# sunwater

Final Service and Performance Plan 2022/23

Pioneer River Bulk Water Service Contract

28 July 2022

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## At a glance

#### Our performance in 2020/21



Operating costs: \$1.32 million (7.6% less than QCA target)



Total water deliveries: 21,412 ML

Water delivered to irrigators: 7648 ML



Annuity-funded costs: \$2.76 million (970.5% more than QCA target)

included in the annuity-funded program of works assessed by the QCA for 2020/21.



Service targets: Met

### Outlook for 2022/23



Forecast operating costs: \$1.60 million

Significant areas of expenditure:



Forecast annuity-funded costs: \$1.12 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 Pioneer River Bulk Water Service Contract is to:

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

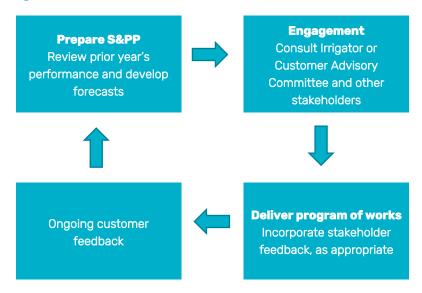
Our focus during 2022/23 will be on ensuring dam safety compliance is maintained and that refurbishment and corrective work identified through our annual and five yearly comprehensive inspections at Teemburra Dam and the scheme's weirs are implemented safely, timely and efficiently.

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:

 $\underline{www.sunwater.com.au/customer/products-and-services/service-and-performance-plans/}$ 

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: <a href="mailto:sppfeedback@sunwater.com.au">sppfeedback@sunwater.com.au</a>

Post: S&PP Feedback PO Box 15536

City East Qld 4002

 $<sup>^1\,\</sup>mathrm{All}$  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

Most customers in this scheme are irrigators in Pioneer River, Palm Creek and Cattle Creek. Water is also provided to supplement the town water supply for Mackay and surrounding townships, and for industrial purposes.

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 data

Customer segment	Total water allocations (ML)	High-A priority water allocations (ML)	High-B priority water allocations (ML)	Total water deliveries 2020/21 (ML)
Irrigation	47,390	33	47,357	7648
Urban	16,520	16,520	0	13,054
Industrial	1920	1920	0	709
Sunwater	12,280	12,280	0	0
Total	78,110	30,753	47,357	21,412

#### Irrigation charges

The 2022/23 charges and cost per megalitre are shown in Table 2.

Table 2: Irrigation charges for 2022/23

Tariff group	Product	2022/23 (\$/ML) <sup>1</sup>	QCA cost- reflective (\$/ML) <sup>2</sup>
Pioneer Valley Water Board	Allocation Charge – Part A	17.30	21.42
Pioneer valley Water Board	Allocation Water – Part B	2.78	3.92

- 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 (excluding dam improvement costs). 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 has company-wide customer interactions service targets. Our performance in 2020/21 against these service targets is shown in Table 3.

Table 3: Customer interactions service targets and performance

Service target	Target	2020/21
Telephone answering <sup>1</sup>	80.00%	90.93%
Requests actioned within Service Level Agreement (SLA) timeframes <sup>2</sup>	> 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 4 lists the key infrastructure used to deliver bulk water services to our customers in Pioneer River.

Table 4: Key infrastructure

Asset	Description	Total storage capacity (ML)
Teemburra Dam	Concrete faced rock fill structure with three saddle dams and an ogee crest spillway. Classified as a referable dam under the <i>Water Supply (Safety and Reliability) Act 2008</i> .	147,500
Dumbleton Weir	Mass concrete structure with a fish lock.	8840
Mirani Weir	Mass concrete. It is also used as a pumping pool for the Mirani pumping stations which supply water to Kinchant Dam in the Eton water supply system.	4660
Marian Weir	Mass concrete with ogee crest in two sections.	3980

## Financial summary—Revenue and expenditure

A high-level summary of the budgeted financial performance of the Pioneer River Bulk Water Service Contract is presented in Table 5.

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

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 Pioneer River Bulk Water Service Contract. Details on the planned spend for this scheme are outlined on subsequent pages of this S&PP.

Figure 2: Total Sunwater cost pools and allocation to scheme—2022/23 forecast (\$M)



*Table 5: Service contract financial summary* 

Pioneer River Bulk Water 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	726.6	740.1	728.5	1032.9	878.1
Community Service Obligation	-	-	289.4	-	-
Industrial <sup>1</sup>	650.1	652.3	597.1	644.1	643.6
Urban <sup>1</sup>	181.5	203.3	220.2	224.6	224.6
Revenue transfers	-	-	-	-	-
Drainage	-	-	-	-	-
Other	-	0.6	0.6	-	-
Revenue total	1558.1	1596.4	1835.8	1901.6	1746.4
Less – Operating expenditure	1360.4	1168.0	1319.5	1868.5	1597.0
Less					
Annuity-funded	94.7	1524.7 <sup>2</sup>	2756.6	433.4	1120.8
Non-annuity funded <sup>3</sup>	-	-	36.3	-	-
Surplus (deficit)	103.0	(1096.2)	(2276.7)	(400.3)	(971.4)

- Forecast revenues for industrial and urban customers are based on current contractual arrangements.
- The annuity-funded spend for 2019/20 has been adjusted to include historical costs associated with a comprehensive risk assessment of Teemburra Dam. These costs were inadvertently classified as Dam Improvement Program costs previously.
- 3. This is expenditure which has not been funded by irrigation customers. An example of this in the Pioneer River Bulk Water Service Contract is recreational facility projects from 2020/21.

## Cost of delivering services—Operating expenditure

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

Table 6 sets out actual and forecast operating expenditure for the Pioneer River Bulk Water Service Contract. For a more detailed breakdown by cost category, refer to **Appendix 2**.

#### Our performance in 2020/21

In 2020/21, operating costs were lower than the QCA's recommended cost target. This was due to a re-evaluation of the preventative maintenance program, amalgamating together like tasks and improving timing.

Table 6: Operating expenditure<sup>1</sup>

Pioneer River Bulk Water	2018/19	2019/20		2020/21		202	1/22	2022	2/23	2023/24	2024/25	2025/26	2026/27
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	819.1	757.4	925.5	913.0	(12.5)	1380.1	946.0	1179.7	968.4	1244.1	1306.3	1374.3	1451.3
Electricity	4.1	3.9	5.1	5.0	(0.1)	5.3	6.4	4.0	6.5	4.1	4.2	4.3	4.5
Insurance	338.9	377.9	426.9	502.3	75.5	668.5	435.4	555.6	445.4	599.4	646.7	697.7	752.8
Operations	476.1	375.6	493.6	405.7	(87.9)	706.2	504.2	620.0	516.5	640.6	655.4	672.3	694.1
Preventative maintenance	365.7	345.2	371.7	308.6	(63.2)	301.2	379.8	255.3	389.0	263.1	270.3	277.2	286.1
Corrective maintenance	175.5	65.4	131.4	97.9	(33.4)	187.2	134.1	162.0	137.3	166.9	171.4	175.9	181.3
Operating costs total	1360.4	1168.0	1428.7	1319.5	(109.1)	1868.5	1459.9	1597.0	1494.7	1674.1	1748.1	1827.4	1918.7
Recreational facility costs <sup>3</sup>				-		-		-		-	-	-	-
Operating costs total (incl. recreational facility costs)	1360.4	1168.0		1319.5		1868.5		1597.0		1674.1	1748.1	1827.4	1918.7

- 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.
- . 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.

## Outlook for 2022/23 Operations

Pioneer River Bulk Water Service Contract's total operations budget in 2022/23 is 21.8 per cent above the QCA's recommended cost target. This variance is largely driven by higher insurance costs (see below), labour costs and non-direct costs.

#### 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.

#### Preventative maintenance

The forecast preventative maintenance costs for the Pioneer River Bulk Water Service Contract are 34.4 per cent below the QCA's recommended cost target. This is because of lower labour and non-direct costs, as the result of a classification difference between operations and preventative maintenance.

#### Corrective maintenance

In 2022/23, Sunwater anticipates spending \$162.0k on corrective maintenance in the Pioneer River Bulk Water Service Contract. This is 18.0 per cent above the QCA's recommended cost target, primarily due to higher non-direct costs and contractor costs. In recent years there has been minimal corrective work undertaken in the service contract, which has distorted the historical average.

## 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 7 outlines our annuity and non-annuity funded expenditure for this service contract.

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

	2018/19	2019/20		2020/21		2021	1/22	2022	2/23	2023/24	2024/25	2025/26	2026/27
Pioneer River Bulk Water Service Contract	Sunwater / QCA Actual \$'000 <sup>3</sup>	Sunwater Actual \$'000	QCA Target \$'000 <sup>4</sup>	Sunwater Actual \$'000	Variance \$'000	Sunwater Forecast \$'000	QCA Target \$'000 <sup>4</sup>	Sunwater Forecast \$'000	QCA Target \$'000 <sup>4</sup>	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Annuity-funded													
Operations	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventative maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Planned corrective maintenance	94.7	1524.7	257.5	2756.6	2499.1	433.4	315.6	1120.8	127.3	1407.4	1469.8	1549.5	1692.0
Unplanned corrective maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Annuity-funded total	94.7	1524.7 <sup>5</sup>	257.5	2756.6	2499.1	433.4	315.6	1120.8	127.3	1407.4	1469.8	1549.5	1692.0
Non-annuity funded													
Dam Improvement Program	-	-		-		-		-		-	-	-	-
Recreational facility projects				36.3		-		-		-	99.4	-	66.9
Metered offtakes and dividend reinvestment	-	-		-		-		-		-	-	-	-
Non-annuity total	-	-		36.3		-		-		-	99.4	-	66.9

- 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. The annuity-funded spend for 2019/20 has been adjusted to include historical costs associated with a comprehensive risk assessment of Teemburra Dam. These costs were inadvertently classified as Dam Improvement Program costs previously.

## 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 comprehensive risk assessment of Teemburra Dam (\$2.46 million), which was not included in the annuity-funded program of works assessed by the QCA.

#### Project level cost variances

**Appendix 3** provides a comparison of the annuity-funded projects planned for 2020/21 and the actual projects undertaken, together with justification for the variances.

#### Outlook

Details of the major annuity-funded projects planned for the 2022/23 to 2026/27 period are set out in

Appendix 4. In 2022/23, Sunwater plans to commence a risk reduction program at Teemburra Dam and remove and dispose of the sheet piling coffer dam at Marian Weir.

#### Asset management and planning improvements

In its final report for the 2020–2024 irrigation price investigation, the QCA identified several potential improvements to Sunwater's asset management and planning framework. It suggested Sunwater should:

- improve our predictive maintenance and asset condition reporting arrangements to better inform the timing of asset replacement
- review our cost estimation approach and ensure that asset values are based on modern equivalent replacement values where appropriate
- develop transparent guidelines for options analyses.<sup>2</sup>

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

 $<sup>^2 \</sup> See \ pages \ 58 \ to \ 60, \ \underline{www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-part-b-sunwater-final-report.pdf}$ 

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.

Sunwater undertook an asset valuation exercise in 2021 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 informs the replacement values underpinning forecast annuity-funded costs outside of the immediate program of works.

#### **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 8 below.

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

Table 8: Annuity balance

Pioneer River Bulk Water 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 <sup>1</sup>	(4243.8)	(4176.2)	(5521.5)	(7523.8)	(7207.2)	(7501.5)	(8071.4)	(8963.8)	(9953.2)
Spend <sup>2</sup>	(94.7)	(1524.7)	(2756.6)	(433.4)	(1120.8)	(1407.4)	(1469.8)	(1549.5)	(1692.0)
Insurance proceeds receipts (if applicable)									
Prior year	-	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-	-
Annuity contribution <sup>3</sup>	480.1	492.1	995.7	1079.1	1141.6	1165.5	930.2	952.0	965.3
Interest/financing costs	(317.9)	(312.8)	(241.4)	(329.0)	(315.1)	(328.0)	(352.9)	(391.9)	(435.2)
Sunwater – Closing balance	(4176.2)	(5521.5)	(7523.8)	(7207.2)	(7501.5)	(8071.4)	(8963.8)	(9953.2)	(11,115.0)
QCA – Closing balance	(4176.2)	(4749.4)	(4218.9)	(3639.8)	(2784.7)	(2355.5)			
Difference	-	(772.1)	(3305.0)	(3567.3)	(4716.8)	(5715.8)			

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

## Appendix 1—Historical water usage

The below table contains the scheme's recent water use, together with the 19-year average for the 2002/03 to 2020/21 period.

Year	Usage (ML)
2010/11	12,439
2011/12	18,753
2012/13	24,296
2013/14	27,604
2014/15	30,396
2015/16	27,894
2016/17	16,576
2017/18	24,984
2018/19	26,203
2019/20	26,983
2020/21	21,412
19-year historical average	24,493

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

	2018/19	2019/20		2020/21		202:	1/22	202:	2/23	2023/24	2024/25	2025/26	2026/27
Pioneer River Bulk Water 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	819.1	757.4	925.5	913.0	(12.5)	1380.1	946.0	1179.7	968.4	1244.1	1306.3	1374.3	1451.3
Labour	113.3	110.4	104.4	94.4	(10.0)	166.5	106.8	152.0	109.5	156.6	161.3	166.1	171.1
Contractors	4.9	4.5	25.9	36.1	10.2	42.5	26.4	20.0	27.0	20.6	21.1	21.7	22.3
Materials	0.9	0.1	1.2	3.0	1.8	5.0	1.2	5.0	1.3	5.1	5.3	5.4	5.6
Electricity	4.1	3.9	5.1	5.0	(0.1)	5.3	6.4	4.0	6.5	4.1	4.2	4.3	4.5
Insurance	338.9	377.9	426.9	502.3	75.5	668.5	435.4	555.6	445.4	599.4	646.7	697.7	752.8
Other	60.1	39.7	80.6	40.6	(40.0)	65.4	82.2	68.6	84.1	69.4	70.3	73.0	74.0
Local area support costs	94.8	59.4	50.4	50.3	(0.1)	108.6	51.5	98.9	52.8	101.8	104.9	108.0	111.3
Corporate support costs	108.6	83.2	80.7	84.1	3.4	158.2	82.4	144.4	84.4	148.8	153.2	157.8	162.6
Indirect costs	93.5	78.4	150.5	97.1	(53.3)	160.0	153.7	131.1	157.4	138.2	139.3	140.1	147.3
Preventative maintenance	365.7	345.2	371.7	308.6	(63.2)	301.2	379.8	255.3	389.0	263.1	270.3	277.2	286.1
Labour	90.0	88.0	93.2	75.5	(17.6)	59.2	95.3	46.8	97.7	48.2	49.6	51.1	52.6
Contractors	78.4	72.4	75.6	46.0	(29.6)	95.0	77.1	95.0	79.0	97.6	100.3	103.1	105.9
Materials	3.8	6.8	9.1	1.0	(8.1)	5.0	9.3	5.0	9.5	5.1	5.3	5.4	5.6
Other	1.4	4.8	10.4	6.2	(4.2)	7.0	10.6	7.0	10.9	7.2	7.4	7.6	7.8
Local area support costs	80.8	47.2	45.0	45.0	0.0	38.5	46.0	30.4	47.1	31.3	32.2	33.2	34.2
Corporate support costs	74.0	67.2	72.0	75.2	3.2	56.3	73.6	44.4	75.3	45.7	47.1	48.5	50.0
Indirect costs	37.3	58.9	66.4	59.7	(6.8)	40.2	67.9	26.7	69.5	28.0	28.4	28.3	30.0
Corrective maintenance	175.5	65.4	131.4	97.9	(33.4)	187.2	134.1	162.0	137.3	166.9	171.4	175.9	181.3
Labour	11.8	9.1	17.0	8.2	(8.8)	27.6	17.3	20.6	17.8	21.2	21.9	22.5	23.2
Contractors	129.2	28.4	47.2	56.9	9.7	70.0	48.2	70.0	49.3	71.9	73.9	75.9	78.0
Materials	3.8	4.8	16.2	11.8	(4.5)	10.0	16.5	10.0	16.9	10.3	10.6	10.8	11.1
Other	2.6	4.9	17.6	1.6	(16.1)	16.6	18.0	16.6	18.4	17.1	17.6	18.0	18.5
Local area support costs	12.7	5.2	8.2	4.7	(3.4)	18.0	8.4	13.4	8.6	13.8	14.2	14.6	15.1
Corporate support costs	8.4	7.1	13.1	8.3	(4.8)	26.2	13.4	19.6	13.7	20.2	20.8	21.4	22.1
Indirect costs	7.1	5.8	12.1	6.5	(5.6)	18.8	12.3	11.8	12.6	12.3	12.5	12.5	13.2
Operating costs total	1360.4	1168.0	1428.7	1319.5	(109.1)	1868.5	1459.9	1597.0	1494.7	1674.1	1748.1	1827.4	1918.7
Annuity-funded costs													
Labour		223.0	25.5	273.3	247.8	64.6	47.0	87.9	10.0	239.2	324.9	262.4	284.7
Contractors		791.5	169.8	1817.9	1648.1	176.0	128.1	729.7	82.9	562.3	199.1	381.4	310.1
Materials		40.7	0.5	5.8	5.3	38.6	28.1	69.7	7.9	71.1	171.4	225.9	310.1
Other		41.0	4.8	51.5	46.7	6.9	5.0	45.5	5.2	59.4	113.3	129.7	169.2
Local area support costs		112.8	10.7	114.1	103.4	42.1	30.7	54.2	6.2	109.1	166.4	155.8	185.0
Corporate support costs		162.4	26.4	283.1	256.6	61.4	44.7	83.5	9.5	227.3	308.6	249.2	270.5
Indirect costs		153.3	19.7	210.8	191.2	43.9	31.9	50.2	5.7	139.0	186.1	145.1	162.4
Annuity-funded total <sup>1</sup>	94.7	1524.7	257.5	2756.6	2499.1	433.4	315.6	1120.8	127.3	1407.4	1469.8	1549.5	1692.0
Total costs <sup>2</sup>	1455.1	2692.6	1686.2	4076.1	2390.0	2301.9	1775.5	2717.8	1622.0	3081.5	3217.9	3376.8	3610.7

<sup>1.</sup> 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.

<sup>2.</sup> 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 Pioneer River Bulk Water Service Contract in 2020/21<sup>3</sup> and the actual projects undertaken.

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
Teemburra Dam	Study – comprehensive inspection.	85	75	This project was completed within budget.
Teemburra Dam	Study – investigate spillway foundations beneath the crest using ground penetrating radar.	78	4	This project was deferred due to high water levels.
Teemburra Dam	Study – investigate the passive anchor strength assumptions using pull-out tests.	70	4	This project was deferred due to high water levels.
Dumbleton Weir	Remove – obsolete fabridam from the weir and related attachments.	66	93	Contractor costs were higher than expected, due to an increase in the scope of works and market costs.
Scheme	Study – audit and review of all scheme switchboards and distribution boards to reassess arc flash rating.	53	40	Sunwater was unable to fully complete this project during the financial year due to operational demands limiting the ability to affect an outage to gain access to the infrastructure.
Palmtree Creek	Replace – components of the cathodic protection system on the pipeline.	30	41	Contractor costs were higher than expected.
Teemburra Dam – Saddle Dam 2	Refurbish – three Saddle Dam 2 baulks (blast and paint).	20	17	This project was completed within budget, due to lower contractor costs.
Multiple	Various projects.	184	6	The cost variance primarily relates to the following projects:  a decision to defer the relocation of radio repeaters at Mirani Water Tower (\$126k)  the asset revaluation (\$26k) and a study into the upstream embankment condition of Saddle Dam 3 (\$13k) not being undertaken as part of the annuity-funded program of works.  The service contract's contingency fund of \$10k was re-allocated to other projects.
Multiple	Various projects.	0	2476	Most of this expenditure related to a comprehensive risk assessment (CRA) of Teemburra Dam. A CRA reviews the condition and compliance of the dam with the current Queensland and Australian guidelines.  Works undertaken under the CRA include, but not limited to, the review of technical, legal and regulatory requirements, site inspections, geotechnical

<sup>&</sup>lt;sup>3</sup> Based on information extracted from Sunwater's systems in mid-2020. See the 2021/22 S&PP at <a href="www.sunwater.com.au/schemes/Pioneer-River/">www.sunwater.com.au/schemes/Pioneer-River/</a>

Facility	Activity description	Forecast \$'000	Actual \$'000	Commentary
				investigations, hydrology studies, failure mode analysis and consequence assessment.  Sunwater also commenced a project to refurbish a 900 mm butterfly valve at Palmtree Creek (\$14k).
2020/21 Total		586	2757	

## Appendix 4—Annuity-funded projects for 2022/23 to 2026/27

The below table sets out Sunwater's currently planned annuity-funded projects for the 2022/23 to 2026/27 period for this scheme. While the immediate program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are likely to change in future S&PPs, reflecting changes in project delivery timing; asset condition and risk updates; outcomes from scheduled asset inspections; and customer feedback.

Year	Facility	Activity description	Forecast \$'000
2022/23	Teemburra Dam Risk reduction program – investigation phase.		742
	Marian Weir	Refurbish – remove and dispose of the sheet piling coffer dam and related construction debris.	135
	Teemburra Dam	Refurbish – main dam trash racks, lifting frame, baulks, and dome bulkhead gate (blast and paint) based on known asset condition and age.	68
	Teemburra Dam – Saddle Dam 2	Refurbish – intake trash racks 1 to 3 (blast and paint) based on known asset condition and age.	49
	Teemburra Dam	Refurbish – 1915 mm diameter conduit dome end plate (blast and paint) and replace explosive bolts based on known asset condition and age.	30
	Teemburra Dam – Saddle Dam 2	Replace – outlet works uninterruptible power supply batteries based on known asset condition and age.	30
	Teemburra Dam – Saddle Dam 1	Refurbish – extend V-notch training walls and provide safe operator access.	30
	Multiple	There are four other annuity-funded projects planned for 2022/23 related to replacing gauging and rainfall equipment at Teemburra Dam; replacing the outlet works main conduit pressure sensor; and refurbishing a 1200 mm diameter guard valve position indicator.	37
	2022/23 Total		1121
2023/24	Teemburra Dam	Risk reduction program – evaluation phase.	1020
	Teemburra Dam	Refurbish – main dam outlet works guard valve based on known asset condition and age.	88
	Dumbleton, Mirani and Marian weirs	Study – siltation surveys to meet asset management, condition, and risk standards.	56
	Teemburra Dam	Study – light detection and ranging survey to meet asset management, condition, and risk standards.	29
	Dumbleton Weir	Refurbish – building (paint and fittings) based on known asset condition and age.	36
	Teemburra Dam	Refurbish – creek diversion channel drop structures.	34
	Teemburra Dam	Replace – signage to mitigate known safety risks.	28
	Dumbleton Weir	Study – options to identify the optimal solution to replace control equipment.	24
	Multiple	There are four other annuity-funded projects planned for 2023/24 related to refurbishing an outlet conduit at Mirani Weir; refurbishing a control building at Mirani Weir; replacing the supervisory control and data acquisition computer and software at Teemburra Dam; and a main spillway secondary concrete options analysis.	92

Year	Facility	Activity description	Forecast \$'000
	2023/24 Total		1407
2024/25	Teemburra Dam	Risk reduction program – definition phase.	573
	Dumbleton Weir	Refurbish – design and construct enhanced downstream left bank protection works.	183
	Dumbleton Weir	Replace – design and procurement of control system equipment.	95
	Teemburra Dam – Saddle Dam 2 Replace – control system programmable logic controller (PLC) based on known asset condi		64
	Teemburra Dam – Saddle Dam 2 Replace – winch control PLC based on known asset condition and age.		59
	Teemburra Dam Replace – winch control PLC based on known asset condition and age.		59
	Teemburra Dam	Refurbish – main dam main conduit 150 mm filling and air vent pipelines.	52
	Marian Weir	Refurbish – control building security fencing, gates and grids based on known asset condition and age.	47
	Teemburra Dam	Study – options to identify the optimal solution to refurbish the main pipe including joints.	36
	Teemburra Dam	Refurbish – main dam winch building based on known asset condition and age.	35
	Teemburra Dam	Refurbish – main dam access road.	27
	Teemburra Dam – Saddle Dam 2	Study – options analysis to determine the most cost-effective replacement for embankment piezometers.	24
	Multiple	There are seven other annuity-funded projects planned for 2024/25 related to refurbishing fishway hydraulics at Dumbleton Weir; refurbishing a repeater at Teemburra Dam; replacing gauging equipment; main spillway concrete works; and various small PLC replacements.	216
	2024/25 Total		1470
2025/26	Teemburra Dam	Risk reduction program – execution phase.	322
	Teemburra Dam	Refurbish – main pipe including joints based on known asset condition and age.	259
	Teemburra Dam	Refurbish – main dam to valve chamber access road based on known asset condition and age.	194
	Dumbleton Weir	Replace – installation and commissioning of new control system and equipment.	130
	Teemburra Dam	Study – comprehensive inspection to meet regulatory compliance.	119
	Teemburra Dam	Refurbish – Palmtree Creek to Saddle Dam 2 access road based on known asset condition and age.	78
	Palmtree Creek Pipeline	Replace – ultrasonic flow meters 1 and 2 based on known asset condition and age.	90
	Teemburra Dam	Replace – hydraulic/electric piezometers equipment. Covers procurement and supply.	65
	Marian Weir	Refurbish – left-hand and right-hand outlet valves based on known asset condition and age.	65
	Scheme	Study – asset revaluation to define asset value for insurance purposes and future expenditure profiles.	34
	Mirani Weir	Refurbish – blast and paint outlet works inlet trash racks and baulks.	30
	Marian Weir	Replace – upstream ponded area marker buoy system.	26

Year	Facility	Activity description	Forecast \$'000
	Multiple	There are nine other annuity-funded projects planned for 2025/26 related to refurbishing valve chamber pipework at Teemburra Dam; refurbishing the outlet works baulks at Saddle Dam 2; refurbishing the valve pit access road; and refurbishing fences and gates at the weirs.	137
	2025/26 Total		1549
2026/27	Teemburra Dam – Saddle Dam 2 Replace/upgrade – piezometer system with current automated vibrating weir (or similar) real time instrumentation and telemetry.		322
	Teemburra Dam	Refurbish – main dam outlet works hydraulic system, handrails, platforms, and minor pipe systems.	245
	Marian Weir	Refurbish – outlet works conduits, handrails, platforms, stairs, and access track (subject to renewed condition data and business requirements).	221
	Mirani Weir	Refurbish – general concrete repairs to abutment aprons, upstream and downstream faces (subject to condition assessment) and the vertical lift gate.	174
	Mirani Weir	Replace – weir control system equipment (subject to condition assessment).	121
	Mirani Weir	Replace – cathodic protection system, main switchboard, and control building general lighting, power, and air conditioner.	121
	Teemburra Dam	Refurbish – main dam inlet structure trash racks, platforms, and handrails.	147
	Teemburra Dam	Replace – main dam and area cattle fencing, security, and access gates.	80
	Teemburra Dam – Saddle Dam 1	Refurbish – baulk transfer system, trolley, drive motor, lifting and transfer hydraulics, platforms, and handrails.	58
	Dumbleton Weir	Replace – fish lock switchboard and motor starter and lock drain valve.	68
	Mirani and Dumbleton weirs	Study – comprehensive inspection based on regulatory requirements and to better understand asset condition and risk.	54
	Multiple	There are six other annuity-funded projects planned for 2026/27 related to a Palmtree Creek Pipeline rupture disk and pit access ladder works; a bulkhead gate refurbishment at Mirani Weir; and road refurbishments at Saddle Dam 2.	81
	2026/27 Total		1692

#### Contact us

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

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