

2017/18 ANNUAL NETWORK SERVICE PLAN

# BARKER BARAMBAH BULK WATER

30 JUNE 2017



MAKING WATER WORK

# CONTENTS

Introduction .....	3
Financial Summary .....	4
Water Data .....	5
Revenue .....	6
Routine Expenditure.....	7
Operations .....	8
Preventive maintenance .....	9
Corrective maintenance.....	10
Non-Routine Expenditure.....	13
Non-routine projects for 2018 and 2019 .....	15
Annuity Balance .....	17
Overview of annuity-funded, non-routine projects to 2043.....	18
Material projects 2018 and 2019.....	18
Material projects 2020–24 .....	19
Material projects 2025–43 .....	19
Appendix 1: Total Expenditure by Expense Type .....	20
Notes.....	23

We're focused on reliability, efficiency and safety, ensuring the Barker Barambah Water Supply Scheme continues to meet the needs and expectations of our diverse customer base.

In this Network Service Plan (NSP) we outline a range of proposed immediate and longer-term improvement projects, and provide a detailed breakdown of anticipated revenue and costs for review.

Our focus for 2017/18 is maintaining a reliable water supply and continuing safe dam operations. No major works are planned, but we will be delivering an extensive program of investigations and repairs, looking specifically at systems, metering and outlet works. This is part of our commitment to maintaining high standards and delivering ongoing value.

It is important to us that our customers are involved in making important decisions. We welcome and encourage your feedback on this NSP, and look forward to working with you to deliver the programs of work.

**John Kelly**  
Service Manager

# INTRODUCTION

At SunWater, we are committed to working collaboratively with our customers to deliver value and fit-for-purpose water solutions.

For our 5,000-plus customers, this means building and sustaining positive relationships while operating an efficient, sustainable business. We are committed to keeping our customers and partners informed, and working closely with them to identify and work towards solutions that deliver shared value.

This annual Network Service Plan (NSP) is designed to keep Barker Barambah Bulk Water's 174 customers up-to-date regarding routine expenditure (opex) and non-routine expenditure throughout the coming financial year — so they can provide input to our processes and be part of business decisions. In particular, the NSP covers:

- past performance for opex and non-routine expenditure
- forecast opex and non-routine expenditure for the approaching year
- the long-term outlook for material non-routine spend.

In the past, NSPs compared SunWater's costs with the Queensland Competition Authority (QCA) targets set in the 2012 price review. The 2017/18 NSP is the first to fall outside the QCA price path, which expires 30 June 2017. While the price path has been extended for two years, new targets will not be formally set.

In order to provide our customers with routine expenditure information of the greatest value possible (i.e. as close as possible to anticipated targets), we have adjusted the 2017 QCA targets in line with the QCA inflation assumption of 2.5% and adopted that as the target spend.

While adopting targets for routine spend is relatively simple, adopting targets for non-routine expenditure is more complicated. Due to the absence of confirmed information from the QCA and to provide our customers with as much information as possible, we have presented non-routine expenditure budgets for both 2018 and 2019. SunWater will work to maintain total expenditure during the next two years within the two-year budget limits.

The prior year figures included in this NSP are provided for information only. The focus of consultation is the draft budget figures for 2018. These figures are subject to change until after consultation when the 2018 budget is finalised.

Customer input to and feedback on the NSP is greatly valued. We consider and respond to all submissions, publishing all responses on our website.

To have your say, please contact us via email or post:

Email: [nspfeedback@sunwater.com.au](mailto:nspfeedback@sunwater.com.au)

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

# FINANCIAL SUMMARY

In 2017/18 SunWater plans to increase routine and non-routine expenditure for Barker Barambah Bulk Water, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers.

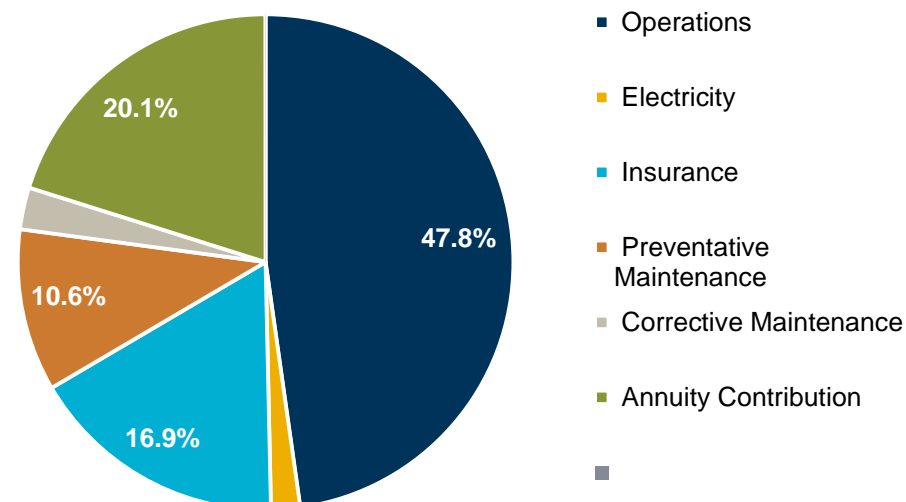
A high-level summary of the budgeted financial performance of the Barker Barambah Bulk Water service contract is presented in Table 1 below. Further detail on the planned spend, together with estimated revenue, is outlined on subsequent pages of this plan.

**TABLE 1: OPERATING REVENUE LESS SPEND**

Barker Barambah WS	Table reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Revenue	Table 1	1,023	1,217	1,396	1,106	1,134
Less – Routine Expenditure	Table 4 & Table 7	861	869	859	901	999
Less – Non-Routine Expenditure						
• Annuity Funded	Table 5, Table 6 & Table 7	615	176	45	268	829
• Non Annuity Funded	Table 5	5	8	-	-	-
<b>Surplus (Deficit)</b>		<b>(459)</b>	<b>164</b>	<b>492</b>	<b>(63)</b>	<b>(695)</b>

As part of our commitment to transparency, Figure 1 below shows a high-level breakdown of total scheme costs assessed by the QCA. These costs are divided up according to the QCA's methodology, which was outlined in its 2012 review of irrigation charges. The item 'Annuity Contribution' refers to the annualised renewals annuity component of the scheme's total costs.

**FIGURE 1: BREAKDOWN OF TOTAL SCHEME COSTS – 2018 BUDGET**



# WATER DATA

Barker Barambah Bulk Water's customer base includes industrial, irrigation and urban customers, as well as SunWater. The water entitlements of each segment are shown in Table 2 below. SunWater's allocation relates to channel system distribution losses.

**TABLE 2: WATER DATA**

Scheme	Customer Segment	No. of Customers	Water Entitlements (ML)	High Water Priority (ML)	Medium Water Priority (ML)
Barker Barambah	Irrigation		31,361	0	31,361
	Urban		2,115	2,100	15
	SunWater		839	136	703
	Total	174	34,315	2,236	32,079

When it comes to apportioning costs, customers fall into two categories: High Priority and Medium Priority. High Priority customers pay a higher proportion of costs to secure priority access to water. These customers are typically urban and industrial.

For the Barker Barambah Bulk Water scheme, the QCA's Headworks Utilisation Factor (HUF) — which determines how fixed costs are allocated — is 24% for High Priority and 76% for Medium Priority.

Further detail on the HUF and how it is applied to breakdown scheme costs can be found in chapters five and six of the QCA's final report from the 2012 pricing review. HUFs for each bulk water scheme are published on page 193. The QCA final report can be downloaded from [www.qca.org.au/Water/Rural/SunWater-s-Irrigation-Prices](http://www.qca.org.au/Water/Rural/SunWater-s-Irrigation-Prices).

\*QCA assumed water use is 55.1%. The 2018 budget is compiled taking into account the QCA water use assumption.

# REVENUE

SunWater anticipated revenue for Barker Barambah Bulk Water in 2017/18 is provided in Table 3.

**TABLE 3: REVENUE**

Barker Barambah WS	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Irrigation	807	799	804	830	851
Industrial	26	27	27	17	17
Urban	164	188	211	234	240
Irrigation CSO	-	-	-	-	- <sup>1</sup>
Revenue Transfers	-	-	-	-	-
Drainage	-	-	-	-	-
Other	25	18	2	26	26
Insurance Proceeds – Flood	-	186	352	-	-
<b>Revenue Total</b>	<b>1,023</b>	<b>1,217</b>	<b>1,396</b>	<b>1,106</b>	<b>1,134</b>

<sup>1</sup> The draft NSP published in April 2017 included SunWater's estimate of the required CSO for the service contract. Since publication of the draft NSP SunWater has been advised by Government of the actual CSO to be paid. The actual CSO will be based on the 2017 CSO adjusted downwards for any real price increase paid by customers. The Government's decision to not fully fund the required CSO results in a state wide short fall of approximately \$8 million which is funded via cross-subsidy from SunWater's commercial activities.

# ROUTINE EXPENDITURE

SunWater has budgeted an increase in Barker Barambah Bulk Water routine operating expenditure in 2018 (refer to Table 4). This budget includes funds for operations activities (operations, electricity and insurance), preventive maintenance and corrective maintenance.

**TABLE 4: ROUTINE OPERATING EXPENDITURE**

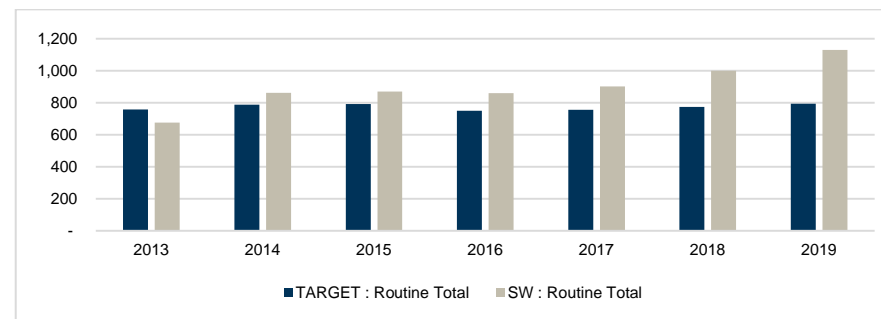
Barker Barambah WS	2014			2015			2016			2017			2018			
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000	% of target
Operations	476	519	43	521	520	(0)	493	475	(17)	554	478	(76)	598	489	(108)	122
Electricity	28	17	(10)	27	18	(8)	19	20	0	22	21	(1)	24	22	(2)	108
Insurance	275	83	(192)	212	84	(128)	192	86	(106)	211	87	(124)	211	90	(122)	236
Operations Total	778	619	(160)	759	623	(136)	704	581	(123)	787	586	(201)	833	601	(232)	139
Preventative Maintenance	49	116	66	90	116	26	114	115	1	79	115	36	132	118	(14)	112
Corrective Maintenance	34	53	20	20	53	34	41	53	13	35	54	19	34	55	21	62
Routine Total	861	788	(74)	869	793	(76)	859	750	(109)	901	755	(146)	999	774	(225)	129

One of the key challenges for SunWater in managing routine expenditure is reigning in the cost of insurance premiums, which are significantly higher than the QCA forecast due to unforeseen flood events in recent years.

The anticipated cost of Barker Barambah Bulk Water's preventive maintenance for 2018 is also significantly higher than the QCA forecast due, for the most part, to the need for additional contractors. SunWater is committed to undertaking ongoing reviews of this work to minimise costs wherever possible.

These projected variances and SunWater's past performance against QCA targets are presented in Figure 2.

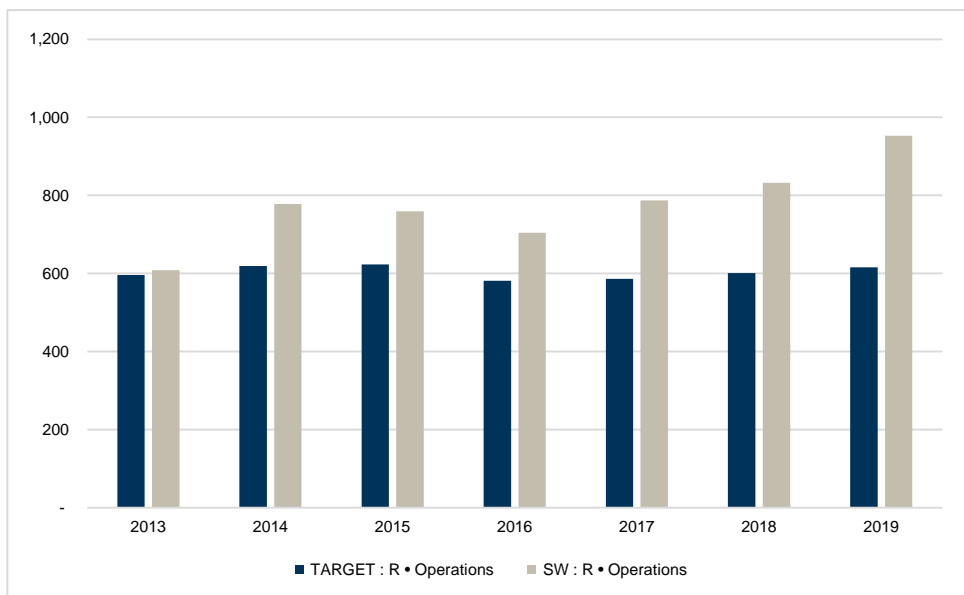
**FIGURE 2: ROUTINE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)**



## Operations

Barker Barambah Bulk Water's total operations budget in 2018 is above the QCA forecast due to increases in insurance costs being higher than allowed for by the QCA.

**FIGURE 3: ROUTINE OPERATIONS EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)**



Operations expenditure includes day-to-day costs associated with management of the scheme, water delivery and meeting compliance obligations. Specific activities include the direct and non-direct cost of<sup>2</sup>:

- scheduling and delivering water, including processing water orders, releasing water, operating pump stations, regulating and monitoring channel and stream flows, and monitoring customer deliveries
- emergency responses for channel overflows, storage operations and other emergency events
- meter reading
- administration of water accounts, billing and receipting payments
- customer management, including enquiries, complaints and maintaining the customer service help desk
- scheme management, including licences and permits, rates, land management, planning and reporting
- insurance
- monitoring the security of infrastructure and unauthorised access and trespass
- managing public relations associated with the scheme
- managing enquiries from adjoining landholders and developers that require input from and negotiations with SunWater's property and legal sections.

<sup>2</sup> Activities listed will not apply to all service contracts.

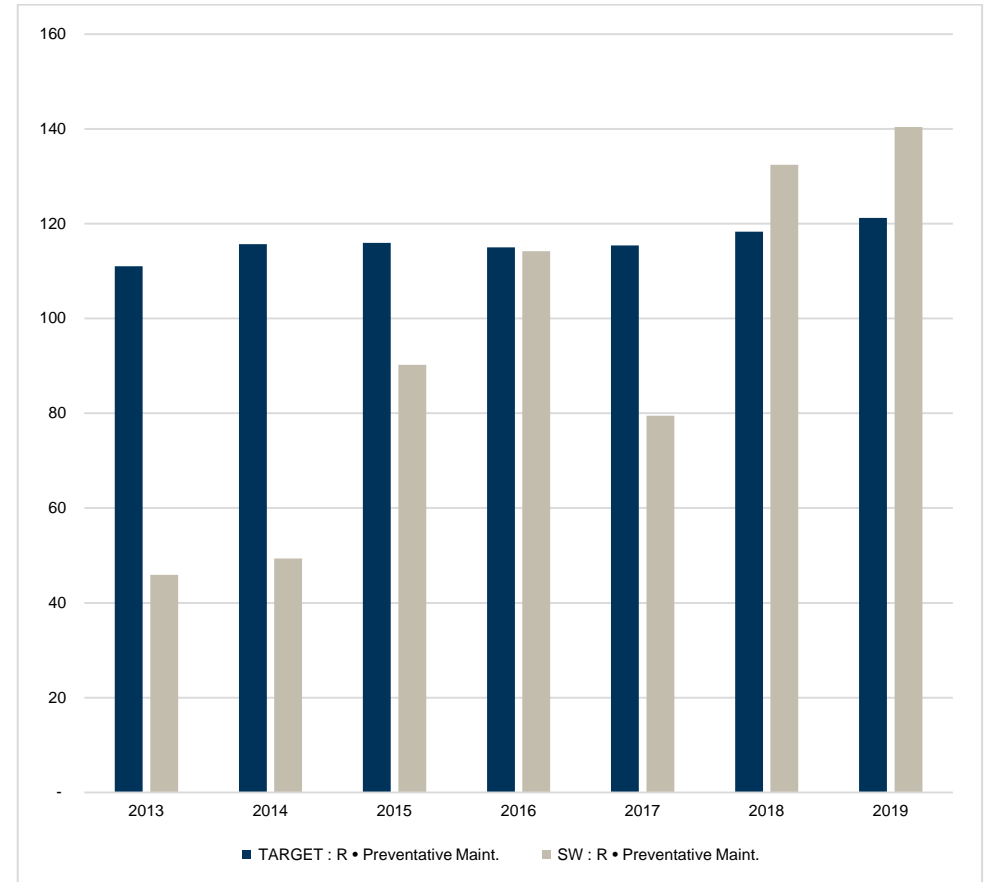


## Preventive maintenance

Preventive maintenance is an important activity and expense, as it ensures the ongoing operational performance and service capacity of Barker Barambah Bulk Water's physical assets. These activities are based on updated work instructions for operating the scheme and include an estimate of the resources required to implement the required scope of work. The work instructions are maintained and kept current by SunWater's maintenance staff.

As outlined above, SunWater's need for additional contractors to deliver the required schedule of preventive maintenance work has had a significant impact on the 2018 budget, increasing it to 113% above the QCA forecast. Every effort will be made to minimise these additional costs.

**FIGURE 4: ROUTINE PREVENTIVE MAINTENANCE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)**



Preventive maintenance is cyclical in nature with a typical interval of 12 months or less.

Preventive maintenance for Barker Barambah Bulk Water includes<sup>3</sup>:

- Condition monitoring — the inspection, testing or measurement of physical assets to report and record condition and performance to determine maintenance requirements. Condition monitoring is carried out on electrical, mechanical and civil assets, including pump stations (pumps, electrical motors, valves, switchboards and associated equipment), channels (regulator gates, civil works, signs, structures, etc.), drains (civil works, structures etc.), pipelines (valves, air valves, scours easements etc.), and other infrastructure.
- Servicing — planned maintenance activities normally expected to be carried out routinely on physical assets including valves, cranes, sump pumps and associated equipment.
- Weed control — management of weeds, including:
  - slashing channels and drains
  - Acrolein treatment of channels
  - Copper Sulphate treatment
  - spraying and other activities to control operational and noxious weeds within dams, channel and drainage reserves, and balancing storages and other land managed by SunWater.

## Corrective maintenance

Corrective maintenance includes activities to correct unexpected failures or to return an asset to an acceptable level of performance or condition. While these are difficult to forecast with accuracy, history has shown that such events can be expected and need to be factored into expenditure forecasts. SunWater conducts two types of corrective maintenance: scheduled and emergency.

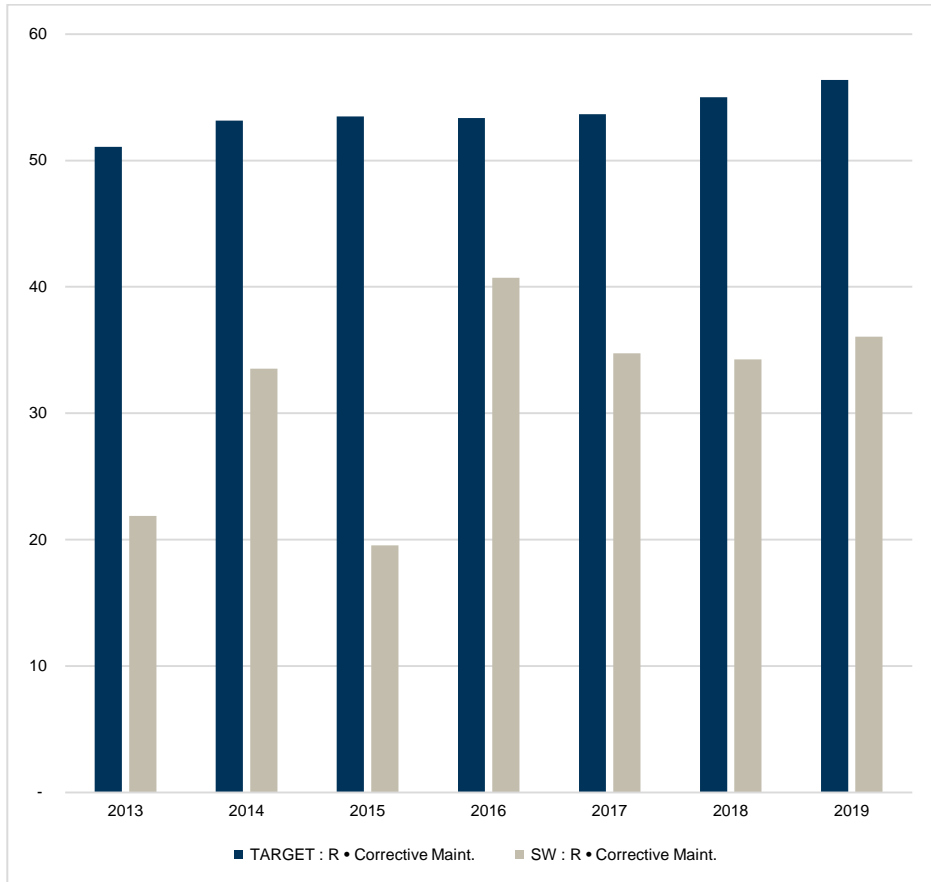
Corrective maintenance expenditure forecasts include provision for labour, materials and plant hire, but do not include costs of damage arising from major unexpected events, such as floods. These costs are categorised as non-routine corrective maintenance, which is discussed in the following section.

Barker Barambah Bulk Water corrective maintenance for 2018 is budgeted below the QCA forecast.

---

<sup>3</sup> Activities listed will not apply to all service contracts.

**FIGURE 5: ROUTINE CORRECTIVE MAINTENANCE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)**



## Scheduled corrective maintenance

Scheduled corrective maintenance is maintenance that can be planned and scheduled. For Barker Barambah Bulk Water it typically includes<sup>4</sup>:

- Channels:
  - de-silting channels and catch drains
  - erosion control and repairing rock protection works
  - repairing fencing
  - repairing concrete structures
  - repairing regulator gates, control valves, etc.
- Drains:
  - de-silting drains
  - erosion control and repairing rock protection works
  - repairing fencing
  - repairing concrete structures.
- Pipelines:
  - repairing pipe breaks
  - repairing air valves, scour valves, etc.
  - erosion control and repairing rock protection works
  - repairing concrete structures.
- Scheme roads:
  - repairing pot holes
  - grading roads
  - repairing, replacing, and painting guide posts and signs.

<sup>4</sup> Activities listed will not apply to all service contracts.

- Pump stations:
  - repairing pumps and motors
  - de-silting intake structures
  - repairing concrete structures
  - repairing control buildings.
  - Storages (balancing storages and reservoirs):
  - repairing control gates and valves
  - repairing walls, embankments and spillways
  - repairing concrete structures.
- Meters:
  - repairing bulk water meters
  - repairing customer meters.
- Dams and Weirs:
  - repairs to concrete structures
  - repairs to dam roads and fencing
  - repairs to steelwork (handrails, stairs, guardrails)
  - repairing regulating and guard valves
  - repairs to erosion control and rock protection
  - repairs and replacement of public safety signage

## Emergency corrective maintenance

Emergency corrective maintenance is maintenance that has to be carried out immediately to restore normal operation or supply to customers or to meet regulatory obligations (e.g. rectify a safety hazard). It typically includes<sup>5</sup>:

- repair or correction of pump station faults
- repair or correction of channel faults
- repair or correction of pipeline faults
- response to theft or vandalism associated with scheme assets.

---

<sup>5</sup> Activities listed will not apply to all service contracts.

# NON-ROUTINE EXPENDITURE

SunWater's approach to managing non-routine expenditure is underpinned by the concept of 'optimised life cycle cost', which seeks to optimise capital outlays and ongoing maintenance spend.

Our whole-of-life asset replacement and maintenance strategy looks at the risk and condition of each asset and uses this information to estimate the future work required to ensure it will continue to provide the required level of service into the future.

Having up-to-date knowledge of asset conditions is essential to this process. Information from our continuous program of asset inspections and condition assessments feeds into the annual review of the renewals program and the calculation of annuity. Having an annuity funding arrangement acknowledges a long-term view of renewals spend is required to ensure adequate funding and to address issues such as intergenerational equity, ensuring the scheme is maintained in perpetuity for future generations of water users.

The most recent annual review of our renewals program was completed in February 2017. Items identified as needing immediate maintenance or replacement are included in the budget for 2018.

While the immediate program for the 2018 budget is well defined, estimates become more uncertain further into the planning timeline. As such, the program of works is not a specific forecast of when individual projects are expected to be

executed, but rather a portfolio-level estimate based on the best-available risk and condition information for the service contract as a whole.

At SunWater, we focus on ensuring our assets are maintained to the required standard with the minimum spend. Our review of the renewals profiles also extends to considering the key asset replacement assumptions so that the profile better reflects likely spend each year and moves away from assuming assets are replaced at end of standard life, based on their replacement costs.

Due to the absence of QCA targets for 2018 and beyond, we have presented non-routine expenditure for two years — to ensure our customers have ample visibility of non-routine maintenance activities prior to the next price review. Table 5 outlines the budget non-routine spends as well as the actual spend for prior years.

Our projected figures for 2018 and 2019 were compared with the 'projected' spend outlined in the 2012 QCA renewals annuity profile. This is referred to as 'QCA forecast' in the table above. There is significant difference in the scope and cost of projects to be undertaken due to the fact that the QCA forecast was developed in 2011. While this was the best estimate of expected work at the time, in some cases, the QCA's funding allowance for renewals work across the price path does not cover the total expenditure required to maintain asset condition to the required standard. In addition, there have been unexpected events, such as floods, that were not allowed for in the QCA's annuity funding allowance.

**TABLE 5: NON-ROUTINE EXPENDITURE**

Barker Barambah WS	2014			2015			2016			2017			2018			2019			
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000	% of target
<b>Annuity Funded</b>																			
Operations	2	-	(2)	5	-	(5)	8	-	(8)	21	-	(21)	126	-	(126)	11	-	(11)	-
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	482	-	(482)	121	-	(121)	(0)	-	0	-	-	-	-	-	-	-	-	-	-
R&E	131	169	37	51	6	(45)	37	27	(10)	247	105	(143)	703	-	(703)	279	286	6	98
<b>Non-routine Total</b>	<b>615</b>	<b>169</b>	<b>(447)</b>	<b>176</b>	<b>6</b>	<b>(170)</b>	<b>45</b>	<b>27</b>	<b>(18)</b>	<b>268</b>	<b>105</b>	<b>(163)</b>	<b>829</b>	<b>-</b>	<b>(829)</b>	<b>291</b>	<b>286</b>	<b>(5)</b>	<b>102</b>
<b>Non Annuity Funded</b>	5			8			-			-			-			-			

## Changes to flood operations

Based on recommendations from the Inspector General Emergency Management (IGEM), SunWater has improved how it operates in flood situations. Our revised processes focus on keeping local communities well informed, providing timely, detailed updates regarding emerging flood risks.

These changes were made in response to the 2015 IGEM review of the TC Marcia floods in the Callide Valley. While the review found SunWater had adequately undertaken its role in accordance with the established emergency action plans (EAPs), more could have been done to notify the community sooner about the emerging flood risk.

This assessment was followed by a second, related IGEM review in late 2015 into warnings provided by SEQWater and SunWater following criticism of SEQWater following a release of water from one of its dams.

IGEM noted that *“the public expects notifications and warnings will be disseminated as soon as possible when known by dam owners. They also expect messages will include timings to guide their actions, will convey the urgency of the developing situation, that regular updates will be provided and when the next update can be expected”*.

## Non-routine projects for 2018 and 2019

Details of the major non-routine projects planned for 2018 and 2019 are provided below in Table 6 and Table 7.

**TABLE 6: NON-ROUTINE PROJECTS 2018**

Project title	Project scope	2018 budget (\$'000)
<b>Replace Slide Gate</b>	5193240 This project is to replace the outlet gate at Silverleaf Weir as it is close to the end of its life. The gate and weir will be fully inspected during late May 2017. If the gate is assessed as being fit for service, it won't be replaced.	73
<b>Study: Options Analysis for Long-term Weir Maintenance/Replacement Strategy</b>	5164860 Silverleaf Weir is close to the end of its life. This project is to prepare an options study, following the 2017 comprehensive inspection, on its long-term maintenance and replacement strategy.	70
<b>Refurbish Valve - including hydraulic actuation (DS 2013/6.4.9a)</b>	5183652 Corrosion and deep pitting around No. 1 guard valve seal and disc was observed during the 2013 inspection. This project is to refurbish the guard valve to maintain its serviceability.	61
<b>Install Public fencing along left bank of spillway (Cherbourg side) - Bjelke Petersen Dam</b>	5195199 This is a public safety project to prevent unauthorised access to the right bank of the Bjelke-Petersen Dam spillway. People have been observed accessing the spillway during flood events.	45
<b>Other Projects</b>	There are 19 other non-routine projects ranging from \$5,000 to \$44,000.	454
<b>Total</b>		<b>703</b>

**TABLE 7: NON-ROUTINE PROJECTS 2019**

<b>Project title</b>	<b>Project scope</b>	<b>2019 budget (\$'000)</b>
<b>Study: 5yr Dam Comprehensive Inspection - Civil, Mech &amp; Elec (by 1 Dec 2018)</b>	5173685 this is a comprehensive inspection of Bjelke-Petersen Dam to be conducted in accordance with the Queensland Dam Safety Management Guidelines.	121
<b>Abrasive clean trash racks and re-coat with an approved coating (2008 Dam Safety Rec 6.3(a))</b>	5083453 This is to refurbish the trash racks at Bjelke-Petersen dam. The full scope will be determined during the 5yr inspection. If patch painting is all that is needed, it can be done at the time of the inspection.	38
<b>Study: Level 2 Bridge Assessment</b>	This is a structural bridge assessment in accordance a with Main Roads Level 2 assessment to confirm the load rating of the bridge and check for any structural defects to the bridge piers etc.	37
<b>Replace Meter Program (2 per year) - Barker Barambah (P2)</b>	5173603 This is an allowance for customer meter replacements. It will not be used if there are no meters to be replaced.	32
<b>Options Analysis: Fixed vs. Mobile Crane</b>	The fixed gantry crane at Bjelke-Petersen dam is not used often yet requires regular inspections to comply with Australian Standards. This is an options analysis to determine if hiring mobile cranes is more cost effective. The level 2 bridge inspection will help inform this decision.	25
<b>Other Projects</b>	There are three other non-routine projects ranging from \$5,000 to \$12,000.	27
<b>Total</b>		<b>279</b>



# ANNUITY BALANCE

SunWater's annuity funding arrangement acknowledges a long-term view of renewals spend and ensures we have adequate funding to address issues such as intergenerational equity.

In order to manage our annuity balance to reasonable levels, we aim to limit annuity spend to the QCA's targets over the five-year price path. However, required increases in spend in recent years have impacted our ability to achieve this. For

detail, please refer to past NSPs available on the SunWater website at: <http://www.sunwater.com.au/schemes/nsp/annual-nsp-and-performance-reports>.

The estimated 2017 and 2018 annuity balances, and the impacts of budgeted non-routine spend, are shown in Table 8 below. The annuity contribution shown has been set by the QCA and is assumed to apply in 2018.

**TABLE 8: ANNUITY BALANCE\***

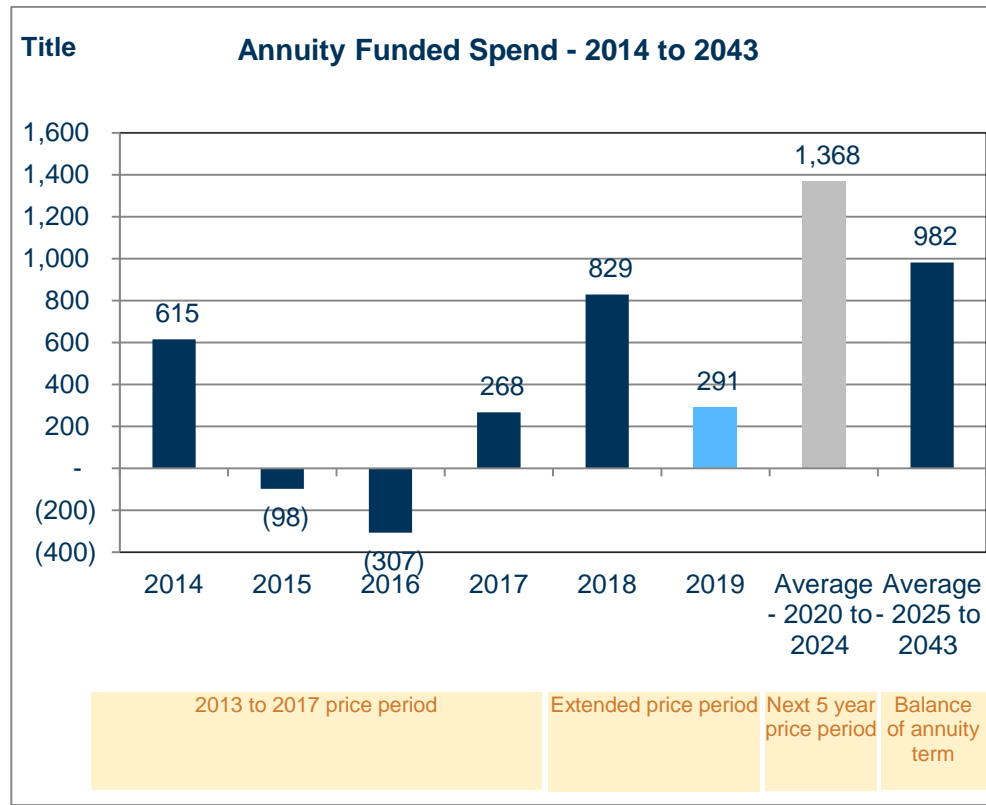
Barker Barambah WS	Table Reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000	2019 Forecast \$000
<b>Annuity</b>							
Opening Balance		(1,254)	(1,734)	(1,528)	(1,095)	(1,199)	(1,866)
Net Spend	See below	(615)	98	307	(268)	(829)	(291)
Annuity Contribution		230	238	240	246	252	258
Interest		(94)	(130)	(114)	(82)	(90)	(140)
<b>SunWater – Closing Balance</b>		(1,734)	(1,528)	(1,095)	(1,199)	(1,866)	(2,038)
<b>QCA – Closing Balance</b>		(1,088)	(937)	(794)	(712)	(514)	(579)
<b>Difference</b>		(646)	(591)	(301)	(487)	(1,353)	(1,459)
<b>Net Spend Analysis</b>							
Spend	Table 5 Table 7	(615)	(176)	(45)	(268)	(829)	(291)
Insurance Proceeds Receipts							
• Prior Year		-	88	-	-	-	-
• Current Year		-	186	352	-	-	-
<b>Net Spend</b>		<b>(615)</b>	<b>98</b>	<b>307</b>	<b>(268)</b>	<b>(829)</b>	<b>(291)</b>

\*All 2017 and 2018 figures are subject to change once actual spend is known.

## Overview of annuity-funded, non-routine projects to 2043

The renewals annuity is calculated over a 20-year planning period. Given that the following pricing period ends in 2024, the estimated renewals spend out until 2043 will affect the next pricing review. The estimated renewals expenditure out to 2043 is shown in Figure 6 below, and material renewals items for the period are discussed in the sections following.

**FIGURE 6: ANNUITY EXPENDITURE TO 2043**



A project is considered ‘material’ when its value is greater than 10% of planned expenditure for the period in question.

SunWater develops options analyses for all material items in the annuity calculation planning period. These reports are tailored to suit project complexity and budget. Detailed options analyses are completed within the current and following five-year pricing periods, and high-level options analyses are completed for the 20-year period beyond the next price path.

The materiality tests are applied each year as part of annual planning process. Given that there will be project variations, some items will no longer require options analysis in future years and new items may join the list.

## Material projects 2018 and 2019

The evenness in spread of estimated project costs means there are no projects that exceed the materiality threshold for this service contract for 2018 and the 2025–43 period.

## Material projects 2020–24

Projects in the program of works for 2020–24 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer.

### Replace Total Pressure Cells (Installation Part 1)

- Year: 2022
- Current estimate: \$458,000
- Options analysis completed: No

### Replace Pneumatic Piezometers (Installation Part 1)

- Year: 2022
  - Current estimate: \$458,000
- Options analysis completed: No

### Replace: Sheet Piling (Construction & Commission)

- Year: 2022
  - Current estimate: \$1,013,000
- Options analysis completed: No

## Material projects 2025–43

The evenness in spread of estimated project costs means there are no projects that exceed the materiality threshold for this service contract for the 2025–43 period.

# APPENDIX 1: TOTAL EXPENDITURE BY EXPENSE TYPE

TABLE 9: EXPENDITURE FOR ACTIVITY BY TYPE

Barker Barambah WS	2014			2015			2016			2017			2018		
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000
<b>Revenue</b>															
<b>Routine Spend</b>															
<b>Operations</b>															
Labour	138	137	(1)	145	142	(4)	134	146	12	140	151	11	137	155	18
Contractors	13	43	30	33	45	12	30	6	(24)	(11)	6	17	10	6	(4)
Materials	3	3	1	1	3	3	0	3	3	2	3	1	5	4	(2)
Electricity	28	17	(10)	27	18	(8)	19	20	0	22	21	(1)	24	22	(2)
Insurance	275	83	(192)	212	84	(128)	192	86	(106)	211	87	(124)	211	90	(122)
Other	61	39	(22)	59	39	(19)	22	40	18	56	41	(15)	53	42	(11)
Non-directs	261	296	35	283	291	8	307	280	(26)	367	277	(90)	392	284	(109)
	778	619	(160)	759	623	(136)	704	581	(123)	787	586	(201)	833	601	(232)
<b>Preventative Maintenance</b>															
Labour	16	35	19	30	36	6	34	38	3	28	39	11	41	40	(1)
Contractors	1	2	1	2	2	0	6	2	(3)	(2)	2	4	10	2	(8)
Materials	1	4	3	1	4	3	2	5	3	-	5	5	-	5	5
Other	3	2	(1)	1	2	0	3	2	(2)	2	2	(0)	2	2	(0)
Non-directs	28	72	44	56	71	16	69	69	(1)	51	68	16	79	70	(10)
	49	116	66	90	116	26	114	115	1	79	115	36	132	118	(14)
<b>Corrective Maintenance</b>															
Labour	9	14	5	4	14	10	7	15	8	9	15	6	8	16	8
Contractors	-	3	3	1	3	2	11	3	(8)	4	3	(1)	5	4	(1)
Materials	8	5	(3)	5	5	0	6	6	(1)	3	6	2	5	6	1
Other	0	2	2	1	2	1	0	2	1	1	2	1	-	2	2
Non-directs	16	29	13	8	29	20	15	28	12	17	27	10	16	28	12
	34	53	20	20	53	34	41	53	13	35	54	19	34	55	21
Routine Total	861	788	(74)	869	793	(76)	859	750	(109)	901	755	(146)	999	774	(225)

Barker Barambah WS	2014			2015			2016			2017			2018		
<b>Non-Routine Spend</b>															
Labour	41	22	(19)	64	1	(63)	7	5	(2)	35	18	(17)	162	-	(162)
Contractors	467	53	(414)	(17)	1	18	12	5	(7)	153	19	(134)	334	-	(334)
Materials	0	24	23	0	1	1	1	5	4	2	19	17	5	-	(5)
Other	6	11	5	12	1	(12)	11	3	(8)	3	10	7	-	-	-
Non-directs	100	59	(42)	116	2	(114)	16	10	(6)	74	38	(35)	329	-	(329)
Non-Routine Total	615	169	(447)	176	6	(170)	45	27	(18)	268	105	(163)	829	-	(829)
<b>Total Regulated Spend</b>	<b>1,476</b>	<b>956</b>	<b>(520)</b>	<b>1,045</b>	<b>798</b>	<b>(247)</b>	<b>904</b>	<b>777</b>	<b>(127)</b>	<b>1,169</b>	<b>860</b>	<b>(309)</b>	<b>1,829</b>	<b>774</b>	<b>(1,054)</b>
Non Annuity Funded Spend	5			8			-			-			-		
Surplus (Deficit)	(459)			164			492			(63)			(695)		

## Non-direct costs explained

Non-direct costs reflect SunWater's methodology for distributing indirect costs, local overheads and corporate overheads to each service contract. Wherever practicable, labour and other costs are booked direct to service contracts. Where this is not possible, the costs accumulate in either indirect or overhead accounting cost pools and are then distributed to service contracts.

Indirect cost pools capture costs such as billing and customer support, irrigation pricing regulation and asset management (including dam safety, asset systems, channels and drainage) that have not been directly charged. They also include flood room operations, including the IGEM emergency management program, water planning, hydrographic services, environmental support costs and GM Operations. These indirect costs are shared between SunWater's lines of business: Bulk Water, Irrigation Distribution Systems, Industrial Pipeline and Facilities Management, where appropriate. For example, service contracts without a dam are not apportioned dam safety costs.

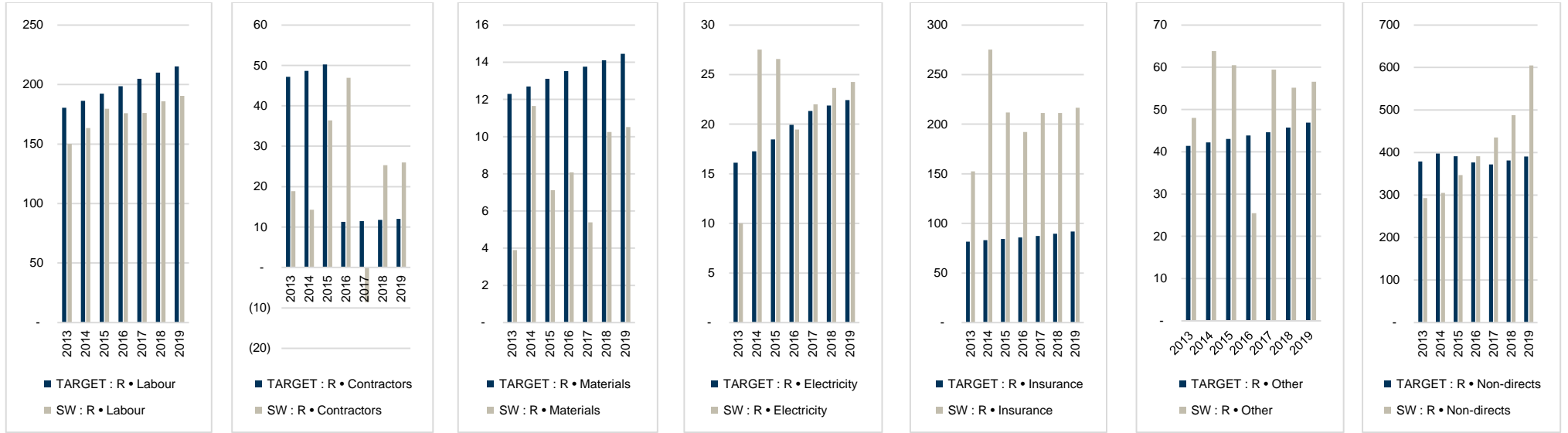
Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local administration support and other local labour not directly booked to activities within service contracts.

Corporate overhead costs are more generic than indirect costs and local overheads, and are spread across all service contacts based on direct labour. They include the cost of HR and payroll, ICT, corporate communications, legal and property, finance, and internal audit, plus the costs of the CEO, GM Corporate and the SunWater Board of Directors, where these costs are not directly charged to activities within service contracts.

SunWater's methodology for recovering non-direct cost was reviewed and accepted by the QCA during the 2012 pricing review.

The charts below graphically report routine costs by expense type compared to the QCA target.

**FIGURE 7: ROUTINE EXPENDITURE BY EXPENSE TYPE (\$'000)**



# NOTES

All financial figures in this report are presented in nominal dollars.

Although the QCA sets cost targets based on assumed inflation of 2.5%, most of the financial figures in the QCA's final report on SunWater's irrigation prices were presented in real dollars (\$2011). To convert the QCA's reported real dollars to nominal dollars, multiply the figures by the conversion factors listed in Table 10 below.

The conversion factors are based on the QCA's assumed inflation rate of 2.5% p.a. Conversion factors based on actual inflation, as measured by the Brisbane All Groups Consumer Price Index in March each year, are provided for comparison.

**TABLE 10: CONVERSION FACTORS FOR REAL \$2011 TO NOMINAL DOLLARS**

	2013	2014	2015	2016	2017	2018	2019
QCA Conversion Factor	1.0510	1.0770	1.1040	1.1310	1.1600	1.189	1.2187
Accumulative March Quarter CPI	1.0494	1.0714	1.1050	1.1208	1.1397	1.1606	

## Disclaimer

This report has been produced by SunWater to provide information for client use only. The information contained in this report is limited by the scope and the purpose of the study, and should not be regarded as completely exhaustive. Permission to use or quote information from this report in studies external to the Corporation must first be obtained from the Chief Executive, SunWater.