

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

Mareeba-Dimbulah 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 \$138,000 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**. In addition to these charges, an annual access charge of \$687.77 per customer applies in 2019/20. 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)	15.87	4.48	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	0.59	0.92	0.33
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)	3.45	4.48	1.03
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	0.59	0.92	0.33

1. This table includes bulk water charges only. For distribution charges (Part C and Part D), please refer to the Distribution Service Contract NSP.
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 \$38.67.

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Mareeba-Dimbulah 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	6 months	0	0
	For shutdowns planned to exceed 3 days	4 weeks	0	0
	For shutdowns planned to be less than 4 days	5 days	0	0
Unplanned shutdowns – duration ¹	Unplanned shutdowns during Peak Demand Period	72 hours	0	2
	Unplanned shutdowns outside Peak Demand Period	5 working days		
Maximum number of interruptions ²	Planned or unplanned interruptions per water year	10	4	7

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}

Mareeba-Dimbulah 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	890.3	817.8	72.5	745.5	825.6	(80.2)	884.4	846.3	998.3	867.4	1021.6	1032.8	1058.7	1084.8	1111.5
Labour	165.5	206.7	(41.2)	147.8	213.3	(65.5)	173.1	218.7	162.7	224.1	167.3	169.1	173.9	178.6	183.4
Contractors	8.4	17.2	(8.8)	7.4	17.5	(10.1)	10.0	18.0	11.7	18.4	12.0	12.1	12.4	12.7	13.0
Materials	1.3	2.9	(1.6)	1.7	3.0	(1.3)	0.5	3.1	2.9	3.1	3.0	3.0	3.1	3.2	3.2
Electricity	2.7	7.2	(4.5)	5.3	7.7	(2.4)	4.0	7.8	1.0	8.0	0.9	0.9	0.9	1.0	1.0
Insurance	190.4	87.8	102.6	159.0	89.3	69.7	146.0	91.5	169.7	93.8	173.2	177.1	181.2	185.4	189.7
Other	141.0	81.8	59.2	140.4	83.2	57.2	131.0	85.3	181.7	87.4	185.4	186.5	190.8	195.2	199.7
Local area support costs	138.4	-	138.4	111.8	-	111.8	127.3	-	98.6	-	101.0	101.9	104.5	107.1	109.8
Corporate support costs	62.1	202.0	(139.9)	51.8	206.5	(154.7)	95.7	211.6	121.9	216.9	124.9	126.0	129.2	132.4	135.7
Indirect costs	180.4	212.0	(31.6)	120.3	205.1	(84.9)	196.9	210.2	248.0	215.5	254.0	256.2	262.7	269.3	276.1
Preventative maintenance	341.7	201.5	140.3	253.6	202.7	50.9	226.3	207.8	284.0	213.0	291.0	293.5	301.1	308.7	316.5
Labour	90.0	66.5	23.5	81.1	68.6	12.4	59.4	70.3	73.0	72.1	75.0	75.9	78.0	80.1	82.3
Contractors	23.7	1.1	22.5	24.8	1.1	23.7	24.5	1.2	24.5	1.2	25.0	25.2	25.8	26.4	27.0
Materials	2.7	2.8	(0.1)	2.4	2.9	(0.4)	2.3	2.9	2.9	3.0	3.0	3.0	3.1	3.2	3.2
Other	36.0	3.9	32.1	3.2	4.0	(0.8)	11.7	4.1	31.4	4.2	32.0	32.2	32.9	33.7	34.5
Local area support costs	77.4	-	77.4	69.7	-	69.7	43.5	-	46.6	-	47.8	48.2	49.4	50.6	51.9
Corporate support costs	28.3	62.1	(33.8)	24.2	63.5	(39.3)	30.4	65.1	54.7	66.7	56.0	56.5	58.0	59.4	60.9
Indirect costs	83.7	65.0	18.8	48.2	62.6	(14.4)	54.4	64.2	50.9	65.8	52.1	52.6	53.9	55.3	56.7
Corrective maintenance	38.4	25.2	13.2	114.2	25.4	88.7	20.9	26.1	162.8	26.7	166.8	168.3	172.7	177.1	181.6
Labour	3.0	6.8	(3.8)	12.7	7.0	5.8	5.5	7.2	43.1	7.3	44.3	44.8	46.1	47.3	48.6
Contractors	24.7	1.1	23.5	73.2	1.1	72.0	1.7	1.2	24.5	1.2	25.0	25.2	25.8	26.4	27.0
Materials	1.5	2.3	(0.8)	1.2	2.3	(1.1)	2.1	2.3	2.9	2.4	3.0	3.0	3.1	3.2	3.2
Other	1.3	1.9	(0.6)	1.2	1.9	(0.8)	0.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2
Local area support costs	2.6	-	2.6	11.0	-	11.0	4.1	-	27.9	-	28.6	28.9	29.6	30.3	31.1
Corporate support costs	2.2	6.6	(4.3)	7.3	6.7	0.6	2.7	6.9	32.3	7.0	33.1	33.4	34.2	35.1	36.0
Indirect costs	3.2	6.6	(3.4)	7.6	6.4	1.2	4.7	6.5	30.1	6.7	30.8	31.1	31.9	32.7	33.5
Routine total	1270.4	1044.5	225.9	1113.2	1053.8	59.4	1131.6	1080.1	1445.1	1107.2	1479.4	1494.7	1532.4	1570.6	1609.5

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**. 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**. There has been a moderate increase in non-routine expenditure since the 2018/19 NSP due to foundation drain cleaning at Tinaroo Falls Dam and Supervisory Control and Data Acquisition (SCADA) upgrades to the outlet works. This has been partially offset by the removal of Tinaroo Falls Dam intake screen refurbishments and a reduction in post tensioning test costs.

Table 4: Annuity balance¹

Mareeba-Dimbulah 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	(738.9)	(918.9)	(1243.9)	(684.4)	(334.5)	(189.9)	162.7
Non-routine spend	(247.9)	(382.5)	(314.0)	(328.3)	(572.5)	(391.7)	(350.4)
Insurance proceeds receipts (if applicable)							
Prior year	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-
Annuity contribution ³	123.2	126.3	129.2	718.2	736.7	755.5	771.5
Interest/financing costs	(55.3)	(68.8)	(93.2)	(40.0)	(19.6)	(11.1)	9.5
Sunwater – Closing Balance	(918.9)	(1243.9)	(1521.9)	(334.5)	(189.9)	162.7	593.4
QCA – Closing Balance	1121.3	1139.4					
Difference	(2040.2)	(2383.3)					

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 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	Tinaroo Falls Dam – Foundation drains	Periodic cleaning of dam foundation drains to ensure uplift pressures are managed in accordance with design values and assumptions.	195
	Customer meter replacements	This is an allowance to replace failed customer meters in the Barron River system with Australian Standard (AS) 4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	32
	Tinaroo Falls Dam – Left abutment protection	The rock protection on the upstream left abutment is scouring away so needs to be replaced to maintain a safe level of protection for the dam.	32
	Tinaroo Falls Dam – Compensator gates	The steel liner in the gate channel is badly corroded. It will be removed, blasted and repainted before being returned to service.	31
	Other works	Unplanned capital replacement allowance.	24
	2019/20 Total		314
2020/21	Tinaroo Falls Dam – Comprehensive risk assessment (CRA) inputs	The CRA is a dam safety condition and scheduled for 2022. This project is to undertake investigation, analysis, a seismic study and reporting as inputs to the CRA.	186
	Customer meter replacements	This is an allowance to replace failed customer meters in the Barron River system with AS4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	33
	Tinaroo Falls Dam – Radial gate refurbishment	Blast and paint the standby radial gate to enable quick change out of the irrigation regulator and rotate units by condition.	33
	Tinaroo Falls Dam – Irrigation outlet SCADA replacement options	Install a standalone SCADA for Tinaroo Falls Dam (radial gate) – procurement and installation.	20
	Asset revaluation	Revalue the assets for insurance purposes; update asset replacement costs and Bill of Materials; and identify gaps in asset hierarchy data.	19

Year	Project title	Project scope	Budget (\$'000 nominal)
	Tinaroo Falls Dam – River outlet SCADA options	Replace SCADA telemetry and controls – procurement and installation.	18
	Other works	Concrete drain outlet refurbishment at the Tinaroo saddle dam.	19
	2020/21 Total		328
2021/22	Tinaroo Falls Dam – Post tensioning	The Australian National Committee on Large Dams Incorporated (ANCOLD) Guidelines on post tensioned dams recommends that they are tested every five years to determine if the tensioning has decreased or slipped. If it has, the anchors will need to be re-tensioned to maintain the required level of safety.	288
	Tinaroo Falls Dam – CRA	This is a dam safety condition. The assessment will use the inputs, reports and analysis completed in 2021.	147
	Tinaroo Falls Dam – Radial gate and river outlet SCADA	Design SCADA telemetry and controls for the radial gate (irrigation) and river outlet works to enable remote control and surveillance.	103
	Customer meter replacements	This is an allowance to replace failed customer meters in the Barron River system with AS4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	34
	Other works	There are no other non-routine projects for 2021/22.	-
	2021/22 Total		572
2022/23	Tinaroo Falls Dam – Radial gate and river outlet SCADA	Install SCADA telemetry and controls for the radial gate (irrigation) and river outlet works to enable remote control and surveillance.	230
	Tinaroo Falls Dam – Regulating structure controls	Replace irrigation regulating structure (at 320m) control equipment system to ensure continued effective control and surveillance.	106
	Customer meter replacements	This is an allowance to replace failed customer meters in the Barron River system with AS4747 compliant arrangements that ensure accurate and robust water accounting and improve system delivery efficiency.	36
	Tinaroo Falls Dam – Radial gate SCADA panel	Replace the radial gate SCADA panel due to condition to ensure continued control system reliability.	20
	Other works	There are no other non-routine projects for 2022/23.	-
	2022/23 Total		392

Year	Project title	Project scope	Budget (\$'000 nominal)
2023/24	Tinaroo Falls 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.	177
	Tinaroo Falls Dam – Irrigation inlet	The steel bell mouth is starting to corrode so will need to be repainted in-situ to extend its life.	109
	Tinaroo Falls Dam – Compensator gates refurbishment	The compensator gate in the irrigation channel is in a similar condition to the vertical lift gates so will be removed, blasted and painted before being returned to service.	41
	Other works	Clean Tinaroo Falls Dam spillway weep hole, clean and repair spillway surface defects, and replace a gate sensor.	23
	2023/24 Total		350

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.