

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

Burdekin Haughton 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 \$107,000 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**. The Burdekin Houghton 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}	Subsidy (\$/ML)
Bulk water customers				
Medium Priority Allocation Charge	Bulk Water Charge – Part A (fixed charge based upon allocation)	12.71	3.03	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	0.54	0.60	0.06
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)	3.49	3.03	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	0.54	0.60	0.06

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 \$6.23.

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Burdekin Houghton 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	10	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 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}

Burdekin Haughton 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	1792.3	2784.9	(992.6)	2005.8	2819.3	(813.6)	2489.1	2889.8	2456.4	2962.1	2508.8	2240.6	2296.4	2359.5	2412.5
Labour	251.2	747.1	(495.9)	270.5	771.0	(500.4)	429.8	790.2	316.5	810.0	325.4	267.2	274.7	282.1	289.8
Contractors	49.4	19.2	30.2	36.9	19.5	17.5	66.4	20.0	58.7	20.5	60.0	49.0	50.2	51.4	52.6
Materials	17.5	23.7	(6.2)	12.1	24.1	(12.0)	13.4	24.7	19.6	25.3	20.0	16.3	16.7	17.1	17.5
Electricity	107.1	118.2	(11.2)	101.8	126.5	(24.7)	(0.7)	129.7	127.0	132.9	126.3	114.0	118.0	128.4	127.6
Insurance	569.3	310.1	259.2	789.7	315.4	474.4	721.2	323.3	844.5	331.3	861.8	881.6	901.9	922.7	943.9
Other	209.6	87.1	122.5	229.2	88.6	140.7	275.6	90.8	327.7	93.0	334.4	273.0	279.2	285.7	292.2
Local area support costs	216.0	-	216.0	232.5	-	232.5	306.9	-	199.8	-	204.6	167.5	171.8	176.1	180.5
Corporate support costs	112.6	716.9	(604.3)	129.1	732.6	(603.5)	275.5	750.9	237.2	769.7	243.0	198.9	204.0	209.1	214.3
Indirect costs	259.7	762.6	(502.9)	203.8	741.7	(538.0)	401.0	760.3	325.5	779.3	333.4	273.0	279.9	286.9	294.1
Preventative maintenance	473.6	370.6	103.0	535.0	373.4	161.5	427.8	382.8	462.9	392.3	474.2	388.3	398.2	408.3	418.5
Labour	102.8	108.2	(5.4)	138.7	111.7	27.1	69.3	114.4	110.7	117.3	113.8	93.4	96.1	98.7	101.3
Contractors	140.1	37.4	102.7	130.6	38.1	92.6	177.3	39.0	97.9	40.0	100.0	81.7	83.7	85.6	87.7
Materials	4.4	8.2	(3.8)	11.6	8.4	3.2	17.4	8.6	13.7	8.8	14.0	11.4	11.7	12.0	12.2
Other	8.3	7.8	0.5	6.1	7.9	(1.9)	8.1	8.1	9.8	8.3	10.0	8.2	8.4	8.5	8.7
Local area support costs	88.3	-	88.3	119.3	-	119.3	51.4	-	70.6	-	72.4	59.2	60.7	62.3	63.8
Corporate support costs	36.4	103.3	(66.9)	46.2	105.5	(59.3)	42.1	108.2	82.9	110.9	85.0	69.6	71.3	73.1	75.0
Indirect costs	93.2	105.7	(12.5)	82.4	101.9	(19.4)	62.2	104.4	77.2	107.0	79.1	64.7	66.4	68.1	69.8
Corrective maintenance	141.6	233.7	(92.1)	282.5	235.9	46.6	399.3	241.8	314.5	247.8	321.9	263.4	270.0	276.7	283.5
Labour	18.6	55.8	(37.2)	33.4	57.6	(24.2)	57.6	59.0	53.8	60.5	55.3	45.5	46.7	48.0	49.3
Contractors	81.2	11.6	69.6	148.7	11.8	136.9	182.6	12.1	107.7	12.4	110.0	89.9	92.0	94.2	96.4
Materials	2.4	33.8	(31.4)	28.1	34.4	(6.3)	15.8	35.2	29.4	36.1	30.0	24.5	25.1	25.6	26.2
Other	2.4	22.5	(20.1)	5.3	22.9	(17.6)	12.2	23.5	10.8	24.1	11.0	9.0	9.2	9.4	9.6
Local area support costs	16.0	-	16.0	28.7	-	28.7	43.1	-	34.9	-	35.7	29.3	30.0	30.8	31.5
Corporate support costs	9.5	55.4	(45.9)	18.4	56.7	(38.2)	37.8	58.1	40.3	59.5	41.3	33.8	34.7	35.6	36.5
Indirect costs	11.5	54.5	(43.0)	19.8	52.5	(32.7)	50.2	53.8	37.6	55.2	38.5	31.5	32.3	33.1	33.9
Routine total	2407.5	3389.2	(981.6)	2823.2	3428.6	(605.5)	3316.2	3514.4	3233.8	3602.2	3304.9	2892.2	2964.7	3044.4	3114.6

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 we published our 2018/19 NSP, we have deferred a number of planned refurbishment projects at Burdekin Falls Dam and Clare Weir, based on updated condition data or alignment with other planned works. Forecast costs for the Claire Weir gates hydraulic cylinder refurbishment are also expected to be lower.

Table 4: Annuity balance¹

Burdekin Haughton 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	4116.2	4195.6	3916.6	6179.8	6978.3	7906.1	9101.4
Non-routine spend	(840.2)	(1219.8)	(1700.7)	(904.3)	(843.7)	(675.5)	(975.2)
Insurance proceeds receipts (if applicable)							
Prior year	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-
Annuity contribution ³	611.3	626.6	640.7	1341.5	1363.4	1408.6	1527.0
Interest/financing costs	308.3	314.2	293.4	361.3	408.0	462.3	532.1
Sunwater – Closing Balance	4195.6	3916.6	3150.0	6978.3	7906.1	9101.4	10,185.4
QCA – Closing Balance	7293.2	7284.1					
Difference	(3097.6)	(3367.5)					

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	Clare Weir – Hydraulic system/cylinders (Stage 3) & gantry crane rail	Continued hydraulic system upgrades to improve reliability and replacement of the upstream gantry crane rail due to condition.	691
	Burdekin Falls Dam – Recreational facility & development strategy	Project to underpin Sunwater's strategic goals in developing the recreational facilities at Burdekin Falls Dam.	209
	Burdekin Falls Dam – Sewage treatment plant	Jacobs recommended that the sewage treatment plant sludge be removed, and the aerating blower replaced to improve efficiency of water treatment. This is in preparation for the dam safety upgrade site work.	176
	Burdekin Falls Dam – 20-year dam safety review	This is the continuation of the 20-year safety review of Burdekin Falls Dam. The safety review assesses the condition of the dam against current standards and design guidelines before the recommendations are risk assessed for action.	149
	Burdekin Falls Dam – Replace light poles and fittings	An inspection highlighted corrosion of the street lighting poles and fittings. This project will replace and reinstate function.	130
	Burdekin Falls Dam – Bulkhead gate refurbishment	The bulkhead did not seal adequately during the 2017 comprehensive inspection. The gate is also distorted. The seals will be replaced and the gate straightened out prior to work on the three conduits in later years.	70
	Burdekin Falls Dam – Gallery lighting project	Installation of emergency lighting system to address power failure hazard within the gallery system.	56
	Other works	Unplanned capital replacement allocation, minor Burdekin Falls Dam water treatment plant works, customers meter replacements, and gantry crane switchboard works etc.	220
	2019/20 Total		1701
2020/21	Clare Weir – Hydraulic system upgrade (Stage 4)	The Clare Weir hydraulic system has been underperforming for many years, mainly due to design inefficiencies. This is Stage 4 of a multi-year project to redesign and improve the hydraulic system.	334

Year	Project title	Project scope	Budget (\$'000 nominal)
	Burdekin Falls Dam – Baulks refurbishment	The baulks at the dam all require patch painting to remove corrosion. Costs have been determined based on the work being done at the dam which requires encapsulation of the sand used to remove the paint.	56
	Burdekin Falls Dam – Penstock liner refurbishment	Planned refurbishment of the three steel penstocks to address coating loss and potential corrosion issues.	108
	Burdekin Falls Dam – Dissipator blocks and slab	Dam safety inspections have identified the erosion or loss of dissipator blocks and erosion of the impact slabs in the outlet works discharge channel.	72
	Burdekin Falls Dam – Main wall light & power refurbishment	Planned replacement and refurbishment of aged hardware and equipment, condition assessment and prioritised works.	96
	Burdekin Falls Dam – Replace main dam distribution board components	Age-related review and replacement of critical components to ensure continued reliable and compliant operation.	50
	Other works	Asset revaluation, customer meter replacements, and fire suppression testing etc.	188
	2020/21 Total		904
2021/22	Clare Weir – Hydraulic system upgrade (Stage 5)	The Clare Weir hydraulic system has been underperforming for many years, mainly due to design inefficiencies. This is Stage 5 of a multi-year project to redesign and improve the hydraulic system.	446
	Burdekin Falls Dam – Comprehensive inspection	Sunwater conducts comprehensive inspections on our dams every five years. This allows us to maintain a current knowledge of the asset condition and risks, so projects can be brought in and deferred as needed to maintain the asset in serviceable condition. This is a requirement of the dam safety condition schedule for Burdekin Falls Dam.	118
	Burdekin Falls Dam – Road refurbishment	The internal roads at the dam are in a deteriorating condition. This project will reseal them, fill potholes and improve drainage.	154
	Burdekin Falls Dam – Patch paint baulks	Twelve baulks to be removed and patch painted to maintain overall condition of assets.	59
	Clare Weir – Comprehensive inspection	Sunwater conducts comprehensive inspections on our weirs every five years. This allows us to maintain a current knowledge of the asset condition and risks, so projects can be brought in and deferred as needed to maintain the asset in serviceable condition.	51

Year	Project title	Project scope	Budget (\$'000 nominal)
	Other works	River meter replacements.	16
	2021/22 Total		844
2022/23	Clare Weir – Hydraulic system upgrade (Stage 6)	The Clare Weir hydraulic system has been underperforming for many years, mainly due to design inefficiencies. This is Stage 6 of a multi-year project to redesign and improve the hydraulic system.	532
	Burdekin Falls Dam – Patch paint baulks	Twelve baulks to be removed and patch painted to maintain overall condition of assets.	61
	Gorge Weir – Comprehensive inspection	Sunwater conducts comprehensive inspections on our weirs every five years. This allows us to maintain a current knowledge of the asset condition and risks, so projects can be brought in and deferred as needed to maintain the asset in serviceable condition.	26
	Other works	Customer river meter replacements, Clare Weir light and power works, and other minor works.	57
	2022/23 Total		676
2023/24	Clare Weir – Hydraulic system upgrade (Stage 7)	The Clare Weir hydraulic system has been underperforming for many years, mainly due to design inefficiencies. This is Stage 7 of a multi-year project to redesign and improve the hydraulic system.	358
	Clare Weir – Access road refurbishment	This is an allowance to refurbish the left and right bank access roads and ramps at Clare Weir. A condition assessment in 2022/23 will determine if this work will proceed.	197
	Burdekin Falls Dam – Ventilation fan replacement	This is an allowance to replace the upper and lower ventilation fans and systems at the dam. A condition assessment in 2022/23 will determine if this work will proceed.	116
	Clare Weir – Outlet works hydraulics	Hydraulic power pack overhaul to ensure reliable flow regulation.	87
	Burdekin Falls Dam – Patch paint baulks	Twelve baulks to be removed and patch painted to maintain overall condition of assets.	62
	Clare Weir – Refurbish ladders, walkways & handrails	This is an allowance to refurbish ladders, walkways and handrails at Clare Weir. A condition assessment in 2022/23 will determine if this work will proceed.	55
	Burdekin Falls Dam – Long haul gantry crane	Long travel drive units and electricals require timed overhaul to ensure continued reliable operation.	44

Year	Project title	Project scope	Budget (\$'000 nominal)
	Other works	Customer river meter replacements, and minor hydraulics and generator works at Burdekin Falls Dam.	56
	2023/24 Total		975

Contact us

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

Email: nspfeedback@sunwater.com.au

Post: NSP Feedback
PO Box 15536 City East
Brisbane Qld 4002

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.