

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

Nogoa Mackenzie 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 \$99,000 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 Nogoia Mackenzie 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)	12.22	6.64	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	1.32	1.28	N/A
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)	8.84	6.64	N/A
Medium Priority Allocation Water	Bulk Water Charge – Part B (variable charge based upon actual usage)	1.32	1.28	N/A

1. This table includes bulk water charges only. From 1 July 2019, distribution charges are set by Fairbairn Irrigation Network Limited.
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 \$33.50.

Service targets

Sunwater and customers have agreed Water Supply Arrangements and Service Targets for the Nogoia Mackenzie 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	4 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	6	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 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}

Nogoa Mackenzie 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	1494.5	1969.4	(474.8)	1594.4	1988.9	(394.5)	2031.8	2038.6	1857.8	2089.6	1898.8	1599.7	1639.2	1680.2	1720.4
Labour	251.5	532.9	(281.4)	251.5	549.9	(298.4)	378.8	563.7	280.0	577.8	287.8	221.4	227.6	233.8	240.1
Contractors	124.9	73.3	51.6	158.4	74.5	83.9	144.0	76.4	171.3	78.3	175.0	133.9	137.1	140.3	143.7
Materials	11.3	29.9	(18.6)	15.4	30.4	(15.0)	15.8	31.1	19.6	31.9	20.0	15.3	15.6	16.0	16.4
Electricity	11.6	16.4	(4.8)	14.4	17.5	(3.1)	38.0	18.0	19.5	18.4	18.0	17.6	18.2	19.8	19.7
Insurance	398.5	208.3	190.2	505.5	211.9	293.6	463.6	217.2	535.7	222.6	546.7	559.3	572.1	585.3	598.7
Other	111.7	49.7	62.0	129.8	50.5	79.3	104.5	51.8	173.9	53.1	177.5	135.6	138.7	141.9	145.2
Local area support costs	216.3	-	216.3	216.1	-	216.1	285.6	-	156.5	-	160.3	122.9	126.0	129.2	132.4
Corporate support costs	102.7	513.9	(411.2)	110.8	525.2	(414.4)	222.3	538.3	209.8	551.8	214.9	164.8	169.0	173.2	177.6
Indirect costs	266.2	545.0	(278.8)	192.4	528.9	(336.5)	379.3	542.1	291.5	555.7	298.6	228.9	234.8	240.7	246.7
Preventative maintenance	360.4	272.7	87.6	390.5	274.6	115.9	332.8	281.5	357.9	288.5	366.8	281.3	288.6	295.9	303.4
Labour	105.1	85.7	19.5	123.8	88.4	35.4	77.4	90.6	94.9	92.9	97.6	75.1	77.2	79.3	81.4
Contractors	20.7	7.3	13.3	37.8	7.5	30.4	78.1	7.6	48.9	7.8	50.0	38.3	39.2	40.1	41.0
Materials	11.3	7.9	3.4	3.4	8.0	(4.6)	2.1	8.2	4.9	8.4	5.0	3.8	3.9	4.0	4.1
Other	9.1	7.5	1.6	8.1	7.6	0.5	6.6	7.8	11.8	8.0	12.0	9.2	9.4	9.6	9.8
Local area support costs	90.4	-	90.4	106.5	-	106.5	57.1	-	60.0	-	61.5	47.1	48.3	49.5	50.8
Corporate support costs	31.7	80.7	(49.0)	37.1	82.5	(45.3)	41.0	84.5	71.2	86.6	72.9	55.9	57.3	58.7	60.2
Indirect costs	92.1	83.7	8.4	73.6	80.7	(7.0)	70.5	82.7	66.2	84.7	67.8	52.0	53.3	54.7	56.0
Corrective maintenance	148.7	206.0	(57.3)	114.1	207.9	(93.9)	262.7	213.1	210.7	218.5	215.6	165.2	169.3	173.5	177.8
Labour	23.7	49.9	(26.2)	12.3	51.5	(39.2)	36.1	52.8	34.8	54.1	35.8	27.6	28.3	29.1	29.9
Contractors	50.9	25.4	25.6	64.6	25.8	38.8	110.7	26.4	73.4	27.1	75.0	57.4	58.8	60.1	61.6
Materials	0.3	22.0	(21.7)	5.8	22.4	(16.5)	19.6	22.9	19.6	23.5	20.0	15.3	15.6	16.0	16.4
Other	24.9	10.5	14.4	6.3	10.7	(4.4)	6.7	11.0	14.7	11.3	15.0	11.5	11.7	12.0	12.3
Local area support costs	20.4	-	20.4	10.5	-	10.5	27.7	-	17.7	-	18.2	13.9	14.3	14.6	15.0
Corporate support costs	10.4	49.5	(39.0)	7.3	50.5	(43.3)	33.0	51.8	26.1	53.1	26.7	20.5	21.0	21.6	22.1
Indirect costs	18.0	48.8	(30.8)	7.3	47.0	(39.7)	28.8	48.2	24.3	49.4	24.9	19.1	19.6	20.1	20.6
Routine total	2003.7	2448.2	(444.5)	2098.9	2471.4	(372.5)	2627.3	2533.2	2426.5	2596.6	2481.2	2046.2	2097.1	2149.6	2201.6

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 the publication of the 2018/19 NSP, there has been a significant decrease in expenditure through the review and removal of Fairbairn Water Treatment Plant projects after 2019/20.

Table 4: Annuity balance¹

Nogoa Mackenzie 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	(3552.0)	(4421.5)	(5057.4)	(6796.8)	(5881.5)	(4946.6)	(4752.2)
Non-routine spend	(1085.7)	(798.8)	(1952.6) ³	(127.6)	(181.0)	(1018.2)	(536.0)
Insurance proceeds receipts (if applicable)							
Prior year	-	-	-	-	-	-	-
Current year	-	-	-	-	-	-	-
Annuity contribution ⁴	482.1	494.2	505.3	1440.4	1459.7	1501.8	1555.9
Interest/financing costs	(266.0)	(331.2)	(378.8)	(397.4)	(343.9)	(289.2)	(277.9)
Sunwater – Closing Balance	(4421.5)	(5057.4)	(6883.5)	(5881.5)	(4946.6)	(4752.2)	(4010.1)
QCA – Closing Balance	(1710.4)	(1374.4)					
Difference	(2711.2)	(3683.0)					

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 2019/20 forecast non-routine spend above (and in our June 2019 regulatory model) includes costs related to the Town Water Supply of approximately \$1.2 million. Sunwater has subsequently decided that the majority of these costs should not be borne by customers. As such, only a share of the non-routine costs incurred in 2019/20 related to the Town Water Supply will be added to the annuity.
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	Fairbairn Dam – Town Water Supply (TWS) control system and related works	The 2015 Jacobs report recommended that the TWS control system be upgraded to a modern equivalent. This business case will determine if the work is cost effective and provide preliminary solutions to the upgrade. There are additional minor pump and bunding works planned in 2019/20.	1174 ¹
	Fairbairn Dam – Bathymetric survey	A bathymetric survey will be completed to identify hidden obstacles. This is a public safety initiative.	292
	Comprehensive inspections – 4 weirs	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.	122
	Bedford Weir – Refurbish trash racks	A condition assessment undertaken in 2015 by Jacobs recommended that the screens need repainting to preserve their life; however, only those above the water level could be assessed. Failed anodes, if any, will also be replaced. Those that do not need repainting will not be done yet.	47
	Tartus Weir – Protection works	Right bank upstream and downstream protection works refurbishment to reinstate lost material and abutment protection.	47
	Bedford Weir – Refurbish inlet baulks	Like the trash racks, the inlet baulks need repainting. It is more economical to do both jobs in the one year to avoid procurement costs.	44
	Fairbairn Dam – Saddle Dam 2 bulkhead	Replacement of the non-compliant bulkhead gate arrangement to enable isolation of the Saddle Dam 2 conduit (Selma Main Channel).	34
	Other works	The balance of works includes customer river meter replacements, various risk assessments, weir baulk and screen patch painting, and minor building works.	193
	2019/20 Total		1953

Year	Project title	Project scope	Budget (\$'000 nominal)
2020/21	Asset revaluation	Revalue the assets for insurance purposes; update asset replacement costs and Bill of Materials; and identify gaps in asset hierarchy data.	47
	Meter replacements	Upgrade program to replace customer river meters with Australian Standard (AS) 4747 compliant equipment.	43
	Selma Weir – Concrete works	The project involves the repair of numerous (though minor) concrete surface defects at the weir based on inspection reports.	30
	Other works	The balance of works involves Bedford Weir low level inlet and outlet screen replacements.	8
	2020/21 Total		128
2021/22	Bingegang Weir – Outlet and protection works	Refurbish low level outlet and reinstate right bank upstream rock fill and downstream baskets.	72
	Meter replacements	Upgrade program to replace customer river meters with AS4747 compliant equipment.	44
	Bedford Weir – Protection works	Repair damage to downstream rock baskets and related protection works.	36
	Tartus Weir – Protection works	Repair damage to left bank downstream rock baskets and related protection works.	23
	Other works	The balance of works involves the replacement of the Fairbairn Dam treated water supply distribution board.	6
	2021/22 Total		181
2022/23	Fairbairn Dam – Right bank rock face stability	This is the final phase of the rock face stability project. The work is to resurvey the site after five years to check for any movement, then complete the remainder of the benching work on the face subject to a renewed risk assessment.	533
	Fairbairn Dam – Comprehensive inspection	Sunwater conducts comprehensive inspections on our dams every five years to comply with the dam safety condition schedules attached to the dam. 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.	136
	Fairbairn Dam outlet works – Lift gates	The four lift gates at the gatehouse need patch painting and new seals.	91
	Fairbairn Dam – Gate hoists	Refurbishment of Fairbairn Dam guard gate and regulating gate hoist motors/electrics and ropes to maintain function and safety.	76

Year	Project title	Project scope	Budget (\$'000 nominal)
	Fairbairn Dam – Bridges	The inlet tower and spillway bridges require third-party inspection (Level 2) to ensure continued safe operation and compliance.	54
	Meter replacements	Upgrade program to replace customer river meters with AS4747 compliant equipment.	46
	Selma Weir – Outlet pipe and valve	The outlet pipe at Selma Weir is now about 50 years old after which time the concrete should need patching. The 2020 inspection will confirm the need for this work. It can only be inspected during a shutdown. The valve is also scheduled for replacement.	56
	Other works	The balance of works includes refurbishment/replacement of the Fairbairn Dam right bank meter cubicle (SWB 003).	26
	2022/23 Total		1018
2023/24	Fairbairn Dam – Saddle Dam 2 (Selma) gates and guides	Refurbishment of trash racks and guides in Saddle Dam 2. If the condition assessment closer to 2023 determines they remain in a serviceable condition, the funds will remain in the annuity.	143
	Fairbairn Dam – Access roads and tracks	Refurbishment and grading of various access roads and tracks to the dam's facilities and embankments.	135
	Fairbairn Dam – Substation	Replacement of targeted electrical substation equipment to retain serviceability.	60
	Fairbairn Dam – Options analysis	Options analysis to consider the most prudent and efficient methodology to refurbish the upstream and downstream main embankment rock rip-rap.	32
	Fairbairn Dam – Fencing	Refurbishment and repair of fencing lines, post and gates at various locations around the dam and associated infrastructure.	43
	Meter replacements	Upgrade program to replace customer river meters with AS4747 compliant equipment.	47
	Other works	The balance of works includes refurbishing two gauging station platforms and stairways, patch painting trash racks and Bedford Weir weep hole cleaning.	76
	2023/24 Total		536

1. Sunwater has subsequently decided that the majority of these costs should not be borne by customers. As such, only a share of non-routine costs incurred in 2019/20 related to the Town Water Supply will be added to the annuity.

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.