sunwater

Final Service and Performance Plan

2021/22

Lower Mary River Distribution Service Contract

12 August 2021

Contents

At a glance

Our performance in 2019/20

Operating costs: $1.09 million (4.0% less than forecast)

This cost variance is due to a redistribution of resource costs for operations, preventative maintenance and corrective maintenance functions across service contracts managed in the region.

Annuity-funded costs: $0.40 million (28.6% less than forecast)

The completion of several projects was deferred to 2020/21, as assets were unable to be taken offline until late in the financial year due to irrigation demand.

Total water deliveries: 9589 ML

Water delivered to irrigators: 7862 ML

Service targets: 2 exceedances

Unplanned shutdowns (duration) and maximum number of interruptions targets were not met.

Outlook for 2021/22

Forecast operating costs: $1.28 million

Significant areas of expenditure (prior to cost transfer):

- electricity ($0.49 million)
- operations ($0.39 million)
- preventative maintenance ($0.30 million)
- corrective maintenance ($0.20 million).

Forecast annuity-funded costs: $1.30 million

Key projects planned:

- surge tank replacement at Walker Point pump station ($0.12 million)
- electrical control equipment replacement at Walker point pump station ($0.44 million)
- design and procurement for electrical work at Owanyilla pump station ($0.10 million; distribution system share of costs).

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 Lower Mary River Distribution Service Contract is to:

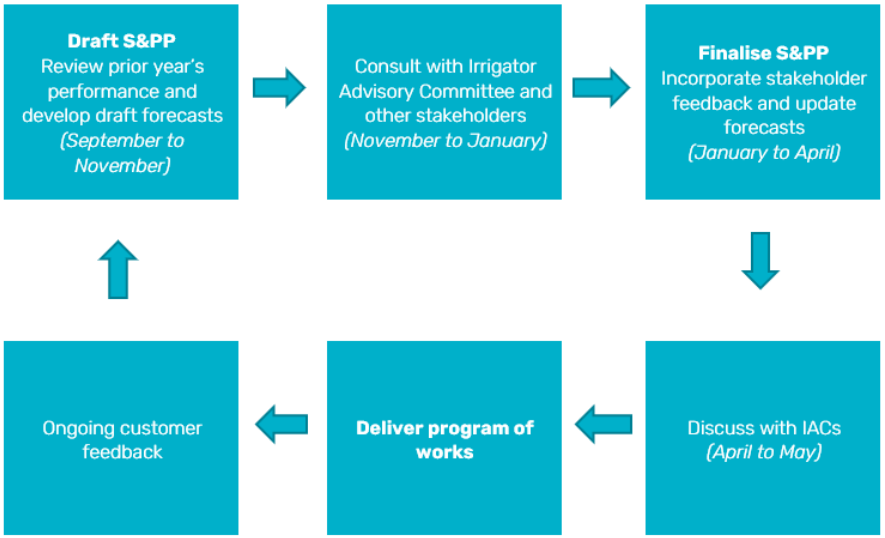
- present to customers Sunwater's projected costs[1] for the upcoming five-year period, i.e. 2021/22 to 2025/26
- consult with our customers on forecast operating and annuity-funded costs for 2021/22 and the forward program of works
- examine Sunwater's performance in 2019/20 against previous forecasts and service targets.

Our focus during 2021/22 will be on ensuring 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 2019/20. Historical total water usage is available in **Appendix 1**.

Table 1: Water allocations and usage data[1]

Customer segment	Total water allocations (ML)	High priority water allocations (ML)	Medium priority water allocations (ML)	Total water deliveries 2019/20 (ML)
Irrigation	10,362	0	10,362	7862
Industrial	20	0	20	1
Urban	0	0	0	0
Sunwater (excl. distribution losses)	5580	0	5580	2
Sunwater distribution losses	4912	324	4588	1724
Total	**20,874**	**324**	**20,550**	**9589**

1. Distribution system only.

Irrigation charges

The 2021/22 charges and cost per megalitre are shown in Table 2.

Table 2: Irrigation charges for 2021/22[1]

Tariff group	Product	2021/22 ($/ML)[2]	QCA cost-reflective ($/ML)[3]
Lower Mary Channel	Allocation Charge – Part C	43.95	56.51
	Allocation Water – Part D	56.96	68.51

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.

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.

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	8 weeks	0	0	0
	For shutdowns planned to exceed 3 days	2 weeks	0	0	0
	For shutdowns planned to be less than 3 days	5 days	0	0	0
Unplanned shutdowns – duration	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	48 hours	0	0	1
Maximum number of interruptions[1]	Planned or unplanned interruptions per water year	6	0	1	3

1. 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 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[1]	80.00%	94.87%
Requests actioned within Service Level Agreement (SLA) timeframes[2]	> 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

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

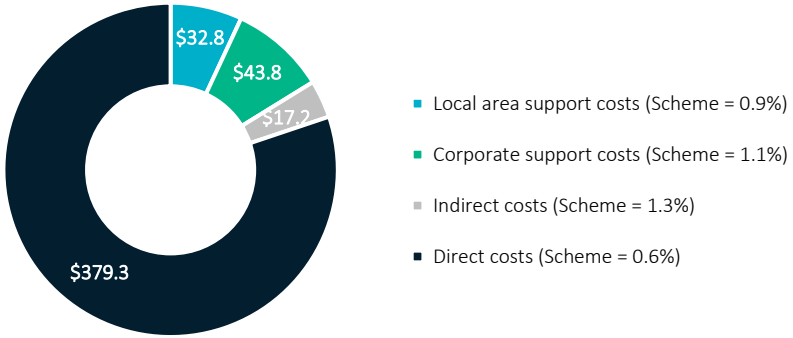
A high-level summary of the budgeted financial performance of the Lower Mary River Distribution Service Contract is presented in Table 6.

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.

Sunwater anticipates an increase in revenue for the Lower Mary River Distribution Service Contract in 2021/22.

In 2021/22, Sunwater expects to spend $473 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. 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[1]—2021/22 forecast ($M)



1. 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	2017/18 Actual $'000	2018/19 Actual $'000	2019/20 Actual $'000	2020/21 Forecast $'000	2021/22 Forecast $'000
Revenue					
Irrigation	732.3	952.0	1023.7	818.1	908.5
Community Service Obligation	741.3	736.7	732.0	-	-
Industrial[1]	2.5	2.6	3.2	2.6	2.7
Urban[1]	-	-	-	-	-
Revenue transfers[2]	(114.2)	(103.3)	(115.8)	(105.3)	(89.8)
Drainage	-	-	-	-	-
Other	(309.0)	40.4	0.3	-	-
Revenue total	**1052.9**	**1628.4**	**1643.3**	**715.4**	**821.4**
Less – Operating expenditure	759.0	891.9	1086.7	1090.1[3]	1278.1[3]
Less					
Annuity-funded	231.1	383.5	397.3	1098.0[3]	1299.5[3]
Non-annuity funded[4]	-	12.2	-	-	-
Surplus (deficit)	**62.8**	**340.8**	**159.3**	**(1472.7)**	**(1756.1)**

1. Forecast revenues for industrial and urban customers are based on current contractual arrangements.
2. 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 expenditure[1]

Lower Mary River Distribution 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[2]	Sunwater Forecast $'000	QCA Target $'000[2]	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000
Operations	456.7	533.5	693.9	721.2	27.3	794.0	704.4	1002.0	825.3	980.8	1003.8	1026.0	1049.0
Electricity	249.2	305.4	300.0	384.8	84.8	350.0	293.0	493.0	405.1	502.9	512.9	523.2	533.6
Insurance	52.7	56.3	63.3	65.2	1.9	87.8	70.9	115.2	72.4	117.5	119.9	122.3	124.7
Operations	154.7	171.8	330.7	271.3	(59.4)	356.2	340.4	393.8	347.8	360.4	371.0	380.6	390.6
Preventative maintenance	195.8	230.6	269.3	161.3	(108.0)	290.5	220.6	303.5	225.4	306.8	316.5	325.3	333.0
Corrective maintenance	106.6	127.8	169.3	204.2	34.9	189.0	178.1	196.3	182.0	198.7	204.7	210.2	215.1
Less costs transferred to Lower Mary River bulk for Owanyilla pump station and main channel[3]						(183.3)	(157.8)	(223.8)	(183.7)	(222.9)	(228.4)	(233.6)	(238.8)
Operating costs total	**759.0**	**891.9**	**1132.5**	**1086.7**	**(45.8)**	**1090.1**	**945.3**	**1278.1**	**1049.0**	**1263.5**	**1296.6**	**1327.9**	**1358.2**
Recreational facility costs[4]						-		-		-	-	-	-
Operating costs total (incl. recreational facility costs)	**759.0**	**891.9**	**1132.5**	**1086.7**	**(45.8)**	**1090.1**		**1278.1**		**1263.5**	**1296.6**	**1327.9**	**1358.2**

1. Sunwater's 2022/23 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. 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 2019/20

In 2019/20, operating costs were lower than our previous forecast[2] due to a redistribution of resource costs for operations, preventative maintenance and corrective maintenance functions across service contracts managed within the region.

Electricity

One of the key challenges for Sunwater is managing the cost of electricity. In 2019/20, 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 2019/20.
- interval meters were installed at pump stations (as required) to provide the granular level of consumption and demand information needed to identify operational optimisation and renewable generation opportunities
- a solar assessment, which found it is not currently cost-effective to invest in solar installations at the pump stations.

Outlook for 2021/22

Operations

Lower Mary River Distribution Service Contract's total operations budget in 2021/22 (prior to cost transfers) is 21.4 per cent above the QCA's recommended cost target. This variance is largely driven by electricity and insurance cost escalation.

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.

Electricity

In 2021/22, 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
- operational optimisation assessment (as required)
- renewable generation opportunity assessment (as required)
- outcome of energy audits reviewed and implemented (as required).

Preventative maintenance

The forecast preventative maintenance costs (prior to cost transfers) for the Lower Mary River Distribution Service Contract are 34.6 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 2021/22, Sunwater anticipates spending $196.3k on corrective maintenance in the Lower Mary River Distribution Service Contract (prior to cost transfers). This is 7.9 per cent above the QCA's recommended cost target.

[2] See the 2019/20 Network Service Plan at www.sunwater.com.au/schemes/Lower-Mary-River/

It is inherently difficult to forecast corrective maintenance costs due to the operating nature and location of particular assets. Sunwater will aim to keep actual corrective maintenance costs to a minimum, while ensuring all assets can perform satisfactorily.

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	2016/17	2017/18	2018/19	2019/20
Electricity usage (kWh)	2,403,632	677,029	1,129,449	1,495,534
Water usage (ML)	12,733	5427	7609	9589
Actual electricity cost per ML ($/ML delivered)	39.12	45.93	40.13	40.13
Average pump energy indicator[1] (kWh/ML/per metre of head)	4.42	4.62	4.37	4.17

1. 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 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 9 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** (all projects except Owanyilla pump station and main channel) and **Appendix 5** (Owanyilla pump station and main channel projects).

Table 9: Annuity and non-annuity funded expenditure[1,2]

Lower Mary River Distribution Service Contract	2017/18	2018/19	2019/20			2020/21		2021/22		2022/23	2023/24	2024/25	2025/26
	Sunwater Actual $'000[3]	Sunwater Actual $'000[3]	Sunwater Forecast $'000	Sunwater Actual $'000	Variance $'000	Sunwater Forecast $'000	QCA Target $'000[4]	Sunwater Forecast $'000	QCA Target $'000[4]	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000
Annuity-funded													
Operations	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	231.1	383.5	556.2	397.3	(158.9)	1292.7	365.7	1589.9	404.8	1191.0	958.7	797.1	115.3
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Less costs transferred to Lower Mary River bulk for Owanyilla pump station and main channel[5]						(194.7)	(71.0)	(290.4)	(142.1)	(345.7)	(413.9)	(8.6)	(3.8)
Annuity-funded total	**231.1**	**383.5**	**556.2**	**397.3**	**(158.9)**	**1098.0**	**294.7**	**1299.5**	**262.6**	**845.3**	**544.8**	**788.5**	**111.5**
Non-annuity funded													
Dam Improvement Program	-	-	-	-	-	-		-		-	-	-	-
Recreational facility projects						-		-		-	-	-	-
Metered offtakes and dividend reinvestment	-	12.2	-	-	-	-		-		-	-	-	-
Non-annuity total	**-**	**12.2**	**-**	**-**	**-**	**-**		**-**		**-**	**-**	**-**	**-**

1. Sunwater's 2022/23 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.
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/

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 2021/22 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 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 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 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 follows Sunwater's project, program and portfolio management framework (P3MF) and is subject to an options analysis.

Options analyses under P3MF examine a range of options and assess the shortlisted options against selected criteria, including financial, regulatory, social and environmental factors.

[3] See pages 58 to 60, 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 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	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[1]	1648.3	2020.2	2284.6	2562.2	1568.3	240.2	(718.3)	(1447.2)	(1808.4)
Spend[2]	(231.1)	(383.5)	(397.3)	(1292.7)	(1589.9)	(1191.0)	(958.7)	(797.1)	(115.3)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	5.2	-	-	-	-	-	-	-
Annuity contribution[3]	479.5	491.5	503.7	186.8	193.2	222.1	261.1	499.2	501.7
Interest/financing costs	123.5	151.3	171.1	112.0	68.6	10.5	(31.4)	(63.3)	(79.1)
Sunwater – Closing balance	**2020.2**	**2284.6**	**2562.2**	**1568.3**	**240.2**	**(718.3)**	**(1447.2)**	**(1808.4)**	**(1501.1)**
QCA – Closing balance	**2020.2**	**2284.6**	**2437.5**	**2365.2**	**2257.0**	**1635.3**	**2061.2**		
Difference	-	-	124.7	(796.9)	(2016.8)	(2353.6)	(3508.4)		
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)	(120.6)	(121.4)

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. 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 18-year average for the 2002/03 to 2019/20 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
18-year historical average	**6422**

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

Lower Mary River Distribution Service Contract	2017/18 Sunwater Actual $'000	2018/19 Sunwater Actual $'000	2019/20 Sunwater Forecast $'000	2019/20 Sunwater Actual $'000	Variance $'000	2020/21 Sunwater Forecast $'000	2020/21 QCA Target $'000	2021/22 Sunwater Forecast $'000	2021/22 QCA Target $'000	2022/23 Sunwater Forecast $'000	2023/24 Sunwater Forecast $'000	2024/25 Sunwater Forecast $'000	2025/26 Sunwater Forecast $'000
Operating costs													
Operations	456.7	533.5	693.9	721.2	27.3	794.0	704.4	1002.0	825.3	980.8	1003.8	1026.0	1049.0
Labour	57.9	42.8	108.0	111.4	3.4	107.1	108.8	111.6	111.3	104.6	107.8	111.0	114.3
Contractors	0.1	0.4	5.0	1.8	(3.2)	6.0	2.5	13.5	2.6	6.1	6.2	6.4	6.5
Materials	0.7	0.2	1.0	3.2	2.2	2.0	4.5	2.0	4.5	2.0	2.1	2.1	2.2
Electricity	249.2	305.4	300.0	384.8	84.8	350.0	293.0	493.0	405.1	502.9	512.9	523.2	533.6
Insurance	52.7	56.3	63.3	65.2	1.9	87.8	70.9	115.2	72.4	117.5	119.9	122.3	124.7
Other	20.0	44.7	41.3	39.5	(1.9)	43.2	38.2	43.4	39.0	44.2	44.4	44.6	46.5
Local area support costs	32.2	23.0	40.5	30.2	(10.3)	59.5	46.0	68.5	47.0	64.4	66.4	68.3	70.4
Corporate support costs	19.8	41.4	80.6	51.4	(29.2)	80.3	84.1	106.0	85.9	99.4	102.4	105.4	108.6
Indirect costs	23.9	19.3	54.2	33.8	(20.4)	58.0	56.3	48.8	57.5	39.7	41.8	42.7	42.1
Preventative maintenance	195.8	230.6	269.3	161.3	(108.0)	290.5	220.6	303.5	225.4	306.8	316.5	325.3	333.0
Labour	65.1	64.9	90.7	51.5	(39.2)	89.2	69.3	89.2	70.9	91.9	94.6	97.5	100.4
Contractors	10.1	26.3	18.0	12.4	(5.6)	18.0	15.8	18.0	16.1	18.4	18.7	19.1	19.5
Materials	2.0	9.6	6.0	3.7	(2.3)	6.0	7.9	6.0	8.0	6.1	6.2	6.4	6.5
Other	5.2	10.2	9.0	6.7	(2.3)	13.0	8.7	13.0	8.9	13.3	13.5	13.8	14.1
Local area support costs	50.2	40.7	32.2	22.7	(9.5)	49.1	29.3	53.5	30.0	55.1	56.8	58.5	60.2
Corporate support costs	25.9	54.6	67.8	38.7	(29.1)	66.9	53.6	84.7	54.7	87.3	89.9	92.6	95.4
Indirect costs	37.2	24.2	45.6	25.5	(20.1)	48.3	35.9	39.0	36.7	34.8	36.7	37.5	37.0
Corrective maintenance	106.6	127.8	169.3	204.2	34.9	189.0	178.1	196.3	182.0	198.7	204.7	210.2	215.1
Labour	28.1	33.3	47.3	59.5	12.1	50.3	48.7	50.3	49.8	51.8	53.4	55.0	56.6
Contractors	11.0	6.1	15.0	2.8	(12.2)	15.0	6.9	15.0	7.0	15.3	15.6	15.9	16.2
Materials	6.9	13.5	15.0	23.1	8.1	15.0	23.0	15.0	23.4	15.3	15.6	15.9	16.2
Other	10.2	12.5	16.0	18.5	2.5	16.0	16.2	16.0	16.6	16.3	16.6	17.0	17.3
Local area support costs	21.8	24.0	16.8	27.4	10.6	27.7	20.6	30.2	21.0	31.1	32.0	33.0	34.0
Corporate support costs	12.3	24.4	35.3	44.7	9.4	37.7	37.6	47.8	38.4	49.2	50.7	52.2	53.8
Indirect costs	16.1	14.0	23.8	28.2	4.4	27.3	25.2	22.0	25.7	19.7	20.7	21.2	20.9
Less cost transfer to Lower Mary River bulk						(183.3)	(157.8)	(223.8)	(183.7)	(222.9)	(228.4)	(233.6)	(238.8)
Operating costs total	**759.0**	**891.9**	**1132.5**	**1086.7**	**(45.8)**	**1090.1**	**945.3**	**1278.1**	**1049.0**	**1263.5**	**1296.6**	**1327.9**	**1358.2**
Annuity-funded costs													
Labour			76.5	104.6	28.0	169.3	47.9	250.4	63.8	163.5	119.3	110.7	9.6
Contractors			167.6	58.5	(109.1)	490.3	138.7	389.5	99.2	323.4	308.9	263.4	23.8
Materials			187.7	46.0	(141.7)	327.2	92.6	364.2	92.7	373.7	297.5	206.8	63.1
Other			-	11.5	11.5	3.1	0.9	85.9	21.9	12.2	-	-	-
Local area support costs			28.7	47.4	18.7	84.0	23.7	152.4	38.8	100.9	73.3	68.4	6.0
Corporate support costs			57.1	81.5	24.4	127.0	35.9	237.9	60.6	155.3	113.4	105.2	9.1
Indirect costs			38.4	47.7	9.3	91.8	26.0	109.6	27.9	62.0	46.3	42.6	3.5
Less cost transfer to Lower Mary River bulk						(194.7)	(71.0)	(290.4)	(142.1)	(345.7)	(413.9)	(8.6)	(3.8)
Annuity-funded total[1]	**231.1**	**383.5**	**556.2**	**397.3**	**(158.9)**	**1098.0**	**294.7**	**1299.5**	**262.6**	**845.3**	**544.8**	**788.5**	**111.5**
Total costs[2]	**990.1**	**1275.4**	**1688.7**	**1484.0**	**(204.7)**	**2188.2**	**1240.0**	**2577.6**	**1311.6**	**2108.8**	**1841.4**	**2116.4**	**1469.7**

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 Lower Mary River Distribution Service Contract in 2019/20 and the actual projects undertaken.

Project	Forecast $'000	Actual $'000	Commentary
Owanyilla pump station – Unit 2 pump, motor, discharge valve and suction valve (20LOW08 and 20LOW10)	231	83	The items were removed from service later in the financial year than planned due to continued irrigation demand. This resulted in less work being completed prior to the end of 2019/20. The project was subsequently carried over into 2020/21.
Walker Point pump station – Control system, switchboard and cable replacements (Stage 1) (19LOW09)	159	131	The final aspects of the main and control switchboards were not completed during this phase of the three-year project. This work was included in the specification for the contractor which was scheduled for 2020/21.
Copenhagen Bend system – Pump 1 discharge valve and Pump 2 discharge valve and actuator refurbishments (20LOW02)	27	1	The pumps were not able to be taken offline until late in 2019/20 due to irrigation demand. The work was scheduled for completion in 2020/21.
Mains Road pump station – Options study (20LOW04)	8	11	This was the first stage of a multi-year project. The options studies were completed for slightly more than estimated.
Walker Point – Pump 1 discharge and non-return valve refurbishment (20LOW06)	28	34	The valves required more work to refurbish than anticipated.
Other works	104	95	Other works were completed within budget.
Non-scheduled works	-	43	Most of these costs related to a carryover of a project from 2018/19 to install a refurbished pump and motor (19LOW08). A shutdown was required to complete this work.
2019/20 Total	**557**	**397**	

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 (excluding Owanyilla pump station and main channel projects, refer to **Appendix 5**). 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
2020/21[4]	Walker Point pump station	Replace – control system, switchboard and cable based on known asset condition and age. Continuation of 2019/20 works.	332
	Walker Point main channel	Replace – surge tank 36.72m based on known asset condition and age. An options study identified replacement as the optimal solution.	296
	Copenhagen Bend	Replace – bulk flow meter sensors and control unit to assist in determining pump efficiencies. Understanding changes in pump capacity/efficiency can help reduce running costs and predict future maintenance requirements.	59
	Scheme	Study – to determine arc flash risk and classification for all electrical switchboards and distribution boards.	65
	Walker Point main channel	Refurbish – regulating gate No. 1 (paint and new seals) based on known asset condition and age.	39
	Multiple	There were 10 other annuity-funded projects planned for 2020/21 plus a scheme contingency amount. The projects include: the installation of a pump/motor/valve at the Main Road pump station; fence repairs in the Walker Point system; meter replacements across the scheme; bulkhead gate refurbishments at Copenhagen Bend pump station and pump 2 discharge valve refurbishment; and an options study to introduce a supervisory control and data acquisition (SCADA) system at Walker Point pump station.	172
	2020/21 Total		**963**
2021/22	Walker Point pump station	Replace – electrical control equipment based on known asset condition and age.	440
	Walker Point pump station	Replace – surge tank based on known asset condition and age (Stage 2).	116
	Main Road pump station	Replace – electrical cabling based on known asset condition and age. Covers design and procurement.	85
	Main Road pump station	Replace – flow meter and flow meter pit based on known asset condition and age.	83
	Walker Point pump station	Study – options to replace intake screens and intake suction pipe based on known asset condition and age.	64
	Main Road pump station	Replace – electrical controls, including programmable logic controller (PLC) and SCADA, based on known asset condition and age. Covers design and procurement.	61

[4] Based on the program of works underpinning the 2020/21 annuity-funded budget figures presented in this S&PP. This data was extracted from Sunwater's systems in mid-2020 and has been provided to facilitate future reporting of our performance against forecast costs. Changes to the 2020/21 program of works since the date of extraction are not incorporated here.

Year	Facility	Activity description	Forecast $'000
	Multiple	There are 12 other annuity-funded projects planned for 2021/22. The projects include: a gate refurbishment at Walker Point main channel; an inlet gate refurbishment at Walker Point Balancing Storage; meter replacements; a pump and electric motor refurbishment at Main Roads pump station; a low voltage switchboard replacement at Main Roads pump station; and fencing, bulkhead gate and safety screen upgrades at Walker Point main channel.	250
	2021/22 Total		**1099**
2022/23	Main Road pump station	Replace – electrical cabling based on known asset condition and age. Covers installation and commissioning.	243
	Walker Point pump station	Replace – intake screens and intake suction pipe based on known asset condition and age.	117
	Main Road pump station	Replace – electrical controls, including PLC and SCADA, based on known asset condition and age. Covers installation and commissioning.	105
	Main Road pump station	Replace – low voltage switchboard based on known asset condition and age. Covers installation and commissioning.	79
	Copenhagen Bend system	Replace – customer meters based on known asset condition and age.	21
	Multiple	There are four other annuity-funded projects planned for 2022/23 related to meter replacements at Main Roads and Walker Point, and fencing and road refurbishments.	40
	2022/23 Total		**605**
2023/24	Copenhagen Bend pump station	Refurbish – pump unit No. 2 based on known asset condition and age.	55
	Copenhagen Bend pump station	Replace – low voltage switchboard based on known asset condition and age. Covers design and procurement.	36
	Copenhagen Bend pump station	Replace – electrical controls, including PLC and SCADA, based on known asset condition and age. Covers design and procurement.	36
	Walker Point pump station	Refurbish – pump unit No. 1 based on known asset condition and age.	33
	Walker Point pump station	Refurbish – pump unit No. 3 based on known asset condition and age.	33
	Multiple	There are four other annuity-funded projects planned for 2023/24 related to the design stage of an electrical cable replacement at Copenhagen Bend pump station and meter replacements.	63
	2023/24 Total		**256**
2024/25	Copenhagen Bend pump station	Replace – low voltage switchboard based on known asset condition and age. Covers installation and commissioning.	263
	Copenhagen Bend pump station	Replace – electrical cabling based on known asset condition and age. Covers installation and commissioning.	226
	Copenhagen Bend pump station	Replace – electrical controls, including PLC and SCADA, based on known asset condition and age. Covers installation and commissioning.	180
	Copenhagen Bend pump station	Refurbish – pump unit No. 1 based on known asset condition and age.	59
	Main Road system	Replace – customer meters based on known asset condition and age.	22
	Multiple	There are two other annuity-funded projects planned for 2024/25 related to meter replacements.	33

Year	Facility	Activity description	Forecast $'000
	2024/25 Total		**783**
2025/26	Main Road system	Replace – customer meters based on known asset condition and age.	22
	Copenhagen Bend system	Replace – customer meters based on known asset condition and age.	22
	Copenhagen Bend Balancing Storage	Replace – intake screen and walkway based on known asset condition and age.	19
	Walker Point pump station	Refurbish – reflux valve at pump unit No. 3 based on known asset condition and age.	16
	Walker Point pump station	Refurbish – discharge valve at pump unit No. 3 based on known asset condition and age.	16
	Multiple	There are two other annuity-funded projects planned for 2025/26 related to road refurbishments and meter replacements.	14
	2025/26 Total		**109**

Appendix 5—Owanyilla pump station and main channel annuity-funded projects for 2020/21 to 2025/26

The below table sets out Sunwater's currently planned Owanyilla pump station and main channel annuity-funded projects for the 2020/21 to 2025/26 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
2020/21[5]	Owanyilla pump station	Replace – bulk flow meter to assist in determining pump efficiencies. Understanding changes in pump efficiency can help reduce running costs and predict future maintenance requirements.	50	20
	Owanyilla pump station	Replace – electrical control system based on the outcome of the 2019 options analysis. Covers design and procurement.	56	23
	Owanyilla pump station	Refurbish – pump, motor, discharge valve and suction valves on pump unit No. 2 based on known asset condition and age.	189	77
	Owanyilla pump station	Refurbish – discharge valve on pump unit No. 1 based on known asset condition and age.	35	14
	2020/21 Total		**330**	**134**
2021/22	Owanyilla pump station	Replace – electrical control system based on known asset condition and age (Stage 1).	249	102
	Owanyilla pump station	Replace – inlet screen based on known asset condition and age.	81	33
	Owanyilla pump station	Replace – pump station guttering based on known asset condition and age.	35	14
	Owanyilla main channel	Refurbish – concrete lining based on known asset condition and age.	69	28
	Owanyilla diversion channel	Replace – electrical cabling to inlet structure and flow meter based on known asset condition and age.	37	15
	Owanyilla main channel inlet	Replace – safety screen based on known asset condition and age.	21	9
	2021/22 Total		**492**	**201**

[5] Based on the program of works underpinning the 2020/21 annuity-funded budget figures presented in this S&PP. This data was extracted from Sunwater's systems in mid-2020 and has been provided to facilitate future reporting of our performance against forecast costs. Changes to the 2020/21 program of works since the date of extraction are not incorporated here.

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).	347	142
	Owanyilla pump station	Replace – low voltage switchboard based on known asset condition and age.	239	98
	2022/23 Total		**586**	**240**
2023/24	Owanyilla pump station	Replace – switchboard 2 based on known asset condition and age.	481	197
	Owanyilla pump station	Replace – main incoming cable based on known asset condition and age.	179	73
	Owanyilla pump station	Replace – switchboard 1 based on known asset condition and age.	42	17
	2023/24 Total		**702**	**287**
2024/25	Owanyilla pump station	Refurbish – access roads based on known asset condition and age.	15	6
	2024/25 Total		**15**	**6**
2025/26	Owanyilla pump station	Study – electrical compliance testing based on regulatory requirements.	6	3
	2025/26 Total		**6**	**3**

Contact us

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

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