

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

Bundaberg 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 \$77,000 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/.

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**. The Bundaberg Bulk Water Service Contract does not currently require additional subsidies to recover irrigation's share of future renewals, maintenance and operating costs. 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) ^{2,3,4}	Subsidy (\$/ML)
Bulk water customers				
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon allocation)	13.06	7.38	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	1.31	1.49	0.18
Bulk water customers wh	o are also customers of a distribution sys	tem		
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon allocation)		7.38	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	1.31	1.49	0.18

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

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Bundaberg 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		Torract	Number of exceptions		
Service target		Target	2016/17	2017/18	
Planned shutdowns	For shutdowns planned to exceed 2 weeks	8 weeks	0	0	
- notification	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	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	72 hours	0	0	
Maximum number of interruptions ¹	Planned or unplanned interruptions per water year	10	0	0	

^{1.} This is the total number of bulk customers in the scheme that have been interrupted in excess of the target.

^{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 \$28.94.

^{4.} Excludes Burnett Water Pty Ltd (Paradise Dam).



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}

		2015/16			2016/17		201	7/18³	201	18/19 ³	2019/20	2020/21	2021/22	2022/23	2023/24
Bundaberg Bulk Water Service Contract	Sunwater Actual \$'000	QCA Recomm ended \$'000	Variance \$'000	Sunwater Actual \$'000	QCA Recomm ended \$'000	Variance \$'000	Sunwater Estimate ⁴ \$'000	2016/17 QCA Recommen ded (Adjusted) \$'000	Sunwater Forecast \$'000	2016/17 QCA Recommen ded (Adjusted) \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000	Sunwater Forecast \$'000
Operations	803.4	763.1	40.2	932.5	766.9	165.6	1008.1	786.1	1218.8	805.8	1246.6	1277.4	1309.6	1342.5	1375.4
Labour	157.0	183.4	(26.4)	178.8	189.2	(10.4)	269.1	194.0	242.9	198.8	249.7	256.7	263.9	271.0	278.4
Contractors	10.5	31.8	(21.3)	12.0	32.4	(20.4)	7.6	33.2	14.7	34.0	15.0	15.4	15.7	16.1	16.5
Materials	8.1	13.2	(5.1)	3.0	13.6	(10.6)	9.8	13.9	14.7	14.3	15.0	15.3	15.7	16.1	16.4
Electricity	8.3	11.5	(3.2)	11.3	12.3	(1.0)	12.2	12.6	9.8	12.9	9.1	8.8	9.2	10.0	9.9
Insurance	202.9	103.1	99.7	262.1	104.9	157.2	241.4	107.5	279.0	110.2	284.7	291.3	297.9	304.8	311.8
Other	81.2	56.6	24.6	100.3	57.6	42.7	94.9	59.0	140.1	60.5	142.9	146.2	149.6	153.0	156.5
Local area support costs	120.3	-	120.3	150.4	-	150.4	109.8	-	91.4	-	93.6	96.0	98.4	100.9	103.4
Corporate support costs	54.1	182.8	(128.7)	67.7	186.9	(119.2)	87.5	191.5	182.0	196.3	186.4	191.2	196.1	201.0	206.0
Indirect costs	161.0	180.6	(19.7)	147.0	170.2	(23.2)	175.9	174.4	244.2	178.8	250.1	256.5	263.1	269.7	276.4
Preventative maintenance	254.0	345.5	(91.5)	209.3	346.7	(137.4)	169.0	355.3	293.6	364.2	300.9	308.7	316.7	324.7	332.9
Labour	74.2	107.2	(33.0)	66.1	110.6	(44.5)	46.3	113.4	85.5	116.2	87.9	90.4	92.9	95.4	98.0
Contractors	19.2	5.6	13.6	19.2	5.7	13.5	11.7	5.8	24.5	5.9	25.0	25.6	26.2	26.8	27.5
Materials	5.6	30.3	(24.7)	4.7	30.5	(25.8)	4.1	31.3	19.6	32.1	20.0	20.5	20.9	21.4	21.9
Other	4.2	3.9	0.3	3.4	3.9	(0.5)	5.3	4.0	5.9	4.1	6.0	6.1	6.3	6.4	6.6
Local area support costs	63.8	-	63.8	56.7	-	56.7	33.7	-	34.4	-	35.2	36.1	37.0	37.9	38.9
Corporate support costs	22.2	101.7	(79.5)	19.8	104.0	(84.1)	24.1	106.6	64.1	109.2	65.7	67.3	69.0	70.8	72.6
Indirect costs	64.9	96.9	(32.0)	39.2	92.0	(52.7)	43.8	94.3	59.7	96.6	61.1	62.7	64.3	65.9	67.5
Corrective maintenance	90.1	139.4	(49.3)	251.4	140.4	111.0	151.0	143.9	214.6	147.5	219.9	225.6	231.5	237.3	243.3
Labour	20.7	29.3	(8.5)	64.7	30.2	34.5	23.5	31.0	61.5	31.7	63.3	65.0	66.9	68.7	70.5
Contractors	9.1	16.7	(7.6)	43.8	17.0	26.8	17.0	17.4	24.5	17.8	25.0	25.6	26.2	26.8	27.5
Materials	12.0	27.0	(15.0)	25.6	27.4	(1.8)	10.2	28.1	14.7	28.8	15.0	15.3	15.7	16.1	16.4
Other	3.8	10.0	(6.2)	4.5	10.2	(5.7)	47.4	10.4	2.9	10.7	3.0	3.1	3.1	3.2	3.3
Local area support costs	17.6	-	17.6	53.3	-	53.3	17.6	-	21.9	-	22.5	23.0	23.6	24.2	24.8
Corporate support costs	7.0	29.9	(22.9)	21.6	30.5	(8.9)	14.8	31.3	46.1	32.1	47.2	48.4	49.7	50.9	52.2
Indirect costs	19.8	26.5	(6.7)	37.9	25.1	12.8	20.5	25.7	42.9	26.4	44.0	45.1	46.2	47.4	48.6
Routine total	1147.4	1248.0	(100.6)	1393.2	1254.0	139.2	1328.0	1285.4	1727.0	1317.5	1767.4	1811.7	1857.7	1904.5	1951.7

^{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**. A key change since the 2018/19 NSP is the inclusion of repair works at Fred Haigh Dam. The discharge channel suffered damage during multiple flood events over the 2011—2019 period. An initial assessment (circa 2015) determined that remedial work was not needed; however, damage caused by subsequent events needs to be repaired to prevent further backscour towards the dam and of the chute wall adjacent to Monduran pump station. Sunwater is preparing options for repairing the discharge channel.

Table 4: Annuity balance¹

Bundaberg 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	(9743.6)	(10,775.0)	(12,420.4)	(14,948.1) ³	(23,800.6)	(23,437.5)	(21,536.2)
Non-routine spend	(935.4)	(1488.1)	(2593.2)	(11,843.9)	(2143.4)	(669.0)	(487.8)
Insurance proceeds receipts (if applicable)							
Prior year	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-
Annuity contribution ⁴	633.9	649.7	664.3	3865.4	3898.0	3940.6	3976.6
Interest/financing costs	(729.8)	(807.0)	(930.3)	(874.0)	(1391.6)	(1370.3)	(1259.2)
Sunwater – Closing Balance	(10,775.0)	(12,420.4)	(15,279.6)	(23,800.6)	(23,437.5)	(21,536.2)	(19,306.6)
QCA – Closing Balance	(950.0)	(720.5)					
Difference	(9825.0)	(11,700.0)					

^{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 a proposed adjustment to the annuity balance relating to the placement of concrete during repairs to Ben Anderson Barrage. Refer to the 2018/19 NSP for further details.

^{4.} 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	Ben Anderson Barrage – Build and install shutters	The existing strategy for shutter maintenance is to refurbish 10 every year. Due to high water levels and floods during the past 8-10 years, the refurbishment program is behind schedule. An options study identified it was more cost effective to build 10 new shutters every year for the next 10 years then start the maintenance strategy again.	313
	Fred Haigh Dam – Spillway repairs	A detailed civil and geotechnical inspection of the unlined spillway discharge chute determined that it needs to be repaired to prevent further backscour towards the dam, and of the chute wall adjacent to Monduran pump station.	1116
	Ned Churchward Weir – Replace trash racks x8	The intake trash racks at the weir are badly corroded to the extent that they cannot be refurbished.	230
	Fred Haigh Dam – Comprehensive Risk Assessment (CRA) and safety review studies	To obtain the best outcome from the CRA and safety review, Sunwater needs to better understand the seismicity of the dam, and the failure consequences downstream. Two studies will be completed to provide inputs into the CRA and safety review.	92
	Ben Anderson Barrage – Sluice gate refurbishment	Sluice gates 4 and 5 are deteriorating such that they need to be repainted, seals replaced and the ropes replaced.	78
	Other works	There are 19 other non-routine projects for 2019/20.	764
	2019/20 Total		2593
2020/21	Ben Anderson Barrage – Build and install shutters	The existing strategy for shutter maintenance is to refurbish 10 every year. Due to high water levels and floods during the past 8-10 years, the refurbishment program is behind schedule. An options study identified it was more cost effective to build 10 new shutters every year for the next 10 years then start the maintenance strategy again.	319
	Fred Haigh Dam – Spillway repairs	A detailed civil and geotechnical inspection of the unlined spillway discharge chute determined that it needs to be repaired to prevent further backscour towards the dam, and of the chute wall adjacent to Monduran pump station. The budgeted amount includes a contingency.	10,819



Year	Project title	Project scope	Budget (\$'000 nominal)
	Fred Haigh Dam – Regulating valve refurbishments x3	The 2016 comprehensive inspection recommended that the three regulating valves be removed to refurbish the coating, seals and linkages that move the valve shroud. This will extend the valves' lives.	105
	Fred Haigh Dam – Conduit door refurbishment	The watertight door that seals the diversion conduit from the outlet works is showing signs of corrosion so needs to be removed and taken from site to repaint. The bulkhead gates will need to be installed to isolate the intake tower.	84
	Ben Anderson Barrage – Sluice gate refurbishment	Sluice gates 1, 2 and 3 are deteriorating such that they need to be repainted, seals replaced and the ropes replaced.	80
	Other works	There are 15 other non-routine projects for 2020/21.	437
	2020/21 Total		11,844
2021/22	Ben Anderson Barrage – Build and install shutters	The existing strategy for shutter maintenance is to refurbish 10 every year. Due to high water levels and floods during the past 8-10 years, the refurbishment program is behind schedule. An options study identified it was more cost effective to build 10 new shutters every year for the next 10 years then start the maintenance strategy again.	328
	Fred Haigh Dam – Comprehensive inspection	The Queensland Dam Safety Management Guidelines require Sunwater to undertake a comprehensive dam safety inspection every 5 years. The inspection identifies any defects and allows Sunwater to assess their risks and prioritise their scheduled work in accordance with the asset planning methodology.	75
	Meter replacements	This is an allowance to replace failed customer meters on the Burnett River. If meters have not failed, the funds will remain in the annuity.	75
	Fred Haigh Dam – Spillway repairs	A detailed civil and geotechnical inspection of the unlined spillway discharge chute determined that it needs to be repaired to prevent further backscour towards the dam, and of the chute wall adjacent to Monduran pump station. The budgeted amount includes a contingency.	1360
	Fred Haigh Dam – CRA	A CRA is conducted with new data collected from previous studies to assess the level of risks identified and further refine their priority for refurbishment.	188
	Other works	There are 8 other non-routine projects for 2021/22.	118
	2021/22 Total		2144



Year	Project title	Project scope	Budget (\$'000 nominal)
2022/23	Ben Anderson Barrage – Build and install shutters The existing strategy for shutter maintenance is to refurbish 10 every year. Due to high water levels and floods during the past 8-10 years, the refurbishment program is behind schedule. An options study identified it was more cost effective to build 10 new shutters every year for the next 10 years then start the maintenance strategy again. Ben Anderson Barrage – Upstream rail refurbishment Sections of the upstream rail are becoming heavily pitted to the extent that the rail should be replaced. This will ensure safe operation of the gantry crane when it is required to lift the shutters back into place. This is a continuation of the 2021/22 project. Ned Churchward Weir – Comprehensive inspection Sunwater conducts comprehensive inspections on all weirs every five years to maintain current knowledge of asset condition and risks. This allows better asset maintenance planning to be undertaken. Meter replacements This is an allowance to replace failed customer meters on the Burnett River. If meters have not failed, the funds will remain in the annuity. The existing strategy for shutter maintenance is to refurbish 10 every year. Due to high water levels and floods during the past 8-10 years, the refurbishment program is behind schedule. An options study identified it was more cost effective to build 10 new shutters every year for the next 10 years then start the maintenance strategy again. The internal settlement instruments at the dam are in poor condition. This will be an options study into how to replace failed customer meters on the Burnett River. If meters have not failed, the funds will remain in the annuity.	344	
	Ben Anderson Barrage – Upstream rail refurbishment	should be replaced. This will ensure safe operation of the gantry crane when it is required to lift the shutters back into place. This is a continuation of the 2021/22	73
	Ned Churchward Weir – Comprehensive inspection	maintain current knowledge of asset condition and risks. This allows better asset	60
	Ben Anderson Barrage – Comprehensive inspection	Anderson Barrage – Comprehensive inspection Sunwater conducts comprehensive inspections on all weirs every five years to maintain current knowledge of asset condition and risks. This allows better asset	54
	Meter replacements		78
	Other works	There are 2 other non-routine projects for 2022/23.	60
	2022/23 Total		669
2023/24	Ben Anderson Barrage – Build and install shutters	high water levels and floods during the past 8-10 years, the refurbishment program is behind schedule. An options study identified it was more cost effective to build 10 new	352
			22
	Meter replacements	This is an allowance to replace failed customer meters on the Burnett River. If meters have not failed, the funds will remain in the annuity.	80
	Ben Anderson Barrage – Switchboard replacement options	The switchboards at Ben Anderson Barrage are coming towards the end of their life. It is prudent to assess their condition and prepare options for their replacement with modern equivalents if their condition and risk level determines replacement is needed.	34
	Other works	There are no other non-routine projects for 2023/24.	-
	2023/24 Total		488



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.