sunwater

Final Service and Performance Plan 2022/23

Lower Mary River Distribution Service Contract

28 July 2022

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At a glance

Our performance in 2020/21



Operating costs: \$0.93 million (1.7% less than QCA target, after cost transfers)



Annuity-funded costs: \$0.84 million (185.4% more than QCA target, after cost transfers)

delivery of service.



Total water deliveries: 6752 ML

Water delivered to irrigators: 5822 ML



Service targets: 1 exceedance

The unplanned shutdowns (duration) target was

Outlook for 2022/23



Forecast operating costs: \$1.40 million (after cost ாரிரிரி transfers)

Significant areas of expenditure (prior to cost



Forecast annuity-funded costs: \$1.97 million (after cost transfers)

Key projects planned:

- low voltage switchboard 2 replacement at Owanyilla pump station (\$0.31 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 Lower Mary River 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.

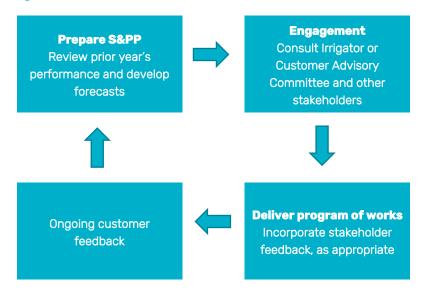
Our focus during 2022/23 will be on ensuring operations activities are implemented safely, timely and efficiently. We are also continuing to implement an efficient and effective preventative maintenance program, with a focus on ensuring the service contract's assets continue to perform reliably.

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

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

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

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

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

Cropping in this scheme is undergoing significant transition to macadamias from sugar cane. Other crop types include cotton and bean crops.

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	9962	0	9962	5822
Urban	0	0	0	0
Industrial	20	0	20	1
Sunwater (excl. distribution losses)	5280	0	5280	2
Sunwater distribution losses	4912	324	4588	927
Total	20,174	324	19,850	6752

^{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
Lower Mary Channel	Allocation Charge – Part C	47.00	57.77
Lower Mary Channel	Allocation Water – Part D	58.23	70.05

- 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.
- Is the cost-reflective price determined by the Queensland Competition Authority (QCA) in its 2020–2024 irrigation price investigation. Costs reflect lower bound cost recovery, i.e. recovery of future replacement and ongoing maintenance and operations. Charges do not allow for any returns on existing assets.

For more information on Sunwater's fees and charges, refer to: www.sunwater.com.au/customer/fees-and-charges/

Service targets

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

In 2020/21, two exceedances of the unplanned shutdown (duration) service target were recorded. The exceedances related to the C2 pipeline in the Copenhagen Bend system which needed to be excavated and repaired on two separate occasions during October and November 2020. Significant rainfall events at the time of the pipe break caused delays in repairs.

Table 3: Scheme service targets and performance

Service target		Target	Num	ber of except	tions
			2018/19	2019/20	2020/21
	For shutdowns planned to exceed 2 weeks	8 weeks	0	0	0
Planned shutdowns – notification	For shutdowns planned to exceed 3 days	2 weeks	0	0	0
	For shutdowns planned to be less than 3 days	5 days	0	0	0
Unplanned shutdowns – duration	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	48 hours	0	1	2
Maximum number of interruptions ¹	Planned or unplanned interruptions per water year	6	1	3	0

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

In addition, Sunwater has company-wide customer interactions service targets. Our performance in 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.
- 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 Lower Mary River.

Table 5: Key infrastructure

Asset	Description	Capacity (ML/day)
Owanyilla pump station	Two pumps.	243
Walker Point pump station	Two submersible pumps.	75
Copenhagen Bend pump station	Two submersible pumps.	65
Main Road pump station	Two pumps.	62

Financial summary—Revenue and expenditure

A high-level summary of the budgeted financial performance of the Lower Mary River 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 Lower Mary River 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 scheme¹—2022/23 forecast (\$M)



 Prior to the transfer of a portion of Owanyilla pump station and main channel costs to the Lower Mary River Bulk Water Service Contract.

Table 6: Service contract financial summary

Lower Mary River 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	952.0	1023.7	1035.9	908.5	772.3
Community Service Obligation	736.7	732.0	82.4	-	-
Industrial ¹	2.6	3.2	2.0	2.7	2.7
Urban ¹	-	-	-	-	-
Revenue transfers ²	(103.3)	(115.8)	(113.4)	(67.1)	(68.7)
Drainage	-	-	-	-	-
Other	40.4	0.3	9.2	-	-
Revenue total	1628.4	1643.3	1016.2	844.1	706.3
Less – Operating expenditure	891.9	1086.7	929.1³	1278.1³	1396.9³
Less					
Annuity-funded	383.5	397.3	841.1 ³	1299.5³	1973.4³
Non-annuity funded⁴	12.2	-	8.4	-	-
Surplus (deficit)	340.8	159.3	(762.4)	(1733.4)	(2664.0)

- 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.
- 3. Excludes a share of Owanyilla pump station and main channel costs which have been transferred to the Lower Mary River Bulk Water Service Contract.
- 4. This is expenditure which has not been funded by irrigation customers. An example of this in the Lower Mary River Distribution Service Contract is metered offtakes.

Cost of delivering services—Operating expenditure

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

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

Table 7: Operating expenditure¹

Lower Mary River	2018/19	2019/20		2020/21		2021	L/22	2022	2/23	2023/24	2024/25	2025/26	2026/27
Distribution Service Contract	Sunwater Actual \$'000	Sunwater Actual \$'000	QCA Target \$'000²	Sunwater Actual \$'000	Variance \$'000	Sunwater Forecast \$'000	QCA Target \$'000²	Sunwater Forecast \$'000	QCA Target \$'000²	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Operations	533.5	721.2	704.4	774.2	69.8	1002.0	825.3	1172.6	841.2	1212.9	1252.4	1292.4	1337.1
Electricity	305.4	384.8	293.0	280.2	(12.9)	493.0	405.1	437.0	410.8	449.0	461.4	474.1	487.1
Insurance	56.3	65.2	70.9	86.5	15.5	115.2	72.4	109.7	74.0	118.4	127.7	137.8	148.7
Operations	171.8	271.3	340.4	407.6	67.2	393.8	347.8	625.9	356.3	645.5	663.4	680.5	701.3
Preventative maintenance	230.6	161.3	220.6	175.5	(45.0)	303.5	225.4	286.0	230.9	295.2	303.7	311.2	321.0
Corrective maintenance	127.8	204.2	178.1	169.9	(8.2)	196.3	182.0	172.0	186.4	177.4	182.5	187.0	192.8
Less costs transferred to Lower Mary River bulk for Owanyilla pump station and main channel ³			(157.8)	(190.6)	(32.8)	(223.8)	(183.7)	(233.7)	(187.3)	(241.3)	(248.7)	(256.0)	(264.4)
Operating costs total	891.9	1086.7	945.3	929.1	(16.2)	1278.1	1049.0	1396.9	1071.2	1444.3	1489.9	1534.5	1586.5
Recreational facility costs ⁴				-		-		-		-	-	-	-
Operating costs total (incl. recreational facility costs)	891.9	1086.7		929.1		1278.1		1396.9		1444.3	1489.9	1534.5	1586.5

- 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. The Owanyilla pump station and main channel also perform a bulk water function as they supplement the Tinana Barrage and Teddington Weir. In its 2020–2024 irrigation price investigation final recommendations, the QCA transferred a share of the Owanyilla pump station and main channel costs from the Lower Mary River Distribution Service Contract to the Lower Mary River Bulk Water Service Contract. Refer to section 6.4.4 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 in line with the QCA's recommended cost target. Higher insurance and operations costs were offset by lower electricity costs and lower preventative and corrective maintenance costs.

Electricity

One of the key challenges for Sunwater is managing the cost of electricity. In 2020/21, Sunwater undertook the following energy improvement initiatives in the Lower Mary River 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 and did not result in any tariff changes for 2020/21.
- an energy audit, with recommendations being prioritised and reviewed for implementation as required
- 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

Lower Mary River Distribution Service Contract's total operations budget in 2022/23 (prior to cost transfers) is 39.4 per cent above the QCA's recommended cost target. This variance is largely driven by higher insurance (see below), labour and non-direct costs than the QCA's 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.

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 (prior to cost transfers) for the Lower Mary River Distribution Service Contract are 23.8 per cent above the QCA's recommended cost target. Statutory compliance drives a large portion of expenditure in the preventive maintenance field on items such as overhead cranes, fire panels and high voltage (HV) testing regimes.

Corrective maintenance

In 2022/23, Sunwater anticipates spending \$172.0k on corrective maintenance in the Lower Mary River Distribution Service Contract (prior to cost transfers). This is 7.7 per cent below the QCA's recommended cost target.

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

Electricity metrics

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

Table 8: Electricity usage and efficiency-related metrics

Metric	2017/18	2018/19	2019/20	2020/21
Electricity usage (kWh) – pump stations	677,029	1,129,449	1,495,534	1,108,243
Water usage (ML) ¹	5427	7609	9589	6752
Actual electricity costs (\$)	249,249	305,362	384,781	215,072 ²
Actual electricity cost per ML (\$/ML delivered)	45.93	40.13	40.13	31.85²
Average pump energy indicator ³ (kWh/ML/per metre of head)	4.62	4.37	4.17	3.46

- 1. Includes distribution losses.
- Post the transfer of 59 per cent of Owanyilla pump station electricity costs to the Lower Mary Bulk Water Service Contract.
- 3. The industry guidelines are 3.4 to 4.5, depending on the size and design of the pump station with the benchmark for larger pump stations being more efficient.

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

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

Annuity-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}

	2018/19	2019/20		2020/21		2021	L/22	2022	2/23	2023/24	2024/25	2025/26	2026/27
Lower Mary River Distribution Service Contract	Sunwater / QCA Actual \$'000 ³	Sunwater Actual \$'000	QCA Target \$′000⁴	Sunwater Actual \$'000	Variance \$'000	Sunwater Forecast \$'000	QCA Target \$′000⁴	Sunwater Forecast \$'000	QCA Target \$′000⁴	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Annuity-funded													
Operations	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	383.5	397.3	365.7	986.4	620.8	1589.9	404.8	3028.0	942.5	1423.1	1017.1	189.9	202.0
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Less costs transferred to Lower Mary River bulk for Owanyilla pump station and main channel ⁵			(71.0)	(145.3)	(74.3)	(290.4)	(142.1)	(1054.6)	(351.0)	(557.3)	(48.8)	(4.3)	(65.5)
Annuity-funded total	383.5	397.3	294.7	841.1	546.4	1299.5	262.6	1973.4	591.5	865.8	968.3	185.6	136.5
Non-annuity funded													
Dam Improvement Program	-	-		-		-		-		-	-	-	-
Recreational facility projects				-		-		-		-	-	-	-
Metered offtakes and dividend reinvestment	12.2	-		8.4		-		-		-	-	-	-
Non-annuity total	12.2	-		8.4		-		-		-	-	-	-

- 1. Sunwater's 2022/23 to 2026/27 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.
- 2. Forecast annuity-funded costs from 2020/21 exclude recreational facility projects.
- 3. The annuity-funded spend for 2018/19 reflects the QCA's 2020–2024 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs.
- 4. Reflects the QCA's 2020–2024 irrigation price investigation final recommendations.
- 5. In its 2020–2024 irrigation price investigation final recommendations, the QCA transferred a share of the Owanyilla pump station and main channel costs from the Lower Mary River Distribution Service Contract to the Lower Mary River Bulk Water Service Contract. Refer to section 6.4.4 of the QCA's final Part B report at: www.qca.org.au/project/rural-water/irrigation-price-investigations/

Our performance in 2020/21 Performance against the QCA target

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

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

In 2020/21, total annuity-funded costs were higher than the QCA's recommended cost target. This was primarily driven by the actual works on the asset base being undertaken at different intervals when compared to program of works assessed by the QCA. Works were required to ensure continued reliable delivery of service.

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 for all assets other than Owanyilla pump station and main channel. Appendix 4 contains the same information for Owanyilla pump station and main channel.

Outlook

Details of the major annuity-funded projects planned for the 2022/23 to 2026/27 period are set out in **Appendix 5** and **Appendix 6**. In 2022/23, Sunwater plans to undertake electrical works at Owanyilla pump station and Main Roads pump station.

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

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

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

Lower Mary River 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	2020.2	2284.6	2562.2	1874.6	559.9	(2221.6)	(3480.7)	(3860.7)	(3405.4)
Spend ²	(383.5)	(397.3)	(986.4)	(1589.9)	(3028.0)	(1423.1)	(1017.1)	(189.9)	(202.0)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	5.2	-	-	-	-	-	-	-	-
Annuity contribution ³	491.5	503.7	186.8	193.2	222.1	261.1	789.3	814.0	825.9
Interest/financing costs	151.3	171.1	112.0	82.0	24.5	(97.1)	(152.2)	(168.8)	(148.9)
Sunwater – Closing balance	2284.6	2562.2	1874.6	559.9	(2221.6)	(3480.7)	(3860.7)	(3405.4)	(2930.4)
QCA – Closing balance	2284.6	2437.5	2365.2	2257.0	1635.3	2061.2			
Difference	-	124.7	(490.6)	(1697.2)	(3856.9)	(5541.9)			
Less annuity contribution transferred to Lower Mary River bulk for Owanyilla pump station and main channel ⁴			(95.5)	(95.9)	(97.1)	(97.0)	(233.6)	(241.9)	(246.5)

- 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. Figures presented are prior to cost transfers to the Lower Mary River Bulk Water Service Contract.
- 3. The annuity contribution is included in the prices paid by customers. For 2020/21 to 2023/24, the annuity contribution is based on the QCA's 2020–2024 irrigation price investigation final recommendations. Thereafter, it is based on Sunwater's projections.
- 4. In its 2020–2024 irrigation price investigation final recommendations, the QCA recovered part of the Lower Mary River Distribution Service Contract annuity contribution from the Tinana Barrage and Teddington Weir bulk water tariff group as the Owanyilla pump station and main channel also perform a bulk water function.

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	746
2011/12	2726
2012/13	8697
2013/14	13,505
2014/15	5893
2015/16	9144
2016/17	12,733
2017/18	5427
2018/19	7609
2019/20	9589
2020/21	6752
19-year historical average	6439

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

Lower Mary River	2018/19	2019/20		2020/21		2023	L/22	202	2/23	2023/24	2024/25	2025/26	2026/27
Distribution Service Contract	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	533.5	721.2	704.4	774.2	69.8	1002.0	825.3	1172.6	841.2	1212.9	1252.4	1292.4	1337.1
Labour	42.8	111.4	108.8	122.0	13.2	111.6	111.3	195.2	114.1	201.1	207.1	213.3	219.7
Contractors	0.4	1.8	2.5	14.0	11.5	13.5	2.6	6.0	2.6	6.2	6.3	6.5	6.7
Materials	0.2	3.2	4.5	4.6	0.2	2.0	4.5	2.0	4.7	2.1	2.1	2.2	2.2
Electricity	305.4	384.8	293.0	280.2	(12.9)	493.0	405.1	437.0	410.8	449.0	461.4	474.1	487.1
Insurance	56.3	65.2	70.9	86.5	15.5	115.2	72.4	109.7	74.0	118.4	127.7	137.8	148.7
Other	44.7	39.5	38.2	25.6	(12.7)	43.4	39.0	43.5	39.9	44.0	44.4	46.6	47.1
Local area support costs	23.0	30.2	46.0	62.6	16.5	68.5	47.0	119.7	48.2	123.3	127.0	130.8	134.7
Corporate support costs	41.4	51.4	84.1	115.6	31.5	106.0	85.9	185.4	88.0	191.0	196.7	202.6	208.7
Indirect costs	19.3	33.8	56.3	63.2	6.9	48.8	57.5	74.0	58.9	78.0	79.7	78.5	82.2
Preventative maintenance	230.6	161.3	220.6	175.5	(45.0)	303.5	225.4	286.0	230.9	295.2	303.7	311.2	321.0
Labour	64.9	51.5	69.3	47.1	(22.2)	89.2	70.9	85.0	72.7	87.6	90.2	92.9	95.7
Contractors	26.3	12.4	15.8	18.9	3.1	18.0	16.1	18.0	16.5	18.5	19.0	19.5	20.1
Materials	9.6	3.7	7.9	4.4	(3.5)	6.0	8.0	6.0	8.2	6.2	6.3	6.5	6.7
Other	10.2	6.7	8.7	9.3	0.6	13.0	8.9	13.0	9.1	13.4	13.7	14.1	14.5
Local area support costs	40.7	22.7	29.3	25.9	(3.4)	53.5	30.0	51.0	30.7	52.5	54.1	55.7	57.4
Corporate support costs	54.6	38.7	53.6	43.8	(9.8)	84.7	54.7	80.8	56.1	83.2	85.7	88.2	90.9
Indirect costs	24.2	25.5	35.9	26.1	(9.8)	39.0	36.7	32.2	37.6	34.0	34.7	34.2	35.8
Corrective maintenance	127.8	204.2	178.1	169.9	(8.2)	196.3	182.0	172.0	186.4	177.4	182.5	187.0	192.8
Labour	33.3	59.5	48.7	38.3	(10.4)	50.3	49.8	43.0	51.1	44.3	45.6	47.0	48.4
Contractors	6.1	2.8	6.9	29.0	22.1	15.0	7.0	15.0	7.2	15.4	15.8	16.3	16.7
Materials	13.5	23.1	23.0	12.3	(10.7)	15.0	23.4	15.0	24.0	15.4	15.8	16.3	16.7
Other	12.5	18.5	16.2	9.9	(6.3)	16.0	16.6	16.0	16.9	16.4	16.9	17.4	17.8
Local area support costs	24.0	27.4	20.6	21.1	0.5	30.2	21.0	25.8	21.5	26.6	27.4	28.2	29.0
Corporate support costs	24.4	44.7	37.6	38.0	0.4	47.8	38.4	40.9	39.4	42.1	43.3	44.6	46.0
Indirect costs	14.0	28.2	25.2	21.4	(3.8)	22.0	25.7	16.3	26.4	17.2	17.6	17.3	18.1
Less cost transfer to Lower Mary River bulk			(157.8)	(190.6)	(32.8)	(223.8)	(183.7)	(233.7)	(187.3)	(241.3)	(248.7)	(256.0)	(264.4)
Operating costs total	891.9	1086.7	945.3	929.1	(16.2)	1278.1	1049.0	1396.9	1071.2	1444.3	1489.9	1534.5	1586.5
Annuity-funded costs					(
Labour		104.6	52.2	140.7	88.5	250.4	63.8	528.5	164.5	248.3	177.8	33.3	35.5
Contractors		58.5	176.1	475.1	299.0	389.5	99.2	581.4	181.0	272.5	194.6	36.4	38.6
Materials		46.0	18.7	50.4	31.7	364.2	92.7	581.4	181.0	272.5	194.6	36.4	38.6
Other		11.5	13.9	37.6	23.6	85.9	21.9	317.1	98.7	148.6	106.1	19.9	21.1
Local area support costs		47.4	25.6	69.1	43.5	152.4	38.8	317.1	98.7	149.0	106.7	20.0	21.3
Corporate support costs		81.5	51.5	139.0	87.5	237.9	60.6	502.1	156.3	235.9	168.9	31.7	33.7
Indirect costs		47.7	27.7	74.6	46.9	109.6	27.9	200.4	62.4	96.4	68.4	12.3	13.3
Less cost transfer to Lower Mary River bulk		77.7	(71.0)	(145.3)	(74.3)	(290.4)	(142.1)	(1054.6)	(351.0)	(557.3)	(48.8)	(4.3)	(65.5)
Annuity-funded total ¹	383.5	397.3	294.7	841.1	546.4	1299.5	262.6	1973.4	591.5	865.8	968.3	185.6	136.5
Total costs ²	1275.4	1484.0	1240.0	1770.2	530.2	2577.6	1311.6	3370.3	1662.7	2310.1	2458.2	1720.2	1722.9

^{1.} The 2018/19 costs reflect the QCA's 2020–24 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs. Sunwater has provided cost information at the lowest level of granularity available.

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 Lower Mary River Distribution Service Contract in 2020/21⁴ and the actual projects undertaken (excluding Owanyilla pump station and main channel projects, refer to **Appendix 4**).

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
Walker Point pump station	Replace – control system, switchboard, and cable.	332	328	This project was completed within budget.
Walker Point main channel	Replace – surge tank 36.72 m.	296	124	Works were split across two financial years. This component included the design and manufacture of the new tank, with installation to occur in 2021/22.
Copenhagen Bend	Replace – bulk flow meter sensors and control unit to assist in determining pump efficiencies.	59	25	An alternative flow meter type was used, which significantly reduced costs.
Scheme	Study – to determine arc flash risk and classification for all electrical switchboards and distribution boards.	65	43	Part of the works were carried over to 2021/22.
Walker Point main channel	Refurbish – regulating gate No. 1 (paint and new seals).	39	34	This project was completed within budget.
Multiple	Various projects.	172	121	 The cost variance was driven by: the re-allocation of funds to refurbish fencing in the Walker Point system to fencing works at the Walker Point main channel (\$15k less; see below) a reduced scope of works to refurbish bulkhead gates 1 and 2 at Copenhagen Bend pump station as the gates were in a better condition than anticipated (\$11k less) a decision to implement supervisory control and data acquisition (SCADA) as standard in any future pump station upgrades, rather than undertake an investigation to assess whether SCADA should be implemented (\$19k less) the service contract's contingency budget of \$48k not being required the refurbishment of a valve and actuator at Copenhagen Bend pump station being completed under budget (\$9k less). These reductions were partially offset by higher meter replacement costs (\$32k) due to additional meter failures and pump refurbishment costs at Main Roads pump station (\$20k). The pump required more extensive repairs than planned, with some components such as the shaft requiring replacement rather than refurbishment.

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

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
Multiple	Various projects.	0	65	The following works at Walker Point main channel were brought forward from 2021/22: refurbishment of a bulkhead (\$12k) fence refurbishments to promptly address a safety issue (\$26k) replacement of two safety screens due to failure (\$13k). Corrective works were also undertaken to improve access to isolators to address a safety hazard (\$13k).
2020/21 Total		963	740	

Appendix 4— Comparison of forecast and actual Owanyilla pump station and main channel annuity-funded projects for 2020/21

The below table sets out the major annuity-funded projects planned for Owanyilla pump station and main channel in 2020/21⁵ and the actual projects undertaken. Customers in the Lower Mary River Distribution Service Contract contributed towards 41 per cent of the total project costs.

Facility	Activity description	Total forecast project costs \$'000	Distribution share of forecast project costs \$'000	Total actual project costs \$'000	Distribution share of actual project costs \$'000	Commentary
Owanyilla pump station	Replace – bulk flow meter.	50	20	15	6	Assessment of the flow meter heads determined that they can be re-used rather than replaced. The unit was planned for calibration in 2021/22.
Owanyilla pump station	Replace – electrical control system.	56	23	21	9	The options study was completed in conjunction with other works, resulting in cost savings.
Owanyilla pump station	Refurbish – pump, motor, discharge valve and suction valves on pump unit No. 2.	189	77	175	72	The project was completed within budget.
Owanyilla pump station	Refurbish – discharge valve on pump unit No. 1.	35	14	18	7	Works commenced in 2020/21 but were not able to be completed. This project was carried over to 2021/22.
Owanyilla channel	Various projects.	0	0	17	7	Expenditure relates to unplanned replacements of a failed safety screen and a failed meter.
2020/21 Total		330	134	246	101	

⁵ Based on information extracted from Sunwater's systems in mid-2020. See the 2021/22 S&PP at <u>www.sunwater.com.au/schemes/Lower-Mary-River/</u>

Appendix 5—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 (excluding Owanyilla pump station and main channel projects, refer to **Appendix 6**). 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	Main Roads pump station	Replace – electrical cabling based on known asset condition and age. Covers installation and commissioning.	344
	Walker Point pump station	Refurbish – pump unit No. 3 pump based on known asset condition and age.	46
	Main Roads pump station	Replace – electrical controls, including programmable logic controller (PLC) and SCADA system, based on known asset condition and age. Covers installation and commissioning.	241
	Main Roads pump station	Replace – low voltage (LV) switchboard based on known asset condition and age. Covers installation and commissioning.	458
	Copenhagen Bend system	Replace – customer meters based on known asset condition and age.	23
	Multiple	There are six other annuity-funded projects planned for 2022/23 related to meter replacements at Main Roads and Walker Point; fencing and road refurbishments; refurbishing the vacuum priming system at Main Roads pump station; and refurbishing the outlet gate at Walker Point Balancing Storage.	129
	2022/23 Total		1241
2023/24	Copenhagen Bend pump station	Refurbish – pump unit No. 2 based on known asset condition and age.	47
	Copenhagen Bend pump station	Replace – LV switchboard based on known asset condition and age. Covers design and procurement.	42
	Copenhagen Bend pump station	Replace – electrical controls, including PLC and SCADA, based on known asset condition and age. Covers design and procurement.	42
	Copenhagen Bend pump station	Replace – cables and cableways based on known condition and age. Covers design.	11
	Walker Point pump station Refurbish – pump unit No. 1 based on known asset condition and age.		47
	Main Roads pump station	Replace – LV switchboard, cables and control system based on condition and age.	87
	Walker Point pump station	Replace – inlet screens and suction pipe based on known asset condition and age.	118
	Multiple	There are three other annuity-funded projects planned for 2023/24 related to meter replacements.	84
	2023/24 Total		479
2024/25	Copenhagen Bend pump station Replace – LV switchboard based on known asset condition and age. Covers installation and commissioning.		
	Copenhagen Bend pump station	Replace – electrical cabling based on known asset condition and age. Covers installation and commissioning.	264

Year	Facility	Activity description	Forecast \$'000
	Copenhagen Bend pump station	Replace – electrical controls, including PLC and SCADA, based on known asset condition and age. Covers installation and commissioning.	211
	Copenhagen Bend pump station	Refurbish – pump unit No. 1 based on known asset condition and age.	65
	Walker Point, Main Roads and Copenhagen Bend systems	Replace – customer meters based on known asset condition and age.	86
	2024/25 Total		934
2025/26	Main Roads system	Replace – customer meters based on known asset condition and age.	26
	Copenhagen Bend system	Replace – customer meters based on known asset condition and age.	25
	Walker Point system	Replace – customer meters based on known asset condition and age.	37
	Copenhagen Bend Balancing Storage	Replace – intake screen and walkway based on known asset condition and age.	22
	Walker Point pump station	Refurbish – reflux valve at pump unit No. 3 based on known asset condition and age.	17
	Walker Point pump station	Refurbish – discharge valve at pump unit No. 3 based on known asset condition and age.	17
	Multiple	There are two other annuity-funded projects planned for 2025/26 related to road refurbishments and a pump refurbishment at Main Roads pump station.	37
	2025/26 Total		183
2026/27	Main Roads system	Replace – customer meters based on known asset condition and age.	26
	Copenhagen Bend system	Replace – customer meters based on known asset condition and age.	26
	Walker Point system	Replace – customer meters based on known asset condition and age.	38
	2026/27 Total		91

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

The below table sets out Sunwater's currently planned Owanyilla pump station and main channel annuity-funded projects for the 2022/23 to 2026/27 period. Customers in the Lower Mary River Distribution Service Contract contribute towards 41 per cent of the total project costs. While the immediate program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are likely to change in future S&PPs, reflecting changes in project delivery timing; asset condition and risk updates; outcomes from scheduled asset inspections; and customer feedback.

Year	Facility	Activity description	Total forecast project cost \$'000	Distribution share of forecast project cost \$'000
2022/23	Owanyilla pump station	Replace – electrical control system based on known asset condition and age (Stage 2).	321	132
	Owanyilla pump station	Replace – electrical cables based on known asset condition and age.	218	89
	Owanyilla pump station	Replace – LV switchboard 2 based on known asset condition and age.	745	305
	Owanyilla main channel	Replace – damaged concrete lining based on known asset condition.	80	33
	Owanyilla pump station	Replace – LV switchboard 1 based on known asset condition and age.	424	174
	2022/23 Total		1788	733
2023/24	Owanyilla pump station	Replace – switchboard 2 based on known asset condition and age.	472	193
	Owanyilla pump station	Replace – electrical control system based on known asset condition and age (Stage 3).	236	97
	Owanyilla pump station	Replace – switchboard 1 based on known asset condition and age.	236	97
	2023/24 Total		945	387
2024/25	Owanyilla pump station	Refurbish – access roads based on known asset condition and age.	16	7
	Owanyilla pump station	Replace – switchboard 2 based on known asset condition and age.	49	20
	Owanyilla pump station	Replace – switchboard 1 based on known asset condition and age.	18	7
	2024/25 Total		83	34
2025/26	Owanyilla pump station	Study – electrical compliance testing based on regulatory requirements.	7	3
	2025/26 Total		7	3
2026/27	Owanyilla main channel	Replace – damaged concrete lining based on known asset condition.	111	46

Year	Facility	Activity description	Total forecast project cost \$'000	Distribution share of forecast project cost \$'000
	2026/27 Total		111	46

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.