

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

Mareeba-Dimbulah Distribution 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
- 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 D 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/>.

Irrigation charges for 2019/20

The 2019/20 charges and cost per megalitre are shown in **Table 1**. The Mareeba-Dimbulah Distribution Service Contract is not expected to fully recover irrigation's share of costs. In addition

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.

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	Subsidy (\$/ML)
Medium Priority Allocation Charge – Channel Distribution	Channel Distribution Charge – Part C (fixed charge based upon allocation)	51.82	51.94	0.12
Medium Priority Allocation Water – Channel Distribution	Channel Distribution Charge – Part D (variable charge based upon actual usage)	8.27	11.95	3.68

1. This table includes distribution charges only. For river charges (Part A and Part B), please refer to the Bulk Water 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.

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Mareeba-Dimbulah Distribution 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 Distribution 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	2475.3	2381.6	93.6	2311.6	2402.7	(91.1)	3066.5	2462.8	3530.1	2524.4	3596.1	3753.4	3855.3	3998.1	4072.4
Labour	551.0	612.8	(61.8)	506.0	632.4	(126.4)	710.5	648.2	679.1	664.4	698.1	717.7	737.8	757.8	778.3
Contractors	2.9	6.2	(3.3)	9.6	6.3	3.2	7.1	6.5	4.9	6.6	5.0	5.1	5.2	5.4	5.5
Materials	6.3	9.8	(3.5)	1.4	10.0	(8.6)	3.3	10.2	4.0	10.5	4.1	4.2	4.3	4.4	4.5
Electricity	507.9	416.6	91.3	497.9	445.7	52.2	543.2	456.9	634.2	468.3	630.9	713.3	738.3	803.6	798.4
Insurance	391.5	301.7	89.8	375.4	306.8	68.6	348.1	314.5	402.8	322.4	411.0	420.5	430.2	440.1	450.2
Other	67.3	76.0	(8.7)	87.8	77.3	10.5	114.6	79.2	528.5	81.2	539.3	551.7	564.4	577.4	590.7
Local area support costs	473.8	-	473.8	435.2	-	435.2	540.2	-	425.3	-	435.6	446.7	458.1	469.5	481.3
Corporate support costs	177.6	589.8	(412.2)	165.4	602.8	(437.4)	346.0	617.8	509.0	633.3	521.3	534.6	548.2	562.0	576.1
Indirect costs	297.0	368.7	(71.7)	232.8	321.4	(88.6)	453.6	329.5	342.3	337.7	350.6	359.6	368.7	378.0	387.4
Preventative maintenance	841.3	531.0	310.4	832.7	529.4	303.3	925.3	542.6	946.4	556.2	970.1	995.3	1021.1	1047.1	1073.8
Labour	258.1	163.4	94.7	250.8	168.6	82.2	279.0	172.9	280.9	177.2	288.8	296.9	305.2	313.4	321.9
Contractors	91.3	16.9	74.4	104.1	17.2	86.9	83.0	17.6	97.9	18.1	100.0	102.4	104.8	107.3	109.9
Materials	24.9	45.4	(20.5)	33.6	46.2	(12.6)	33.0	47.4	32.3	48.5	33.0	33.8	34.5	35.3	36.1
Other	28.5	62.0	(33.5)	34.4	63.0	(28.7)	5.8	64.6	2.9	66.2	3.0	3.1	3.1	3.2	3.3
Local area support costs	221.6	-	221.6	215.7	-	215.7	211.0	-	180.3	-	184.6	189.4	194.2	199.0	204.0
Corporate support costs	79.4	158.3	(78.9)	78.8	161.8	(83.0)	131.7	165.9	210.5	170.0	215.6	221.1	226.8	232.4	238.3
Indirect costs	137.6	84.9	52.7	115.4	72.5	42.9	181.8	74.3	141.6	76.2	145.0	148.7	152.5	156.3	160.2
Corrective maintenance	1636.2	1552.8	83.4	1586.4	1579.3	7.2	1507.0	1618.7	1988.9	1659.2	2037.3	2089.3	2142.7	2196.4	2251.6
Labour	424.5	422.6	1.8	414.4	447.8	(33.4)	348.8	459.0	510.5	470.4	524.8	539.5	554.6	569.6	585.1
Contractors	104.0	33.8	70.2	74.3	34.4	39.9	108.5	35.2	83.2	36.1	85.0	87.0	89.1	91.2	93.4
Materials	303.3	264.9	38.4	335.8	269.4	66.4	322.3	276.1	323.4	283.0	330.0	337.6	345.4	353.3	361.4
Other	69.1	193.3	(124.2)	75.5	196.6	(121.1)	42.4	201.5	101.1	206.6	103.1	105.5	107.9	110.4	112.9
Local area support costs	365.0	-	365.0	355.9	-	355.9	258.6	-	330.9	-	338.9	347.5	356.4	365.3	374.5
Corporate support costs	142.7	418.7	(276.1)	140.2	438.6	(298.4)	186.0	449.6	382.6	460.8	391.9	401.9	412.1	422.4	433.0
Indirect costs	227.7	219.5	8.2	190.4	192.5	(2.1)	240.4	197.3	257.3	202.3	263.6	270.3	277.2	284.1	291.2
Routine total	4952.8	4465.4	487.4	4730.7	4511.4	219.3	5498.8	4624.2	6465.4	4739.8	6603.4	6838.0	7019.1	7241.7	7397.7

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**. Since the 2018/19 NSP, there has been a minor overall increase in forecast costs through the addition of the Pipeline M4 P002 replacement and variations in concrete lining works. These project costs have been partially offset by the removal of some projects that will be funded by the National Water Infrastructure Development Fund.

Table 4: Annuity balance¹

Mareeba-Dimbulah Distribution 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	6274.6	8400.4	9764.8	12,061.8	13,312.5	14,596.9	16,913.6
Non-routine spend	(569.6)	(1545.9)	(946.1)	(1305.2)	(1413.1)	(1323.4)	(1600.3)
Insurance proceeds receipts (if applicable)							
Prior year	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-
Annuity contribution ³	2225.4	2281.0	2332.4	1850.7	1919.1	2786.7	2830.3
Interest/financing costs	470.0	629.2	731.4	705.2	778.4	853.4	988.9
Sunwater – Closing Balance	8400.4	9764.8	11,882.4	13,312.5	14,596.9	16,913.6	19,132.4
QCA – Closing Balance	2735.5	4221.8					
Difference	5665.0	5542.9					

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	Work items	Work description	Budget (\$'000 nominal)
2019/20	Meter replacements	Staged upgrade of Biboohra customer meters to improve accuracy and scheme delivery efficiency and comply with Australian Standard (AS) 4747.	249
	Mareeba Channel M15/2 – Pipeline replacement	Planned replacement of pipeline M15/2 based on age, condition and risk.	106
	West Barron main channel – Regulating gates	Scheduled refurbishment of West Barron float regulating gates to ensure continued reliable operation and maximise service life.	97
	Paddy’s Green A & B pump station – Screens	Refurbishment of Paddy’s Green A & B pump station screens and guides etc. to extend service life and maintain function.	62
	West Barron Balancing Storage – Rotating weed screen	Refurbishment of the automated weed screen on the West Barron Balancing Storage to ensure continued reliable operation and enhance service life.	48
	East Barron and South Walsh main channels – Control systems	Scheduled replacement of the control systems’ central processing units and telemetry to maintain equipment serviceability and function.	37
	Granite, Dulbil, Collins, Solanum, Bruce and Leafgold Weirs – Five yearly inspections and reports	Works are required to manage ownership risks and support management due diligence through inspection and condition assessments.	36
	Mareeba, Price Creek and North Walsh – Options analyses	Options analyses to determine the most cost-effective replacement or refurbishment options for Mareeba fencing, pipeline replacements and pump station control systems.	35
	Mareeba Channel M9 – Offtake replacement	Replacement of M9 offtake (from the main channel) walkway, handrails and access ladders due to condition and raised hazard.	33
	Collins Weir – Outlet works	Overhaul Collins Weir gate actuator to retain operational control and scheme delivery efficiency.	31
	Other works	The balance of the program consists of individual gate refurbishments, fencing repairs, regulating gate control equipment and actuator replacements, safety screen replacements and an unplanned capital replacement allowance.	212

Year	Work items	Work description	Budget (\$'000 nominal)
	2019/20 Total		946
2020/21	Mareeba system – Concrete channel lining works	Concrete lining section/panel replacements are based on the 30 Year Irrigation Asset Strategy. A system-wide strategy and prioritisation schedule is to be determined under an options analysis planned for 2019.	614
	Meter replacements	Staged upgrade of East Barron and North Walsh customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	322
	Mareeba and West Barron main channel – Regulating gates	Periodic refurbishment of regulating gates, in accordance with Sunwater's Float Regulating Gate Strategy.	108
	Mareeba System – Scheme road refurbishment works	Road refurbishments are based on the 30 Year Irrigation Asset Strategy. Channel and access roads to be regraded and surfaced by priority as part of a five-yearly funding schedule.	59
	Mareeba System – Scheme fencing refurbishment works	Fencing refurbishments are based on the 30 Year Irrigation Asset Strategy. Fencing refurbishment is based on priority as part of a five-yearly funding schedule.	48
	Other works	The balance of the program consists of a suction pipe refurbishment at Price Creek B pump station, controls and radio replacements at various locations, and minor metal work replacements/refurbishments.	154
	2020/21 Total		1305
2021/22	Price Creek A pump station – Switchboard, cables and control system	Upgrade or replacement of switchboard, cables and control system. The timing, scope and costing of the works will be subject to an options analysis scheduled for 2020.	300
	Price Creek B pump station – Switchboard, cables and control system	Upgrade or replacement of switchboard, cables and control system. The timing, scope and costing of the works will be subject to an options analysis scheduled for 2020.	212
	Meter replacements	Staged upgrade of South Walsh SW11 customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	213
	Price Creek B pump station – Pumps, motors and non-return valves (NRVs)	Refurbishment of Pump Units 1 & 2 (pumps, motors and NRVs), based on standard refurbishment period to retain serviceability.	106
	West Barron main channel – Bench flume	Stage 1 refurbishment of the bench flume bracing beams and fixings to retain structural integrity and operation performance.	179
	Mareeba main channel – P025 pipeline	Replacement of P025 pipeline section due to age and condition and as confirmed through the 2019 business case.	136

Year	Work items	Work description	Budget (\$'000 nominal)
	South Walsh main channel – Regulating gate	Refurbishment of regulating gate RG01 based on standard refurbishment life to ensure continued serviceability and maximise service life.	32
	Other works	The balance of the program consists of regulating gate actuator replacements, a bench flume deformation survey, and regulating gate and trash screen refurbishments.	235
	2021/22 Total		1413
2022/23	Mareeba System – Concrete channel lining	Repairs based on the 30 Year Irrigation Asset Strategy. A system-wide strategy and prioritisation schedule is to be determined under an options analysis planned for 2019.	666
	Meter replacements	Staged upgrade of 11 Mareeba, West and East Barron, and South Edge customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	242
	West Barron main channel – Bench flume	Stage 2 refurbishment of the bench flume bracing beams and fixings to retain structural integrity and operational performance.	137
	Mareeba main channel – Refurbish regulating gates 1 & 2	Refurbish based on asset standard refurbishment period to maintain serviceability.	65
	Mareeba System – Supervisory Control and Data Acquisition upgrade	Enhancement of the host system (Costin Street) to ensure continued hardware, software support and serviceability.	64
	Mareeba, South Walsh and East Barron – Air valves	Refurbishment or replacement of air valves and associated pipework and valves in the Mareeba, South Walsh and North Walsh sections, to retain functionality and pipeline performance.	38
	Other works	The balance of the program consists of gate refurbishments, minor options analyses and metal works.	111
	2022/23 Total		1323
2023/24	Paddy's Green – Replacement of pump station A pumps, pressure reducing valves (PRVs) and NRVs	Works involve the replacement of three pumps, PRVs and NRVs based on standard replacement periods. Project scheduling, scope and costings will be subject to an options analysis. The objectives of the work are to reinstate as-new function and service life of major pumping assets at the station.	776

Year	Work items	Work description	Budget (\$'000 nominal)
	Mareeba Channel M4 – Pipeline replacement	Replacement of M4 Duplication P002 pipeline section based on age and condition. The 2012 options study to be reviewed and updated (if required) before capital works are confirmed.	396
	Meter replacements	Staged upgrade of South Walsh and West Barron main channel customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	226
	West Barron – Regulating gates	Periodic refurbishment of West Barron main channel regulating gates, in accordance with Sunwater’s Float Regulating Gate Strategy.	77
	Other works	The balance of the program consists of control equipment replacements, air vent and valve works, pump motor and valve refurbishments, regulating gate refurbishments, and a system wide control equipment options analysis.	125
	2023/24 Total		1600

Contact us

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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.