

2019/20 to 2023/24 Network Service Plan Fact Sheet

St George Bulk Water Service Contract

This fact sheet details a range of proposed immediate and longer-term improvement projects, and presents a breakdown of anticipated costs. It also provides a summary of changes provided to the Queensland Competition Authority (QCA) during the current irrigation price review process for new prices commencing on 1 July 2020.

Summary of key changes

On 6 November 2018, Sunwater provided a comprehensive submission to the QCA's review of irrigation prices for the 2021–24 period. We have since updated our forecast costs to reflect changes to underlying inputs, including:

- a revised non-routine program of works, based on the latest available information (eg condition and risk data)
- a greater focus on direct charging of labour to service contracts and the splitting of local area support costs to better align with where the costs are incurred
- an increase in insurance premiums, to align with current market conditions and a revalued insurance asset base
- a small reduction in total Inspector-General Emergency Management (IGEM) costs and a change in the way these costs are allocated to service contracts with referable dams, from a purely risk-based approach to one that allocates costs on an equal-share basis and risk. IGEM costs are approximately \$125,000 for this service contract in 2019/20.
- revised electricity escalators, which take into account more detailed site information including updated consumption data and current retail tariffs. For sites on transitional or obsolete regulated retail electricity tariffs that cease on 30 June 2020¹ or 30 June 2022, Sunwater has also corrected the year in which the step change increase is applied.
- using the scheme's 16-year average water usage over the 2002/03 to 2017/18 period to determine the Part B cost per megalitre.

These changes have been reflected in this Network Service Plan (NSP) fact sheet and Sunwater's June 2019 regulatory model, which is available at: <https://www.sunwater.com.au/customer/fees-and-charges/water-pricing-review/>.

For additional information on Sunwater's cost categories and Cost Allocation Methodology, please refer to the 2018/19 NSPs at: <https://www.sunwater.com.au/customer/products-and-services/network-service-plans/>.

¹ The Queensland Government subsequently announced that customers would have until 30 June 2021 to move to standard electricity tariffs. Due to the timing of this announcement, this extension has not been reflected in our modelling.

Irrigation charges for 2019/20

The 2019/20 charges and cost per megalitre are shown in **Table 1**. For the full suite of charges that apply, refer to Sunwater's website.

Table 1: Irrigation charges for 2019/20¹

Product	Charge type	2019/20 (\$/ML)	Cost (\$/ML) ^{2,3}	Subsidy (\$/ML)
Bulk water customers				
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon allocation)	21.91	20.18	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	1.38	1.50	0.12
Bulk water customers who are also customers of a distribution system				
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon allocation)	20.86	20.18	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	1.38	1.50	0.12

1. This table includes bulk water charges only. Distribution charges are set by Mallowa Irrigation Ltd.
2. Costs reflect lower bound cost recovery ie recovery of future replacement and ongoing maintenance and operations. Charges do not allow for any capital returns on existing assets.
3. The notional High Priority Allocation Charge cost per megalitre is \$31.98.

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the St George Bulk Water Service Contract. **Table 2** below sets out our performance in 2016/17 and 2017/18 against selected service targets.

Table 2: Service targets and performance

Service target	Target	Number of exceptions		
		2016/17	2017/18	
Planned shutdowns – notification	For shutdowns planned to exceed 2 weeks	8 weeks	0	0
	For shutdowns planned to exceed 3 days	2 weeks	0	0
	For shutdowns planned to be less than 3 days	5 days	0	0
Unplanned shutdowns – duration ¹	Unplanned shutdowns during Peak Demand Period	48 hours	0	0
	Unplanned shutdowns outside Peak Demand Period	5 working days		
Maximum number of interruptions ²	Planned or unplanned interruptions per water year	6	0	0

1. This is the number of times that the unplanned shutdown has exceeded the shortest of the peak/off peak periods.
2. This is the total number of bulk and distribution customers in the scheme that have been interrupted in excess of the target.

Routine expenditure

Routine (or annual) expenditure includes funds for operations activities (operations, electricity and insurance), preventative maintenance and corrective maintenance.

Table 3: Routine expenditure^{1,2}

St George Bulk Water Service Contract	2015/16			2016/17			2017/18 ³		2018/19 ³		2019/20	2020/21	2021/22	2022/23	2023/24
	Sunwater Actual \$'000	QCA Recommended \$'000	Variance \$'000	Sunwater Actual \$'000	QCA Recommended \$'000	Variance \$'000	Sunwater Estimate ⁴ \$'000	2016/17 QCA Recommended (Adjusted) \$'000	Sunwater Forecast \$'000	2016/17 QCA Recommended (Adjusted) \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Operations	549.8	686.7	(136.9)	435.5	692.2	(256.7)	804.5	709.5	757.0	727.2	774.4	774.5	794.1	814.2	834.2
Labour	121.4	169.2	(47.9)	86.5	174.6	(88.1)	181.6	179.0	121.6	183.5	125.0	124.8	128.3	131.8	135.4
Contractors	7.9	18.0	(10.1)	10.2	18.3	(8.2)	11.2	18.8	14.7	19.3	15.0	14.9	15.3	15.6	16.0
Materials	4.6	71.0	(66.4)	1.8	72.2	(70.5)	22.0	74.0	19.6	75.9	20.0	19.9	20.3	20.8	21.3
Electricity	3.5	10.4	(6.9)	7.5	11.1	(3.6)	7.5	11.4	6.7	11.6	6.2	6.0	6.3	6.8	6.8
Insurance	117.8	43.1	74.7	114.4	43.8	70.6	102.7	44.9	120.9	46.0	123.4	126.2	129.1	132.1	135.1
Other	6.7	31.0	(24.3)	15.3	31.5	(16.2)	18.0	32.3	68.1	33.1	69.5	69.1	70.7	72.3	73.9
Local area support costs	104.4	-	104.4	74.3	-	74.3	139.1	-	107.8	-	110.4	109.9	112.7	115.6	118.5
Corporate support costs	40.8	165.8	(125.0)	31.3	169.4	(138.2)	93.2	173.7	91.1	178.0	93.3	93.0	95.3	97.7	100.2
Indirect costs	142.7	178.3	(35.5)	94.4	171.2	(76.8)	229.4	175.5	206.6	179.9	211.6	210.7	216.1	221.5	227.1
Preventative maintenance	339.2	232.5	106.7	282.0	234.0	48.0	302.9	239.8	306.4	245.8	314.0	312.8	320.9	329.0	337.3
Labour	92.2	75.5	16.7	88.9	77.9	11.0	85.0	79.9	79.7	81.9	81.9	81.8	84.1	86.4	88.7
Contractors	28.4	2.8	25.6	25.8	2.9	22.9	25.0	2.9	29.4	3.0	30.0	29.8	30.5	31.3	32.0
Materials	5.3	6.2	(0.9)	2.8	6.3	(3.5)	6.9	6.4	9.8	6.6	10.0	9.9	10.2	10.4	10.6
Other	16.4	3.5	12.9	8.4	3.6	4.8	7.8	3.6	15.7	3.7	16.0	15.9	16.3	16.6	17.0
Local area support costs	79.3	-	79.3	76.5	-	76.5	63.8	-	56.6	-	58.0	57.8	59.2	60.7	62.2
Corporate support costs	28.3	70.7	(42.4)	26.7	72.3	(45.5)	40.9	74.1	59.7	75.9	61.2	60.9	62.5	64.0	65.6
Indirect costs	89.3	73.8	15.5	52.9	71.1	(18.2)	73.5	72.9	55.6	74.7	56.9	56.7	58.1	59.6	61.1
Corrective maintenance	15.2	143.6	(128.3)	22.0	144.5	(122.5)	131.2	148.1	57.7	151.8	59.1	58.8	60.3	61.8	63.4
Labour	2.0	46.2	(44.2)	2.9	47.7	(44.8)	43.9	48.9	11.7	50.1	12.0	12.0	12.3	12.7	13.0
Contractors	0.5	2.8	(2.4)	7.3	2.9	4.5	-	2.9	9.8	3.0	10.0	9.9	10.2	10.4	10.7
Materials	0.7	2.8	(2.1)	5.0	2.9	2.1	0.0	2.9	3.9	3.0	4.0	4.0	4.1	4.2	4.3
Other	5.1	3.2	1.9	1.1	3.3	(2.2)	1.1	3.4	4.9	3.4	5.0	5.0	5.1	5.2	5.3
Local area support costs	3.3	-	3.3	2.5	-	2.5	34.2	-	10.5	-	10.8	10.7	11.0	11.3	11.6
Corporate support costs	1.4	43.4	(42.0)	1.5	44.3	(42.8)	18.4	45.4	8.7	46.5	9.0	8.9	9.2	9.4	9.6
Indirect costs	2.3	45.1	(42.9)	1.7	43.5	(41.8)	33.5	44.6	8.1	45.7	8.3	8.3	8.5	8.7	9.0
Routine total	904.1	1062.8	(158.6)	739.5	1070.7	(331.2)	1238.6	1097.5	1121.1	1124.9	1147.4	1146.2	1175.3	1205.0	1234.9

1. All financial figures are nominal. Totals may not add due to rounding.
2. Sunwater's 2020/21 to 2023/24 budget figures are draft as at the time of publication. These figures will not be locked down until late in the financial year prior.
3. For 2017/18 and 2018/19 Sunwater has included and reported against the 2016/17 QCA recommended costs adjusted for inflation which was assumed to be 2.5%.
4. A normalised level of direct expenditure and associated overheads were included in 2017/18 routine costs to rectify an under-representation of time-sheet reporting for direct cost activities (and partially because of the organisational changes occurring) during that year.

Annuity balance and non-routine expenditure

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/rehabilitation of assets over a pre-determined period of time. The forecast annuity balances, and the impacts of budgeted non-routine spend, are shown in **Table 4** below. Sunwater has used a 30-year planning period to calculate the annuity from 2020/21.

Details of the major non-routine projects planned for the 2019/20 to 2023/24 period are set out in **Appendix 1**. The main change since our 2018/19 NSP is an increase in costs in 2018/19 and 2019/20 for the Thuraggi Channel repairs. Market prices for the repairs to the channel were significantly higher than originally estimated when the tender process was run in November 2018. Other contributing factors to the increase in final estimated costs include:

- additional costs associated with mitigating the impacts on customers as a result of the dam not being able to store water for the duration of the construction works (coffer dam and private off-stream storage)
- delay costs due to inflows into the storage (approximately one month)
- contract variations associated with dewatering, geotechnical investigations and upstream coffer dam investigations.

Table 4: Annuity balance¹

St George Bulk Water Service Contract	2017/18 Actual \$'000	2018/19 Forecast \$'000	2019/20 Forecast \$'000	2020/21 Forecast \$'000	2021/22 Forecast \$'000	2022/23 Forecast \$'000	2023/24 Forecast \$'000
Annuity							
Opening balance ²	600.5	694.7	(2409.6)	(6633.7) ³	(6267.9)	(6155.4)	(5796.4)
Non-routine spend	(624.2)	(3846.6) ⁴	(3554.1) ⁵	(197.0)	(482.8)	(294.4)	(129.3)
Insurance proceeds receipts (if applicable)							
Prior year	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-
Annuity contribution ⁶	673.4	690.3	705.8	950.7	961.8	1013.3	1198.1
Interest/financing costs	45.0	52.0	(180.5)	(387.9)	(366.5)	(359.9)	(338.9)
Sunwater – Closing Balance	694.7	(2409.6)	(5438.3)	(6267.9)	(6155.4)	(5796.4)	(5066.4)
QCA – Closing Balance	2438.3	3239.7					
Difference	(1743.6)	(5649.3)					

1. All financial figures are nominal. Totals may not add due to rounding.
2. The difference in the closing balance for 2019/20 and the opening balance for 2020/21 relates primarily to expenditure incurred prior to the start of the 2012 price path. These amounts have been carried forward to 2020/21 so that they can be considered as part of the QCA's review of expenditure for the new irrigation price path.
3. The opening balance in 2020/21 does not yet incorporate proposed adjustments to the annuity balance relating to the Thuraggi Channel works and the refurbishment of the electrical system at Beardmore Dam. Refer to the 2018/19 NSP for further details.
4. Includes actual expenditure for the Thuraggi Channel works. The June 2019 regulatory model includes forecast expenditure for these works, which were substantially lower than actual costs.
5. Includes forecast expenditure for the Thuraggi Channel works. The June 2019 regulatory model erroneously excluded this expenditure.
6. The annuity contribution is included in the prices paid by customers. It was set by the QCA for 2012/13 to 2016/17 and is rolled forward with the Consumer Price Index for 2017/18, 2018/19 and 2019/20. Thereafter the annuity contribution is based upon Sunwater's forecast.

Appendix 1: Non-routine projects for 2019/20 to 2023/24

The below table sets out Sunwater’s currently planned non-routine projects for the 2019/20 to 2023/24 period. While the 2019/20 program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are therefore subject to change in future NSPs, reflecting changes in project delivery timing, asset condition and risk updates, and outcomes from scheduled asset inspections.

Year	Project title	Project scope	Budget (\$'000 nominal)
2019/20	Beardmore Dam – Comprehensive Risk Assessment (CRA) input studies	Three studies will be conducted to help inform the Beardmore Dam CRA; namely, a seismic investigation; a hydrology, geotechnical and dam stability study; and a gate operation reliability study.	256
	Beardmore Dam – Design and install Thuraggi Channel meters	Releases into Thuraggi Channel need to be metered for accurately recording volumes released into the irrigation schemes. This will allow better water management at the dam.	173
	Meter replacements	This is an allowance to replace failed customer meters. If no meters fail, the funds will remain in the annuity.	24
	Beardmore Dam – CRA	A CRA follows on from the 20-year dam safety review to assess the level of risks identified and further refine their priority for refurbishment.	114
	Beardmore Dam – Repair concrete on spillway, causeway and downstream face	The 2017 Beardmore Dam comprehensive inspection report recommended continuation of the downstream rock and concrete scour works to prevent further damage to the causeway and dissipator area.	210
	Beardmore Dam – Thuraggi Channel repair	Sand boils in the channel immediately downstream of the Thuraggi outlet need to be addressed by increasing the length of the outlet conduit by about 40 metres downstream.	2705
	Other works	There are 3 other non-routine projects for 2019/20.	72
	2019/20 Total		3554
2020/21	Jack Taylor Weir winches – Outlet works construction	Construction of a new low-level outlet works at Jack Taylor Weir will occur, pending the outcome of the options and design project in 2020.	86
	Meter replacements	This is an allowance to replace failed customer meters. If no meters fail, the funds will remain in the annuity.	25

Year	Project title	Project scope	Budget (\$'000 nominal)
	Jack Taylor Weir and Beardmore Dam – X-ray examination of the wire ropes x7	X-ray examination of seven of the wire ropes is an effective way of determining their condition so their replacement can be scheduled.	86
	Other works	There are no other non-routine projects for 2020/21.	-
	2020/21 Total		197
2021/22	Beardmore Dam – 20-year dam safety review	The Queensland Dam Safety Management Guidelines and condition schedule require each referable dam to undergo a dam safety review every 20 years to identify any deficiencies in design when compared to current standards and practices.	359
	Beardmore Dam – Thuraggi Channel bulkhead gate refurbishment	The seals and concrete sill will be refurbished prior to the next five-yearly inspection.	17
	Beardmore Dam – Foundation drain clean	The foundation drains in most dams with a gallery are checked every five years for calcite blockages. If blocked, they need to be cleaned out to relieve the uplift pressure beneath the concrete structure to retain its stability. Only the blocked drains will be cleaned.	38
	Meter replacements	This is an allowance to replace failed customer meters. If no meters fail, the funds will remain in the annuity.	26
	Jack Taylor Weir – Comprehensive inspection	Sunwater conducts comprehensive inspections on each weir every five years to identify defects and plan for their repair. Keeping the condition and risk data current allows us to defer projects if they can be deferred and bring forward higher risk projects if required.	43
	Other works	There are no other non-routine projects for 2021/22.	-
	2021/22 Total		483
2022/23	Beardmore Dam – Comprehensive inspection	Sunwater conducts comprehensive inspections on each dam every five years to identify defects and plan for their repair. Keeping the condition and risk data current allows us to defer projects if they can be deferred and bring forward higher risk projects if required. This is also a requirement of the dam safety condition schedule for each dam.	116
	Meter replacements	This is an allowance to replace failed customer meters. If no meters fail, the funds will remain in the annuity.	27

Year	Project title	Project scope	Budget (\$'000 nominal)
	Beardmore Dam – Refurbish winches	This will only occur if needed. Regular inspections leading up this project will inform Sunwater if it can be deferred or not. The winches are critical assets so it is prudent to plan for the refurbishment.	65
	Jack Taylor Weir – Refurbish winches	This will only occur if needed. Regular inspections leading up this project will inform Sunwater if it can be deferred or not. The winches are critical assets so it is prudent to plan for the refurbishment.	87
	Other works	There are no other non-routine projects for 2022/23.	-
	2022/23 Total		295
2023/24	Jack Taylor Weir – Refurbish remaining winches x3	This will only occur if needed. Regular inspections leading up this project will inform Sunwater if it can be deferred or not. The winches are critical assets so it is prudent to plan for the refurbishment.	53
	Meter replacements	This is an allowance to replace failed customer meters. If no meters fail, the funds will remain in the annuity.	27
	Beardmore Dam – Refurbish remaining winches x3	This will only occur if needed. Regular inspections leading up this project will inform Sunwater if it can be deferred or not. The winches are critical assets so it is prudent to plan for the refurbishment.	39
	Beardmore Dam – Internal road resurfacing	The internal sealed roads to the houses and left abutment need periodic treatment to keep them trafficable. If a condition assessment closer to this year determines they remain in good condition, this project will not be needed.	10
	Other works	There are no other non-routine projects for 2023/24.	-
	2023/24 Total		129

Contact us

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

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We consider and respond to all submissions, publishing all responses on our website.

This NSP has been prepared by Sunwater to provide indicative information to our customers for the purpose of consultation. It contains estimates and forecasts which are based upon a number of assumptions. The actual financial performance of the Service Contract to which this NSP relates, and the operations and activities actually undertaken by Sunwater during the relevant periods, may vary materially from the information contained in this NSP. This NSP should not be relied upon beyond its purpose as a tool for consultation and you should not rely on the information contained in this NSP in making decisions about your circumstances. Sunwater will not be responsible or liable for any loss (including consequential loss), claim or damage (including in tort) that is in any way connected with the use of this NSP or the information contained within it.