sunwater

Final Service and Performance Plan

2021/22

Barker Barambah Bulk Water Service Contract

28 July 2021

Contents

At a glance

Our performance in 2019/20

Operating costs: $1.20 million (5.7% more than forecast)

Key drivers of cost variance:

- greater than forecast electricity and insurance costs
- an increase in non-direct costs allocated to the service contract.

Annuity-funded costs: $1.13 million (24.5% less than forecast)

Key drivers of cost variance:

- works on the Silverleaf Weir refurbishment were partially delayed due to COVID-19. However, the full scope was delivered in 2020/21.
- input studies for the comprehensive risk assessment were carried over into 2020/21 or were completed for less than budget due to the packaging of multiple studies with one consultant
- the scheme's contingency amount was not drawn down.

Total water deliveries: 6511 ML

Water delivered to irrigators: 6006 ML

Service targets: Met

No exceptions

Outlook for 2021/22

Forecast operating costs: $1.46 million

Significant areas of expenditure:

- insurance ($0.42 million)
- operations ($0.81 million).

Forecast annuity-funded costs: $0.21 million

Key projects planned:

- a 20-year dam safety review of Bjelke-Petersen Dam ($0.07 million)
- replacement of customer meters, as required, during the year ($0.09 million).

Introduction

This Service and Performance Plan (S&PP) details a range of proposed scheme activities and projects, and presents a breakdown of anticipated costs for review. It also compares Sunwater's actual costs for 2019/20 with our previous forecasts for this scheme.

The purpose of this year's S&PP for the Barker Barambah Bulk Water Service Contract is to:

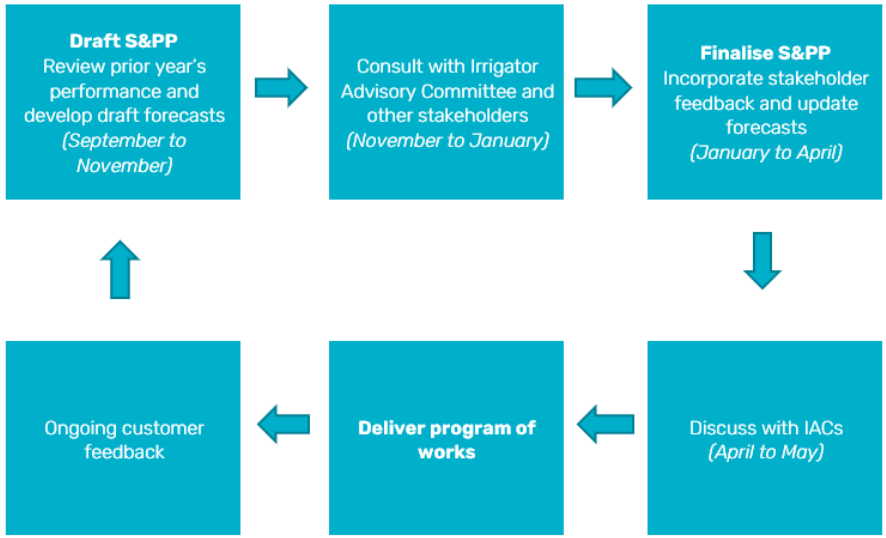
- present to customers Sunwater's projected costs[1] for the upcoming five-year period, i.e. 2021/22 to 2025/26
- consult with our customers on forecast operating and annuity-funded costs for 2021/22 and the forward program of works
- examine Sunwater's performance in 2019/20 against previous forecasts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

Our focus during 2021/22 will be delivering water to customers within agreed service standards, ensuring assets are maintained and works are completed in a safe, timely and efficient manner.

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

The majority of our 158 customers in this service contract are farmers in the areas of Redgate, Murgon and Mondure. Water is also provided to supplement the town water supply for the townships of Murgon, Wondai, Byee and Cherbourg.

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

Customer segment	Total water allocations (ML)	High priority water allocations (ML)	Medium priority water allocations (ML)	Total water deliveries 2019/20 (ML)
Irrigation	30,712	0	30,712	6006
Industrial	649	0	649	14
Urban	2115	2100	15	491
Sunwater	839	136	703	0
Total	**34,315**	**2236**	**32,079**	**6511**

Irrigation charges

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

Table 2: Irrigation charges for 2021/22

Tariff group	Product	2021/22 ($/ML)[1]	QCA cost-reflective ($/ML)[2]
River	Allocation Charge – Part A	24.56	44.57
	Allocation Water – Part B	3.62	4.35
Redgate Relift	Allocation Charge – Part A	24.56	49.71
	Allocation Water – Part B	19.61	54.67

1. Includes the Queensland Government's 15 per cent discount for irrigation customers. Refer to www.rdmw.qld.gov.au for more information.
2. 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 Barker Barambah Bulk Water Service Contract. Table 3 below sets out our recent performance against selected service targets for this scheme.

Table 3: Scheme service targets and performance

Service target		Target	Number of exceptions		
			2017/18	2018/19	2019/20
Planned shutdowns – notification	For shutdowns planned to exceed 2 weeks	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	0
Maximum number of interruptions	Planned or unplanned interruptions per water year	6	0	0	0

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 bulk water services to our customers in Barker Barambah.

Table 5: Key infrastructure

Asset	Description	Total storage capacity (ML)
Bjelke-Petersen Dam	Earth and rock fill dam, consisting of a saddle wall and a main wall. The spillway is located on the left abutment. Classified as a referable dam under the *Water Supply (Safety and Reliability) Act 2008*.	134,900
Joe Sippel Weir	Cascading concrete wall.	710
Silverleaf Weir	Timber piled, earth and rock structure.	580
Redgate Diversion Pipeline	Gravity, with a pumping unit installed when the dam level is too low. Transfers water from Bjelke-Petersen Dam to Joe Sippel Weir.	n/a
Upper Redgate Relift Pipeline	Includes a pump.	n/a

Financial summary—Revenue and expenditure

A high-level summary of the budgeted financial performance of the Barker Barambah Bulk Water 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 Barker Barambah Bulk Water 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 Barker Barambah Bulk Water Service Contract. Detail on the planned spend for this scheme is outlined on subsequent pages of this S&PP.

Figure 2: Total Sunwater cost pools and allocation to scheme—2021/22 forecast ($M)

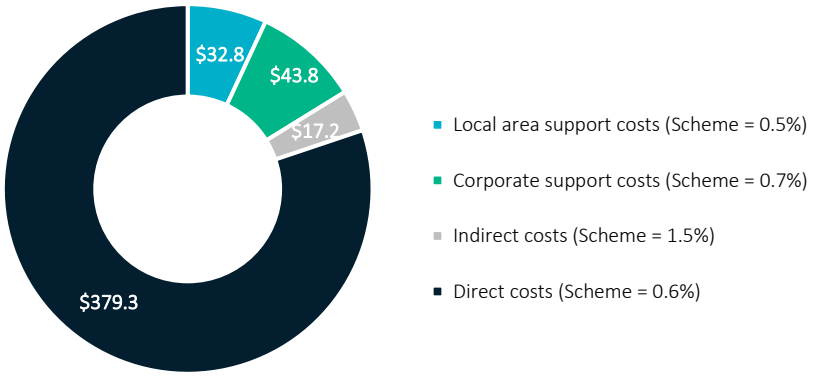


Table 6: Service contract financial summary

Barker Barambah Bulk Water Service Contract	2017/18 Actual $'000	2018/19 Actual $'000	2019/20 Actual $'000	2020/21 Forecast $'000	2021/22 Forecast $'000
Revenue					
Irrigation	813.1	864.2	843.9	904.1	1074.7
Community Service Obligation	-	-	-	-	-
Industrial[1]	-	-	-	-	14.8
Urban[1]	256.5	260.9	264.8	264.8	273.7
Revenue transfers	-	-	-	-	-
Drainage	-	-	-	-	-
Other	7.4	3.5	6.2	1.0	1.0
Revenue total	**1077.0**	**1128.5**	**1114.9**	**1169.9**	**1364.2**
Less – Operating expenditure	876.6	1129.7	1200.5	1318.0	1489.0
Less					
Annuity-funded	197.1	171.6	1126.5	3936.2	206.4
Non-annuity funded[2]	5.6	-	-	62.1	1214.5
Surplus (deficit)	**(2.3)**	**(172.8)**	**(1212.2)**	**(4146.3)**	**(1545.6)**

1. Forecast revenues for industrial and urban customers are based on current contractual arrangements.
2. This is expenditure which has not been funded by irrigation customers. An example of this in the Barker Barambah Bulk Water Service Contract is recreational facility projects from 2020/21.

Cost of delivering services—Operating expenditure

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

Table 7 sets out actual and forecast operating expenditure for the Barker Barambah Bulk Water Service Contract. For a more detailed breakdown by cost category, refer to **Appendix 2**.

Our performance in 2019/20

In 2019/20, operating costs were broadly in line with our previous forecast.[2] Operations costs were above budget, primarily driven by higher direct costs such as electricity, insurance and contractors. Increases in preventative maintenance costs were partially offset by lower corrective maintenance costs.

Table 7: Operating expenditure[1]

Barker Barambah Bulk Water Service Contract	2017/18	2018/19	2019/20			2020/21		2021/22		2022/23	2023/24	2024/25	2025/26
	Sunwater Actual $'000	Sunwater Actual $'000	Sunwater Forecast $'000	Sunwater Actual $'000	Variance $'000	Sunwater Forecast $'000	QCA Target $'000[2]	Sunwater Forecast $'000	QCA Target $'000[2]	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000
Operations	734.4	999.1	984.8	1039.6	54.8	1186.2	932.3	1298.9	954.8	1308.6	1341.9	1372.6	1401.6
Electricity	39.5	86.2	39.6	46.1	6.5	43.0	40.5	67.0	44.1	68.3	69.7	71.1	72.5
Insurance	192.5	207.0	229.2	236.0	6.7	318.2	260.8	417.6	266.0	425.9	434.4	443.1	452.0
Operations	502.4	705.8	716.1	757.6	41.6	825.0	631.1	814.4	644.7	814.3	837.7	858.4	877.1
Preventative maintenance	108.9	110.5	108.9	137.6	28.7	66.0	94.3	115.2	96.4	115.1	118.7	121.9	124.7
Corrective maintenance	33.3	20.1	42.3	23.3	(19.0)	38.2	33.9	45.9	34.6	46.0	47.3	48.5	49.6
Operating costs total	**876.6**	**1129.7**	**1136.0**	**1200.5**	**64.6**	**1290.4**	**1060.5**	**1460.0**	**1085.8**	**1469.7**	**1507.9**	**1543.0**	**1575.9**
Recreational facility costs[3]						27.6		29.0		29.0	29.8	30.5	31.2
Operating costs total (incl. recreational facility costs)	**876.6**	**1129.7**	**1136.0**	**1200.5**	**64.6**	**1318.0**		**1489.0**		**1498.6**	**1537.7**	**1573.6**	**1607.1**

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. 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.

[2] See the 2019/20 Network Service Plan at www.sunwater.com.au/schemes/Barker-Barambah/

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 Barker Barambah Bulk Water Service Contract:

- a review of our electricity tariff selections, to ensure that we are using the most cost-effective tariffs. Our review focused on the Upper Redgate pump station as it represents 88 per cent of consumption and most of the scheme's electricity costs. There was no change in tariff for 2019/20.
- an interval meter was installed at the Upper Redgate pump station to provide the granular level of consumption and demand information required to identify operational optimisation and renewable generation opportunities
- a solar assessment, which found that it is not currently cost-effective to invest in a solar installation.

Outlook for 2021/22

Operations

Barker Barambah Bulk Water Service Contract's total operations budget in 2021/22 is 36.0 per cent above the QCA's recommended cost target. This variance is largely driven by increased insurance costs (see below), as well as higher labour and non-direct costs related to complying with dam safety obligations. Sunwater will continue to seek efficient ways to deliver operations activities, with a view to aligning with the QCA target.

Insurance

Insurance is one of Sunwater's largest expenditure items. These costs have increased significantly in recent years due to multiple flood events in Queensland and global insurable events impacting premiums. Although Sunwater is subject to market forces in the pricing of insurance premiums, we have also been actively managing insurance premium costs by reviewing coverage levels and policy specifications (including deductibles) to ensure that our insurance coverage is appropriate and reflective of the risks faced by our business.

In 2020/21, Sunwater experienced a significant price increase in insurance premiums. Our insurance broker has indicated this is the beginning of an upward trend in premiums due to, among other factors, the number and size of natural disasters that have occurred in Australia over the past 12 months. Insurance premiums in 2021/22 are therefore expected to be higher than the QCA's recommended allowance and historical costs.

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.

Preventative maintenance

The forecast preventative maintenance costs for the Barker Barambah Bulk Water Service Contract are 19.5 per cent above the QCA's recommended cost target. This is attributed to a rebalancing of resources assigned to perform preventative maintenance and operational activities.

Corrective maintenance

In 2021/22, Sunwater anticipates spending $45.9k on corrective maintenance in the Barker Barambah Bulk Water Service Contract. This is 32.6 per cent above the QCA's recommended cost target.

Electricity metrics

Table 8 sets out electricity usage and efficiency-related information for the Barker Barambah Bulk Water Service Contract.

Table 8: Electricity usage and efficiency-related metrics

Metric	2016/17	2017/18	2018/19	2019/20
Electricity usage (kWh)	182,665	125,314	276,771	56,130
Water usage – Redgate Relift (ML)	874	454	633	197
Actual electricity cost per ML ($/ML delivered)	85.71	86.95	136.22	233.34
Average pump energy indicator[1] (kWh/ML/per metre of head)	4.96	5.68	6.62	5.32

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 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 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**.

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

Barker Barambah Bulk Water Service Contract	2017/18	2018/19	2019/20			2020/21		2021/22		2022/23	2023/24	2024/25	2025/26
	Sunwater Actual $'000[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	5.7	-	-	-	-	-	-	-	-	90.1	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	191.4	171.6	1492.8	1126.5	(366.2)	3936.2	2213.7	206.4	558.0	582.7	304.9	125.9	920.6
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Annuity-funded total	**197.1**	**171.6**	**1492.8**	**1126.5**	**(366.2)**	**3936.2**	**2213.7**	**206.4**	**558.0**	**672.8**	**304.9**	**125.9**	**920.6**
Non-annuity funded													
Dam Improvement Program	-	-	-	-	-	-		1202.4		3174.4	-	-	-
Recreational facility projects						62.1		12.1		104.1	-	-	45.7
Metered offtakes and dividend reinvestment	5.6	-	-	-	-	-		-		-	-	-	-
Non-annuity total	**5.6**	**-**	**-**	**-**	**-**	**62.1**		**1214.5**		**3278.4**	**-**	**-**	**45.7**

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.

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.

Sunwater has also recently undertaken an asset valuation exercise to estimate the value of fully replacing high value assets including dams and pipelines using a bottom-up assessment of material line items. This data will inform the replacement values underpinning forecast annuity-funded costs.

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

Barker Barambah Bulk Water Service Contract	2017/18 Actual $'000	2018/19 Actual $'000	2019/20 Actual $'000	2020/21 Forecast $'000	2021/22 Forecast $'000	2022/23 Forecast $'000	2023/24 Forecast $'000	2024/25 Forecast $'000	2025/26 Forecast $'000
Opening balance[1]	(909.3)	(922.4)	(866.4)	(1793.1)	(5119.5)	(4793.3)	(4536.3)	(3890.8)	(2166.3)
Spend[2]	(197.1)	(171.6)	(1126.5)	(3936.2)	(206.4)	(672.8)	(304.9)	(125.9)	(920.6)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	38.4	-	-	-	-	-	-	-
Annuity contribution[3]	252.0	258.3	264.8	688.1	756.4	1139.4	1148.8	2020.5	2025.1
Interest/financing costs	(68.1)	(69.1)	(64.9)	(78.4)	(223.8)	(209.6)	(198.3)	(170.1)	(94.7)
Sunwater – Closing balance	**(922.4)**	**(866.4)**	**(1793.1)**	**(5119.5)**	**(4793.3)**	**(4536.3)**	**(3890.8)**	**(2166.3)**	**(1156.6)**
QCA – Closing balance	**(922.4)**	**(866.4)**	**(2081.4)**	**(3698.0)**	**(3661.3)**	**(3181.7)**	**(2397.1)**		
Difference	-	-	288.4	(1421.5)	(1132.0)	(1354.7)	(1493.7)		

1. The opening balances for 2017/18, 2018/19 and 2019/20 reflect the QCA's 2020–2024 irrigation price investigation final recommendations.
2. The spend for 2017/18 and 2018/19 reflects the QCA's 2020–2024 irrigation price investigation final recommendations, which included adjustments to Sunwater's actual costs. The 2019/20 spend reflects Sunwater's actual costs. Thereafter, the spend is based on Sunwater's forecasts.
3. The annuity contribution is included in the prices paid by customers. It was set by the QCA from 2012/13 to 2016/17 and was rolled forward with the Consumer Price Index (CPI) for 2017/18, 2018/19 and 2019/20. From 2020/21 to 2023/24, the annuity contribution is based on the QCA's 2020–2024 irrigation price investigation final recommendations. Thereafter, it is based on Sunwater's projections.

Appendix 1—Historical water usage

The below table contains the scheme's recent water use, together with the 18-year average for the 2002/03 to 2019/20 period.

Year	Usage (ML)
2010/11	2651
2011/12	7974
2012/13	9819
2013/14	24,852
2014/15	17,435
2015/16	15,187
2016/17	18,010
2017/18	10,641
2018/19	13,134
2019/20	6511
18-year historical average	**12,617**

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

Barker Barambah Bulk Water 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	734.4	999.1	984.8	1039.6	54.8	1186.2	932.3	1298.9	954.8	1308.6	1341.9	1372.6	1401.6
Labour	140.9	181.9	182.9	174.1	(8.7)	191.0	152.9	193.9	156.4	199.7	205.7	211.9	218.3
Contractors	5.3	6.9	11.0	134.8	123.8	24.3	19.3	27.7	19.7	24.8	25.3	25.8	26.3
Materials	0.3	0.5	3.0	1.4	(1.6)	2.9	0.9	2.9	0.9	3.0	3.0	3.1	3.2
Electricity	39.5	86.2	39.6	46.1	6.5	43.0	40.5	67.0	44.1	68.3	69.7	71.1	72.5
Insurance	192.5	207.0	229.2	236.0	6.7	318.2	260.8	417.6	266.0	425.9	434.4	443.1	452.0
Other	27.0	85.0	96.9	110.1	13.3	101.8	74.9	100.9	76.4	104.5	105.0	105.8	106.5
Local area support costs	109.8	104.4	69.3	84.3	15.0	106.3	64.7	117.2	66.1	120.7	124.3	128.1	131.9
Corporate support costs	66.2	172.3	136.5	133.1	(3.5)	143.2	118.2	184.2	120.7	189.8	195.5	201.3	207.4
Indirect costs	152.9	154.8	216.5	119.8	(96.7)	255.6	200.1	187.5	204.5	171.8	178.8	182.5	183.6
Preventative maintenance	108.9	110.5	108.9	137.6	28.7	66.0	94.3	115.2	96.4	115.1	118.7	121.9	124.7
Labour	28.5	29.2	33.9	42.2	8.2	16.7	28.8	31.0	29.4	31.9	32.8	33.8	34.8
Contractors	20.0	23.2	12.0	9.0	(3.0)	11.7	6.2	11.7	6.3	11.9	12.1	12.4	12.6
Materials	2.5	0.8	1.0	0.1	(0.9)	1.0	1.3	1.0	1.3	1.0	1.0	1.0	1.1
Other	1.8	2.6	1.0	4.2	3.2	1.9	3.1	1.9	3.2	2.0	2.0	2.1	2.1
Local area support costs	22.2	15.4	12.1	22.0	9.9	9.2	12.2	19.3	12.4	19.9	20.5	21.1	21.7
Corporate support costs	12.3	24.2	25.3	33.3	8.0	12.6	22.2	29.4	22.7	30.3	31.2	32.1	33.1
Indirect costs	21.6	15.1	23.6	26.9	3.3	12.9	20.5	21.0	20.9	18.2	19.1	19.4	19.3
Corrective maintenance	33.3	20.1	42.3	23.3	(19.0)	38.2	33.9	45.9	34.6	46.0	47.3	48.5	49.6
Labour	5.8	2.9	10.1	2.1	(8.1)	8.0	7.7	10.0	7.9	10.3	10.6	10.9	11.2
Contractors	11.8	5.7	7.0	17.3	10.3	6.8	4.9	6.8	5.0	6.9	7.1	7.2	7.4
Materials	1.3	6.5	7.0	0.2	(6.8)	6.8	5.7	6.8	5.8	6.9	7.1	7.2	7.4
Other	2.5	-	-	-	-	-	0.8	-	0.8	-	-	-	-
Local area support costs	4.5	0.9	3.6	0.8	(2.8)	4.4	3.3	6.1	3.3	6.3	6.4	6.6	6.8
Corporate support costs	3.0	2.4	7.5	1.5	(6.0)	6.0	6.0	9.5	6.1	9.7	10.0	10.3	10.7
Indirect costs	4.4	1.8	7.0	1.5	(5.6)	6.2	5.5	6.8	5.6	5.9	6.1	6.2	6.2
Operating costs total	**876.6**	**1129.7**	**1136.0**	**1200.5**	**64.6**	**1290.4**	**1060.5**	**1460.0**	**1085.8**	**1469.7**	**1507.9**	**1543.0**	**1575.9**
Annuity-funded costs													
Labour			183.2	287.2	103.9	42.7	24.0	12.7	34.5	52.4	22.3	11.9	149.6
Contractors			603.3	258.0	(345.2)	3730.2	2097.9	70.4	190.3	350.1	91.6	22.2	159.0
Materials			338.4	29.7	(308.7)	68.9	38.8	68.7	185.8	137.9	140.6	63.9	218.5
Other			34.0	23.2	(10.9)	6.2	3.5	26.1	70.5	21.0	2.5	2.5	78.3
Local area support costs			69.7	118.8	49.1	23.2	13.1	7.7	20.8	31.7	13.6	7.3	90.3
Corporate support costs			136.8	219.1	82.3	32.0	18.0	12.1	32.7	49.8	21.2	11.3	142.1
Indirect costs			127.3	190.6	63.2	32.9	18.5	8.7	23.4	30.0	13.0	6.8	82.7
Annuity-funded total[1]	**197.1**	**171.6**	**1492.8**	**1126.5**	**(366.2)**	**3936.2**	**2213.7**	**206.4**	**558.0**	**672.8**	**304.9**	**125.9**	**920.6**
Total costs[2]	**1073.7**	**1301.3**	**2628.7**	**2327.1**	**(301.7)**	**5226.5**	**3274.2**	**1666.4**	**1643.8**	**2142.5**	**1812.8**	**1668.9**	**2496.5**

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 Barker Barambah Bulk Water Service Contract in 2019/20 and the actual projects undertaken.

Project	Forecast $'000	Actual $'000	Commentary
Silverleaf Weir – Refurbishment (20BBA03)	959	747	This project was planned to run over two financial years, with the 2019/20 scope on track until COVID-19 delayed the works planned for the fourth quarter. Works including design finalisation, procurement and contract award were impacted which postponed several activities and subsequent cashflow. The full scope of weir refurbishment was completed in 2020/21.
Bjelke-Petersen Dam – Refurbish guard valve No. 2 (17BBA03)	76	92	The guard valve was in worse condition than anticipated, which led to more extensive refurbishment costs. The low allocation early in the water year also limited the ability to leave the outlet offline hence a valve from Boondooma Dam was installed to maintain release capability. This led to additional costs related to isolation and installation aspects.
Bjelke-Petersen Dam – Comprehensive risk assessment (CRA) inputs (20BBA08 and 20BBA09)	207	70	The seismic study was completed for less than estimated due to packaging the work with other studies with one consultant. Commencement on the remaining studies was delayed, therefore less budget was utilised in 2019/20. This work was carried over to 2020/21.
Redgate Pipeline – Replace valve (13BBA02)	34	25	Access to the valve was made easier due to the low allocation (no demand) on this pipeline. This equated to less labour and time needed for dewatering and isolations, which increased efficiency for the works.
Bjelke-Petersen Dam – Level 2 bridge assessment (20BBA05)	30	35	The original estimate for this work was based on similar market costs for completed studies at other dam sites. The consultant costs for this facility were higher than the budgeted allowance.
Other works	187	140	The key cost variances related to the following projects: • additional meters and faulty meter components were replaced throughout the scheme (20BBA11 and 20BBA12; $24k above forecast) • the contingency budget for the scheme was not drawn down ($66k) • the estimate to return the observation bore to the original design depth included an allowance for the hire cost of drilling a new bore if necessary. The original bore was able to be cleared and returned to service for $8k less than the budgeted amount (20BBA07).
Non-scheduled works	-	17	There was an unplanned project to replace the original booster pump on the Redgate Pipeline (20BBA13). The original pump was due for maintenance but was subsequently deemed unserviceable and beyond economic refurbishment.
2019/20 Total	**1493**	**1127**	

Appendix 4—Annuity-funded projects for 2020/21 to 2025/26

The below table sets out Sunwater's currently planned annuity-funded projects for the 2020/21 to 2025/26 period for this scheme. While the immediate program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are likely to change in future S&PPs, reflecting changes in project delivery timing; asset condition and risk updates; outcomes from scheduled asset inspections; and customer feedback.

Year	Facility	Activity description	Forecast $'000
2020/21[4]	Silverleaf Weir	Refurbish – install sheet piling on the upstream side, concrete cap the weir and install new outlet works, based on the outcomes of the options study.	3335
	Bjelke-Petersen Dam	Study – comprehensive risk assessment based on regulatory requirements to better understand asset condition and risk.	190
	Bjelke-Petersen Dam	Study – updated geotechnical and failure consequence assessments will be conducted to inform the full level of societal risk. This information will inform the CRA.	154
	Bjelke-Petersen Dam	Replace – secondary bulkhead winch with an electrically actuated system.	34
	Bjelke-Petersen Dam	Refurbish – guard valve No. 2 at Bjelke-Petersen Dam based on known asset condition and age. Most of the work was completed in 2019/20; however, the valve could not be installed due to operational constraints. This work is to re-install the valve and complete the remaining refurbishment.	26
	Multiple	There were four other annuity-funded projects planned for 2020/21 including meter replacements; an asset revaluation; and a safety-related study into electrical arc flash following updated safety guidelines. The balance was a contingency allowance.	197
	2020/21 Total		**3936**
2021/22	Scheme	Replace – customer meters based on known asset condition and age.	85
	Joe Sippel Weir	Study – comprehensive inspection based on asset management standards and to better understand asset condition and risk.	16
	Upper Redgate and Bjelke-Petersen Dam	Refurbish – fence, gates and grids based on known asset condition and age.	34
	Bjelke-Petersen Dam	Study – 20-year dam safety review based on regulatory requirements and to better understand asset condition and risk.	72
	2021/22 Total		**207**
2022/23	Bjelke-Petersen Dam	Study – 20-year dam safety review based on regulatory requirements and to better understand asset condition and risk.	500

[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
	Bjelke-Petersen Dam	Study – grout anchor pull-out tests to inform the 20-year dam safety review.	86
	Scheme	Replace – customer meters based on known asset condition and age.	87
	2022/23 Total		**673**
2023/24	Bjelke-Petersen Dam	Study – comprehensive inspection based on regulatory requirements and to better understand asset condition and risk.	137
	Bjelke-Petersen Dam	Study – Level 2 Bridge inspection based on Department of Transport and Main Roads Structures Inspection Manual.	44
	Bjelke-Petersen Dam	Replace – outlet building dehumidifier based on known asset condition and age.	21
	Stream gauging stations	Replace – stream gauging equipment based on known asset condition and age.	16
	Scheme	Replace – customer meters based on known asset condition and age.	88
	2023/24 Total		**306**
2024/25	Bjelke-Petersen Dam	Study – options to replace dam instrumentation to better understand asset condition.	36
	Scheme	Replace – customer meters based on known asset condition and age.	90
	2024/25 Total		**126**
2025/26	Bjelke-Petersen Dam	Replace – total pressure cells pending outcome of the options study. Covers design and procurement.	196
	Bjelke-Petersen Dam	Replace – pneumatic piezometers pending outcome of the options study. Covers design and procurement.	196
	Bjelke-Petersen Dam	Replace – control equipment based on known asset condition and risk. Covers design, installation and commissioning.	113
	Scheme	Replace – customer meters based on known asset condition and age.	92
	Redgate Diversion Pipeline	Study – non-destructive testing to better understand asset condition.	65
	Stream gauging stations	Replace – stream gauging equipment based on known asset condition and age.	59
	Multiple	There are 12 other annuity-funded projects planned for 2025/26. These projects include: replacing gauging station recorders; outlet works discharge channel refurbishment at Bjelke-Petersen Dam; three valve refurbishments; upgrading fencing at Bjelke-Petersen Dam; ground penetrating radar surveys of the concrete at Bjelke-Petersen Dam; a 10-yearly crest survey; and a recovery winch refurbishment.	200
	2025/26 Total		**921**

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