277
	Mareeba system	Refurbish – channel access roads based on known asset condition and age.	150
	West and East Barron main channel	Replace – air valves based on known asset condition and age.	119
	Paddy's Green A pump station	Replace – programmable logic controller (PLC) control equipment, alarm dialler, modem and flow meter based on known asset condition and age.	152
	Paddy's Green B pump station	Replace – PLC, control equipment, modem and flow meter based on known asset condition and age.	150
	Mareeba system	Replace – Costin street SCADA host system based on asset condition and age.	76
	West Barron balancing storage	Refurbish – rotating safety screen based on known asset condition and age.	62
	West Barron main channel	Replace – vertical lifting gate based on known asset condition and age.	61

Year	Facility	Activity description	Forecast \$'000
	Multiple	There are 15 other annuity-funded projects planned for 2025/26 including, for example, Biboohra and East Barron control and telemetry replacements; West Barron M04 options analysis and main channel bench flume and screen refurbishments; and minor equipment maintenance at Bruce Weir.	186
	2025/26 Total		1678
2026/27	Mareeba system	Refurbish – investigation and concrete channel lining based on known asset condition and age.	181
	Mareeba system	Replace – customer meters to AS4747 to meet regulatory compliance.	265
	Collins Weir	Replace – control and telemetry equipment based on known condition and age.	34
	2026/27 Total		481

Contact us

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

Email: sppfeedback@sunwater.com.au

Post: S&PP Feedback
PO Box 15536
City East Qld 4002

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.