Service and Performance Plan – 2020/21

Barker Barambah Bulk Water 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 Barker Barambah Bulk Water Service Contract,[1] we expected to spend $1.14 million on routine costs and $0.39 million on non-routine projects. Our actual performance for routine costs ($1.13 million) was broadly in line with this forecast. Non-routine costs were lower than expected due to the deferral of the refurbishment of guard valve 2 at Bjelke-Petersen Dam to 2019/20.

Outlook for 2020/21

Routine costs ($1.18 million) are expected to remain relatively stable compared to what we previously forecast in last year's NSP ($1.14 million in 2020/21).[2]

Sunwater plans to spend approximately $2.55 million on non-routine projects. This is slighter higher than our previous forecast ($2.27 million), largely due to the need to undertake input studies to inform the comprehensive risk assessment at Bjelke-Petersen Dam. A significant driver of the non-routine spend in 2020/21 is the continuing refurbishment of Silverleaf Weir. Sunwater is installing sheet piling on the upstream side, concrete capping the weir and installing new outlet works.

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.

[1] See www.sunwater.com.au/schemes/Barker-Barambah/
[2] Excluding routine recreational facility costs.

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 Barker Barambah Bulk Water 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 Barker Barambah Bulk Water 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	8 weeks	0	0	0
	For shutdowns planned to exceed 3 days	2 weeks	0	0	0
	For shutdowns planned to be less than 3 days	5 days	0	0	0
Unplanned shutdowns – duration	Unplanned shutdowns will be fixed so that at least partial supply can be resumed	48 hours	0	0	0
Maximum number of interruptions	Planned or unplanned interruptions per water year	6	0	0	0

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	17,435
2015/16	15,187
2016/17	18,010
2017/18	10,641
2018/19	13,134
17-year historical average	**12,976**

Routine expenditure

Routine (or annual) expenditure includes funds for operations activities, preventative maintenance and corrective maintenance.

Table 3 Routine expenditure[1,2]

Barker Barambah Bulk Water 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	727.6	734.4	950.4	999.1	48.7		965.2	1095.8	1130.4	1188.0	1212.9	1248.2
Labour	131.0	140.9	130.0	181.9	51.9	At the total level, operations costs were largely consistent with our forecast. Electricity costs were higher than expected due to low storage levels at Bjelke-Petersen Dam, which resulted in more pumping to the Redgate scheme.	182.9	196.6	202.5	208.6	213.8	219.2
Contractors	7.5	5.3	8.0	6.9	(1.1)		11.0	25.0	25.6	26.3	26.9	27.6
Materials	0.4	0.3	4.0	0.5	(3.5)		3.0	3.0	3.1	3.2	3.2	3.3
Electricity	74.9	39.5	40.0	86.2	46.2		39.6	43.0	44.1	45.2	46.3	44.2
Insurance	211.3	192.5	204.9	207.0	2.2		236.6	284.0	291.1	298.3	305.8	313.4
Other	23.7	27.0	49.0	85.0	36.0		73.8	81.9	83.0	87.5	88.8	90.0
Local area support costs	112.6	109.8	166.4	104.4	(62.0)		62.8	99.9	107.7	137.0	131.6	128.5
Corporate support costs	48.8	66.2	84.5	172.3	87.8		131.1	147.5	151.9	156.5	160.4	164.4
Indirect costs	117.5	152.9	263.6	154.8	(108.8)		224.5	214.9	221.4	225.4	236.1	257.7
Preventative maintenance	102.9	108.9	146.8	110.5	(36.2)		115.9	64.2	66.3	70.0	71.4	74.1
Labour	34.0	28.5	37.7	29.2	(8.5)	Actual preventative maintenance costs were similar to historical expenditure.	33.9	17.2	17.7	18.3	18.7	19.2
Contractors	7.2	20.0	12.0	23.2	11.2		12.0	12.0	12.3	12.6	12.9	13.2
Materials	0.3	2.5	1.0	0.8	(0.2)		1.0	1.0	1.0	1.1	1.1	1.1
Other	2.0	1.8	1.0	2.6	1.6		1.0	2.0	2.1	2.1	2.2	2.2
Local area support costs	29.2	22.2	48.3	15.4	(32.9)		12.4	8.3	9.0	11.6	11.0	10.8
Corporate support costs	10.0	12.3	24.5	24.2	(0.3)		24.3	12.9	13.3	13.7	14.1	14.4
Indirect costs	20.2	21.6	22.3	15.1	(7.2)		31.3	10.7	10.9	10.7	11.4	13.1
Corrective maintenance	40.7	33.3	40.2	20.1	(20.0)		44.4	37.6	38.8	40.7	41.5	43.0
Labour	10.0	5.8	8.3	2.9	(5.4)	Actual corrective maintenance costs were lower than forecast due to a smaller number of corrective actions that needed to be undertaken in 2018/19. This is due to a large number of corrective actions identified and undertaken in the previous two years.	10.1	8.3	8.5	8.8	9.0	9.2
Contractors	3.0	11.8	6.0	5.7	(0.3)		7.0	7.0	7.2	7.4	7.5	7.7
Materials	8.8	1.3	5.0	6.5	1.5		7.0	7.0	7.2	7.4	7.5	7.7
Other	0.9	2.5	-	-	-		-	-	-	-	-	-
Local area support costs	8.6	4.5	10.6	0.9	(9.7)		3.7	4.0	4.3	5.5	5.3	5.2
Corporate support costs	3.4	3.0	5.4	2.4	(3.0)		7.2	6.2	6.4	6.6	6.7	6.9
Indirect costs	6.0	4.4	4.9	1.8	(3.1)		9.3	5.1	5.2	5.1	5.5	6.3
Routine total	**871.2**	**876.6**	**1137.3**	**1129.7**	**(7.6)**		**1125.5**	**1197.5**	**1235.4**	**1298.7**	**1325.8**	**1365.3**
Recreational facility costs[3]	Recreational facility costs are included in the above line items, as irrigation customers previously contributed towards them.							19.4	19.9	20.3	20.8	21.4
Routine total (excl. recreational facility costs)								**1178.1**	**1215.6**	**1278.3**	**1304.9**	**1344.0**

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.
3. From 1 July 2020, irrigation customers will no longer contribute towards the costs of operating and maintaining recreational facilities. Forecast costs have been separately identified for transparency.

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**. The continuation of the sheet piling refurbishment at Silverleaf Weir is forecast to be a significant driver of non-routine expenditure in the first two years of this period.

Table 4 Annuity balance[1]

Barker Barambah Bulk Water 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]	(909.3)	(922.4)	(866.4)	(2152.3)	(4106.5)	(4084.4)	(3602.4)	(2862.8)
Non-routine spend[3]	(197.1)	(171.6)	(1527.8)	(2548.2)	(554.8)	(478.8)	(251.6)	(75.6)
Insurance proceeds receipts (if applicable)								
Prior year	-	-	-	-	-	-	-	-
Current year	-	38.4	42.1	-	-	-	-	-
Annuity contribution[4]	252.0	258.3	264.8	688.1	756.4	1139.4	1148.8	1176.2
Interest/financing costs	(68.1)	(69.1)	(64.9)	(94.1)	(179.5)	(178.6)	(157.5)	(125.2)
Sunwater – Closing Balance	**(922.4)**	**(866.4)**	**(2152.3)**	**(4106.5)**	**(4084.4)**	**(3602.4)**	**(2862.8)**	**(1887.4)**
QCA – Closing Balance	**(922.4)**	**(866.4)**	**(2081.4)**	**(3698.0)**	**(3661.3)**	**(3181.7)**	**(2397.1)**	
Difference	-	-	70.8	408.4	423.1	420.8	465.7	

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 Barker Barambah Bulk Water Service Contract in 2018/19 and the actual projects undertaken.

Project	Forecast $'000	Actual[1] $'000	Commentary
Bjelke-Petersen Dam – Comprehensive inspection (19BBA01)	118	101	This project was delivered within budget.
Bjelke-Petersen Dam – Refurbish guard valve 1 (18BBA03)	79	66	Reflects refurbishment costs only. The installation of the refurbished guard valve (and the associated costs) has been carried over to 2019/20, as a dam shutdown is required to complete installation.
Silverleaf Weir – Options study (18BBA02)	58	78	Further work was conducted on the Wood Research condition assessment report in order to inform the options study more accurately. Additional time was then required by Sunwater's design engineer to complete the study in preparation for the next phase of the project in 2020.
Bjelke-Petersen Dam – Refurbish guard valve 2 (17BBA03)	79	5	Deferred. This project will be undertaken once the re-installation of guard valve 1 has been completed in 2019/20.
Other works (18BBA05, 18BBA07, 19BBA03 and 19BBA04)	60	29	Other works were undertaken as per forecasts. Contingency funds were not required.
2018/19 Total[2]	**394**	**280**	

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	Silverleaf Weir – Refurbishment	The options study on the refurbishment of Silverleaf Weir recommended the installation of sheet piling on the upstream side, concrete capping the weir and installing new outlet works. Three other weirs have been successfully refurbished using this method so Sunwater is confident this is the optimum solution. Other options at a far higher cost include a new weir upstream and buying back water allocations. Work will be spread over two years, with a third-year contingency in case of unfavourable weather.	1945
	Bjelke-Petersen Dam – Comprehensive risk assessment (CRA)	A CRA is conducted with new data collected from previous studies (safety review, input studies) to assess the level of dam and community safety risks identified and further refine their priority for refurbishment. A CRA is considered best practice among dam safety owners.	187
	Bjelke-Petersen Dam – Hydrographic survey	An underwater survey is to be conducted to identify potential operational obstructions.	48
	Bjelke-Petersen Dam – Replace secondary winch	The secondary bulkhead winch has been hydraulically actuated in the past; however, the hydraulic system is in poor condition. It is prudent to replace with an electrically actuated system as there is an electrical supply to the site already. The current hydraulic system is a mobile system that is designed specifically for this site, so it is not the optimal solution.	34
	Bjelke-Petersen Dam – CRA input studies	The CRA relies on current and accurate data upon which to conduct the risk assessments. In this case, updated geotechnical and failure consequence assessments will be conducted to inform the full level of societal risk.	151
	Other works	There are four other non-routine projects planned for 2020/21.	183
	2020/21 Total		**2548**
2021/22	Silverleaf Weir – Refurbishment	The options study on the refurbishment of Silverleaf Weir recommended the installation of sheet piling on the upstream side, concrete capping the weir and installing new outlet works. Three other weirs have been successfully refurbished using this method so Sunwater is confident this is the optimum solution. Other options at a far higher cost include a new weir upstream and buying back water allocations. Work will be spread over two years, with a third-year contingency in case of unfavourable weather.	500

Year	Project title	Project scope	Budget ($'000 nominal)
	Meter replacements	This is an allowance to replace failed customer meters in the Barker Barambah scheme. If meters are not replaced, the funds will remain in the annuity.	32
	Joe Sippel Weir – Comprehensive inspection	Sunwater conducts comprehensive inspections on our dams and weirs every five years to maintain current asset condition knowledge and improve the non-routine maintenance programs.	16
	Other works	There are two other non-routine projects planned for 2021/22, being standard-based seven-year crane inspections.	8
	2021/22 Total		**556**
2022/23	Meter replacements	This is an allowance to replace failed customer meters in the Barker Barambah scheme. If meters are not replaced, the funds will remain in the annuity.	32
	Bjelke-Petersen Dam – 20-year dam safety review	The Queensland Dam Safety Management Guidelines and condition schedule require each referable dam to undergo a dam safety review every 20 years to identify any deficiencies in design when compared to current standards and practices.	360
	Bjelke-Petersen Dam – Passive anchor tests	Several passive anchors will be pulled during the 20-year dam safety review to determine their contact with the foundation rock. The force needed to pull them will be compared with design standards and refurbishment planned if needed.	86
	Other works	There are no other non-routine projects planned for 2022/23.	-
	2022/23 Total		**478**
2023/24	Bjelke-Petersen Dam – Comprehensive inspection	The Queensland Dam Safety Management Guidelines require Sunwater to undertake a comprehensive dam safety inspection every five 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.	139
	Bjelke-Petersen Dam – Electrical upgrade options	Components of the outlet building electrical system not replaced under flood damage repair works are coming towards their end of life. It is prudent to better understand their condition and prepare options for their replacement before they fail. Options are needed as electrical technology has changed considerably since this equipment was installed.	8
	Stream gauging stations – Replace ageing equipment	The stream gauging station equipment is ageing and needs to be replaced with modern equivalents. An options study is not needed as the technology and likely solutions remain well defined.	16
	Bjelke-Petersen Dam – Replace dehumidifier	This is an allowance to replace the dehumidifier in the outlet building. It is needed to keep electrical switchboards etc. dry and will complement any electrical upgrades recommended from the options study.	21

Year	Project title	Project scope	Budget ($'000 nominal)
	Bjelke-Petersen Dam - Level 2 bridge inspection	Level 2 bridge inspections to Department of Transport and Main Roads standards are being introduced to all Sunwater intake tower and spillway bridges to ensure the safety of operators and the public. A five-year frequency is the maximum time between inspections recommended by the Department.	35
	Other works	There are two other non-routine projects planned for 2023/24 related to meter replacements.	33
	2023/24 Total		**252**
2024/25	Meter replacements	This is an allowance to replace failed customer meters in the Barker Barambah scheme. If meters are not replaced, the funds will remain in the annuity.	34
	Bjelke-Petersen Dam – Instrument replacement options studies	The Sunwater dam safety team is reviewing the need for instrumentation on some dams, particularly where the instruments have failed or are returning spurious results. Options for replacing failed piezometers will be investigated. Piezometers measure the pore pressure in the dam.	36
	Upper Redgate pump station – Fencing replacement	This is an allowance to replace fencing, gates and grids at the Upper Redgate pump station area. The funds will remain in the annuity if the assets are in a functional condition.	6
	Other works	There are no other non-routine projects planned for 2024/25.	-
	2024/25 Total		**76**

Contact us

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

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