Service and Performance Plan – 2020/21

Mareeba-Dimbulah Distribution Service Contract

This fact sheet details a range of proposed scheme activities and projects, and presents a breakdown of anticipated costs. It also compares Sunwater's actual costs for 2018/19 with our previous forecasts for this scheme.

Highlights

Our performance in 2018/19

In our 2018/19 Network Service Plan (NSP) for the Mareeba-Dimbulah Distribution Service Contract,[1] we expected to spend $6.21 million on routine costs and $1.52 million on non-routine projects.

Operations costs were higher than budgeted; however, this increase was more than offset by lower than forecast preventative and corrective maintenance costs.

The non-routine program of works for 2018/19 was also lower than forecast. Various planned non-routine projects were not undertaken as they will be incorporated into (or superseded by) the Mareeba-Dimbulah Water Supply Scheme Efficiency Improvement Project which is being funded by Sunwater and the National Water Infrastructure Development Fund.

Outlook for 2020/21

Routine costs ($6.40 million) are expected to decrease compared to what we previously forecast in last year's NSP ($6.84 million in 2020/21).

Sunwater plans to spend approximately $1.61 million on non-routine projects, which is higher than our previous forecast ($1.31 million). This is primarily due to:

- additional customer meter replacements in the North Walsh Relift section
- additional projects to refurbish regulating gates in Mareeba main channel
- the inclusion of a contingency amount for unplanned capital replacements.

[1] See www.sunwater.com.au/schemes/Mareeba-Dimbulah/

Irrigation charges for 2020/21

On 10 February 2020, the Queensland Competition Authority (QCA) released its final recommendations on irrigation prices to be charged by Sunwater for the 2020/21 to 2023/24 price path period. The Queensland Government is currently considering the QCA's recommendations and will make a final decision and set Sunwater's irrigation prices.

Until this decision is made, Sunwater is unable to publish 2020/21 irrigation prices or compare our forecast costs against targets recommended by the QCA. Customers can access the QCA's recommended costs at: www.qca.org.au/project/rural-water/irrigation-price-investigations/

Sunwater will publish irrigation prices for the Mareeba-Dimbulah Distribution Service Contract on our website as soon as practicable after the decision: www.sunwater.com.au/customer/fees-and-charges/

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Mareeba-Dimbulah Distribution Service Contract. Table 1 below sets out our recent performance against selected service targets for this scheme.

Table 1 Service targets and performance

Service target		Target	Number of exceptions		
			2016/17	2017/18	2018/19
Planned shutdowns – notification	For shutdowns planned to exceed 2 weeks	6 months	0	0	0
	For shutdowns planned to exceed 3 days	4 weeks	0	0	0
	For shutdowns planned to be less than 4 days	5 days	0	0	0
Unplanned shutdowns – duration[1]	Unplanned shutdowns during Peak Demand Period	72 hours	0	2	0
	Unplanned shutdowns outside Peak Demand Period	5 working days			
Maximum number of interruptions[2]	Planned or unplanned interruptions per water year	10	**4**	**7**	**21**

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 distribution customers in the scheme that have been interrupted in excess of the target. Interruption to supply to individual customers was limited due to works being undertaken when there was minimal demand for water usage.

Water usage

The amount of water used in a scheme within a given year impacts operations and expenditure. Table 2 contains the scheme's water use for 2018/19, together with water use in recent years and the 17-year average for the 2002/03 to 2018/19 period.

Table 2 Water usage

Year	Usage (ML)
2014/15	148,111
2015/16	154,442
2016/17	132,084
2017/18	111,947
2018/19	115,303
17-year historical average	**124,886**

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	2016/17	2017/18	2018/19				2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	Sunwater Actual $'000	Sunwater Actual $'000	Sunwater Forecast $'000	Sunwater Actual $'000	Variance $'000	Commentary	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000	Sunwater Forecast $'000
Operations	2311.6	2384.2	2995.2	3317.5	322.3		3321.1	3530.9	3650.9	3779.5	3884.9	3866.7
Labour	506.0	489.4	585.0	709.5	124.5	As the operations and maintenance works program uses the same workforce, actual performance should be assessed at the total level across all activities. Overall, routine costs were delivered under budget. A larger wet season in 2018/19 reduced the amount of water that needed to be pumped and delivered, resulting in lower electricity costs.	698.1	747.5	769.9	793.0	812.8	833.1
Contractors	9.6	7.1	2.1	29.4	27.3		5.0	8.0	8.2	8.4	8.6	8.8
Materials	1.4	3.3	4.1	4.9	0.8		4.1	8.0	8.2	8.4	8.6	8.8
Electricity	497.9	543.2	630.9	532.7	(98.2)		630.9	700.4	717.9	735.8	754.2	696.4
Insurance	375.4	348.1	365.3	369.2	3.9		424.3	509.2	521.9	535.0	548.4	562.1
Other	87.8	114.6	107.5	118.3	10.8		188.8	225.2	229.9	236.8	240.7	247.5
Local area support costs	435.2	381.7	709.6	570.9	(138.7)		417.2	422.7	476.2	525.7	534.0	457.2
Corporate support costs	165.4	214.5	380.3	675.3	295.0		500.5	560.6	577.4	594.7	609.6	624.9
Indirect costs	232.8	282.3	210.5	307.4	96.8		452.1	349.4	341.3	341.7	368.0	428.0
Preventative maintenance	832.7	767.4	1143.7	930.8	(212.9)		998.4	975.8	1014.2	1054.7	1086.0	1095.8
Labour	250.8	232.8	303.9	214.8	(89.1)	As above, the overall routine program of works was delivered under budget.	288.8	278.1	286.5	295.1	302.4	310.0
Contractors	104.1	83.0	100.0	218.9	118.9		100.0	95.0	97.4	99.8	102.3	104.9
Materials	33.6	33.0	30.0	39.0	9.0		33.0	30.0	30.8	31.5	32.3	33.1
Other	34.4	5.8	20.8	8.2	(12.6)		3.0	75.0	76.9	78.8	80.8	82.8
Local area support costs	215.7	181.6	382.1	176.2	(205.9)		179.6	159.1	180.8	201.0	204.4	173.3
Corporate support costs	78.8	96.9	197.5	189.1	(8.4)		207.0	208.6	214.9	221.3	226.8	232.5
Indirect costs	115.4	134.3	109.4	84.6	(24.8)		187.0	130.0	127.0	127.1	136.9	159.3
Corrective maintenance	1586.4	1719.9	2071.0	1545.8	(525.1)		2087.8	1891.6	1964.7	2041.6	2101.4	2121.3
Labour	414.4	446.0	469.9	335.2	(134.7)	As above, the overall routine program of works was delivered under budget.	524.8	497.1	512.0	527.4	540.6	554.1
Contractors	74.3	108.5	76.9	178.7	101.9		85.0	90.0	92.3	94.6	96.9	99.3
Materials	335.8	322.3	350.0	373.0	23.0		330.0	330.0	338.3	346.7	355.4	364.3
Other	75.5	42.4	98.2	12.2	(86.0)		103.1	82.1	84.2	86.3	88.4	90.7
Local area support costs	355.9	346.9	601.5	306.9	(294.5)		328.7	287.2	326.9	363.8	369.9	312.8
Corporate support costs	140.2	197.1	305.4	244.5	(61.0)		376.2	372.8	384.0	395.6	405.4	415.6
Indirect costs	190.4	256.6	169.1	95.4	(73.7)		339.9	232.4	227.0	227.3	244.7	284.6
Routine total	**4730.7**	**4871.4**	**6209.9**	**5794.2**	**(415.8)**		**6407.3**	**6398.4**	**6629.8**	**6875.7**	**7072.2**	**7083.9**

1. All financial figures are nominal. Figures may not sum due to rounding.
2. Sunwater's 2020/21 to 2024/25 budget figures are draft as at the time of publication. These figures will not be locked down until late in the financial year prior.

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.

A comparison of forecast and actual non-routine projects for 2018/19 is provided in **Appendix 1**, with details of the major non-routine projects planned for the 2020/21 to 2024/25 period set out in **Appendix 2**.

Table 4 Annuity balance[1]

Mareeba-Dimbulah Distribution Service Contract	2017/18 Actual $'000	2018/19 Actual $'000	2019/20 Forecast $'000	2020/21 Forecast $'000	2021/22 Forecast $'000	2022/23 Forecast $'000	2023/24 Forecast $'000	2024/25 Forecast $'000
Annuity								
Opening balance[2]	6515.5	8674.5	10,556.5	12,729.5	12,504.3	12,563.1	12,615.2	12,351.1
Non-routine spend[3]	(554.5)	(1048.7)	(955.8)	(1611.0)	(1397.4)	(1435.0)	(1803.2)	(1653.2)
Insurance proceeds receipts (if applicable)								
Prior year	-	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-	-
Annuity contribution[4]	2225.4	2281.0	2338.1	829.2	909.5	937.8	987.5	1011.1
Interest/financing costs	488.0	649.7	790.7	556.6	546.7	549.3	551.6	540.0
Sunwater – Closing Balance	**8674.5**	**10,556.5**	**12,729.5**	**12,504.3**	**12,563.1**	**12,615.2**	**12,351.1**	**12,249.0**
QCA – Closing Balance	**8674.5**	**10,556.5**	**12,799.3**	**12,925.8**	**13,569.1**	**13,792.5**	**14,534.5**	
Difference	-	-	69.9	421.5	1006.0	1177.3	2183.4	

1. All financial figures are nominal. Figures may not sum due to rounding.
2. The opening balances for 2017/18, 2018/19 and 2019/20 reflect the QCA's irrigation price investigation 2020–24 final recommendations and differ to previous opening balances published by Sunwater.
3. The non-routine spend for 2017/18 and 2018/19 reflects the QCA's irrigation price investigation 2020–24 final recommendations, which included adjustments to Sunwater's actual costs. From 2019/20, the non-routine spend is based on Sunwater's forecasts.
4. 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 irrigation price investigation 2020–24 final recommendations. The forecast annuity contribution for 2024/25 has been calculated by applying CPI to the 2023/24 annuity contribution.

Appendix 1: Comparison of forecast and actual non-routine projects for 2018/19

The below table sets out the major non-routine projects planned for the Mareeba-Dimbulah Distribution Service Contract in 2018/19 and the actual projects undertaken.

Project	Forecast $'000	Actual[1] $'000	Commentary
Meter replacements – Atherton and Biboohra (19MDA05)	244	184	The project was completed for less than forecast, due to: • most installations being of a simpler nature than typically experienced • most meters being located on the same pipeline, enabling on-site efficiencies to be achieved.
Meter replacements – West Barron and Atherton (19MDA22)	189	130	The project was completed for less than forecast, due to: • most installations being of a simpler nature than typically experienced • most meters being located on the same pipeline, enabling on-site efficiencies to be achieved.
Mareeba system – Bench flume joint repairs (19MDA02)	212	149	The project was completed for less than forecast, due to planning/scheduling, procurement and work execution.
Atherton main channel – Refurbish channel regulating gates (19MDA06)	126	2	This project was not undertaken, as it will be superseded by the Mareeba-Dimbulah Water Supply Scheme Efficiency Improvement Project.
East Barron main channel – Manage overflow risks at splitter box (17MDA10)	97	108	This project was delivered broadly in line with forecasts.
Mareeba system – Copper Sulphate trial and property flow rate investigation (14MDA33 and 18MDA01)	71	112	The original budget for the Copper Sulphate trial was insufficient to prepare the relevant information for the reapplication to the Australian Pesticides and Veterinary Medicines Authority by the review date. A review of the risk analysis for the overflow locations was also required to more accurately determine the extent and impact of releases. The property flow rate investigation was completed for less than forecast.
North Walsh pump station – A & B control system upgrade options analysis (19MDA23)	56	39	These projects were completed for less than the budgeted amount.
South Walsh (19MDA15), North Walsh (19MDA18), South Edge (19MDA16) and Mareeba system channels (19MDA01) and Price Creek B pump station (19MDA13) – Options analyses	72	54	These projects were completed for less than the budgeted amount.

Project	Forecast $'000	Actual[1] $'000	Commentary
Leafgold Weir – Repairs to the weir crest (19MDA12)	37	61	An inspection and measurement of the site once the weir water level had been lowered identified that the length of the crest requiring repair was significantly longer than anticipated. Additional materials and an extra day on site were required. Scaffolding to allow safe access to the work site was also needed. Funds were reallocated from underspent projects.
Mareeba main channel and lateral pipelines – Prepare business cases for pipeline replacement works (19MDA20)	33	7	This project was completed for less than the budgeted amount.
Other works	382	278	Various projects were not undertaken, as they will form part of the Mareeba-Dimbulah Water Supply Scheme Efficiency Improvement Project.
2018/19 Total[2]	**1519**	**1124**	

1. Actual costs incurred by Sunwater. This figure differs to the 2018/19 non-routine spend in Table 4, which has been adjusted to reflect the QCA's irrigation price investigation 2020–24 final recommendations. The QCA has used the adjusted figure in Table 4 to calculate its final recommended irrigation prices for 2020–24.
2. All financial figures are nominal. Figures may not sum due to rounding.

Appendix 2: Non-routine projects for 2020/21 to 2024/25

The below table sets out Sunwater's currently planned non-routine projects for the 2020/21 to 2024/25 period for this scheme. While the 2020/21 program is well defined, estimates become more uncertain further into the planning timeline. Forecasts are likely to change in future Service and Performance Plans, reflecting changes in project delivery timing; asset condition and risk updates; outcomes from scheduled asset inspections; and customer feedback.

Year	Project title	Project scope	Budget ($'000 nominal)
2020/21	Mareeba System – Concrete channel lining	Concrete lining section/panel replacements are based on the 30 Year Irrigation Asset Strategy. A system-wide strategy and prioritisation schedule was determined as part of a 2019 options analysis.	601
	Meter replacements	Staged upgrade of East Barron and North Walsh customer meters to improve accuracy and scheme delivery efficiency and comply with Australian Standard (AS) 4747.	365
	Mareeba, West Barron and South Walsh main channel – Regulating gate refurbishments	Periodic refurbishment of float and vertical slide type regulating gates, in accordance with Sunwater's Float Regulating and Slide Gate Strategies.	318
	Mareeba System – Road refurbishments	Road refurbishments are based on the 30 Year Irrigation Asset Strategy. Channel and access roads will be regraded and surfaced by priority as part of a five-yearly funding schedule.	58
	Mareeba System – Fencing refurbishments	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.	47
	West Barron main channel – Controls replacement	Scheduled replacement of M09 regulating gate actuator and controls to maintain serviceability and support.	25
	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, minor metal work replacements/refurbishments, and a contingency amount for unplanned capital replacements.	197
	2020/21 Total		**1611**
2021/22	Meter replacements	Staged upgrade of South Walsh SW11 and East Barron Ch EB04 customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	321
	Price Creek A pump station – Switchboard, cables and controls	Upgrade or replacement of switchboard, cables and the control system. The timing, scope and costing of the works will be subject to an options analysis scheduled for 2020.	290
	West Barron main channel – Regulating gate refurbishments	Periodic refurbishment of float type (AMIL) regulating gates, in accordance with Sunwater's Float Regulating Gate Strategy.	251

Year	Project title	Project scope	Budget ($'000 nominal)
	Price Creek B pump station – Switchboard, cables and controls	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.	205
	Mareeba main channel – P025 pipeline replacement	Replacement of P025 pipeline section due to age and condition and as confirmed through the 2019 business case.	131
	West Barron main channel – Vertical lift gates refurbishment	Periodic refurbishment of vertical lift type regulating gates, in accordance with Sunwater's Vertical Lift Gate Strategy.	102
	Other works	The balance of the program consists of minor metal work items, bench flume deformation survey, and trash screen refurbishments.	97
	2021/22 Total		**1397**
2022/23	Mareeba System – Concrete channel lining	Concrete lining section/panel replacements are based on the 30 Year Irrigation Asset Strategy. A system-wide strategy and prioritisation schedule was determined as part of a 2019 options analysis.	639
	Meter replacements	Staged upgrade of 12 Mareeba, West and East Barron, Atherton and South Edge customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	258
	West Barron main channel – Bench flume refurbishment	Stage 1 refurbishment of the bench flume bracing beams and fixings to retain structural integrity and operational performance.	179
	South Edge and South Walsh main channel – Regulating gate refurbishments	Periodic refurbishment of float type (AMIL) regulating gates, in accordance with Sunwater's Float Regulating Gate Strategy.	139
	Mareeba main channel – Regulating gate refurbishments	Refurbish main channel regulating gates 1 and 2 based on asset standard refurbishment period to maintain serviceability.	62
	Mareeba System – Supervisory Control and Data Acquisition (SCADA) upgrade	Enhancement of the SCADA host system (Costin Street) to ensure continued hardware and software support and serviceability.	61
	Mareeba System – Controls replacements	Scheduled replacement of station 3 and 4 central processing units to retain serviceability and future support.	41
	Other works	The balance of the program consists of gate refurbishments, minor options analyses and metal works.	56
	2022/23 Total		**1435**

Year	Project title	Project scope	Budget ($'000 nominal)
2023/24	Paddy's Green pump station A – Pump and valve replacements	Works involve the replacement of three pumps, pressure relief valves and non-return valves 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.	748
	Mareeba channel M4 – Pipeline replacement	Replacement of M4 Duplication P002 pipeline section based on age and condition. The 2012 options study will be reviewed and updated (if required) before capital works are confirmed.	381
	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.	217
	West Barron and South Walsh – Regulating gate refurbishments	Periodic refurbishment of West Barron main channel and South Walsh Ch 29 regulating gates, in accordance with Sunwater's Float Regulating Gate Strategy.	201
	West Barron main channel – Bench flume refurbishment	Stage 2 refurbishment of the bench flume bracing beams and fixings to retain structural integrity and operational performance.	136
	Mareeba, Arriga and South Walsh channels – Regulating gate refurbishments	Scheduled refurbishment of individual regulating gates based on refurbishment life to retain function and maximise service life.	75
	Other works	The balance of the program consists of control equipment replacements, options analyses and minor valve and pump works.	45
	2023/24 Total		**1803**
2024/25	Paddy's Green pump station B – Non-return valve replacements	Scheduled replacement of three non-return valves to ensure continued reliable operation of the pump station.	141
	Paddy's Green pump station B – Switchboard, cables and controls	Scheduled replacement of the pump station switchboard, cabling system and controls based on asset service life and AS/NZS3000 compliance.	368
	Meter replacements	Staged upgrade of Mareeba and South Walsh customer meters to improve accuracy and scheme delivery efficiency and comply with AS4747.	426
	Paddy's Green pump station A – Motor replacements	Scheduled replacement of three pump motors, based on service life, to ensure continued reliable operation of the station.	115
	Mareeba System – SCADA upgrade	Additional stage of the SCADA host system upgrade (Costin Street). The timing and scope of works will be subject to review pending earlier upgrades, functionality assessment and technological change.	156

Year	Project title	Project scope	Budget ($'000 nominal)
	Paddy's Green pump station B – Pump and motor replacements	Scheduled replacement of three pumps and motors, based on service life, to ensure continued reliable operation of the station.	204
	Mareeba System – Sign replacements	Allocation for system wide replacement of obsolete signage with current Sunwater standard arrangements to ensure continued management of operational and public risks.	24
	South Walsh main channel – Bench flume survey	Three yearly deformation survey of the bench flume to monitor panel movements and ensure units remain functional and serviceable.	16
	Weir (various) – Comprehensive inspections	Scheduled five yearly inspection of Solanum, Granite, Dulbil, Collins, Bruce and Leafgold Weirs to ensure structure safety and operational performance.	41
	Other works	The balance of the program consists of gate actuator works, air valves, an options analysis and minor valve works.	162
	2024/25 Total		**1653**

Contact us

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