

2017/18 ANNUAL NETWORK SERVICE PLAN

# BOWEN BROKEN BULK WATER

30 JUNE 2017



MAKING WATER WORK

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We're focused on reliability, efficiency and safety, ensuring the Bowen Broken 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.

**William Weaver**  
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 Bowen Broken Bulk Water's 51 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 Bowen Broken Bulk Water, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers.

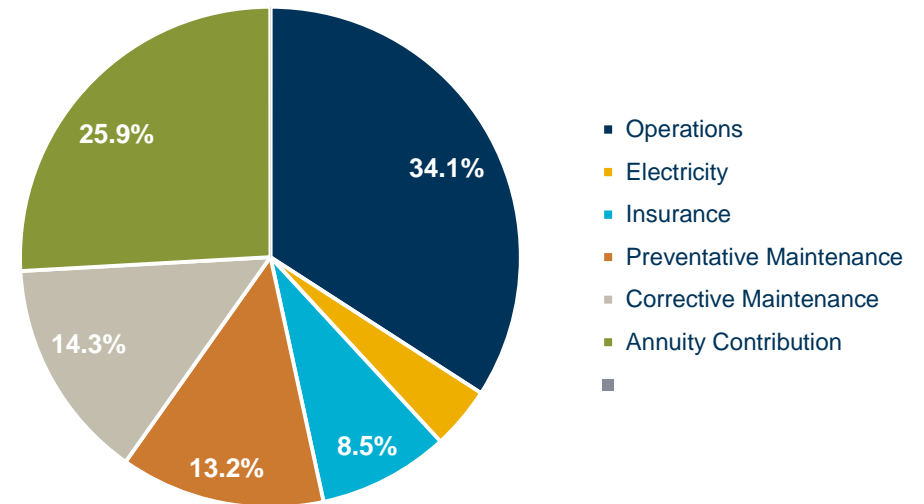
A high-level summary of the budgeted financial performance of the Bowen Broken Bulk Water service contract is presented in Table 1 below. Further detail on the planned spend, together with estimated revenue, is outlined on subsequent pages of this plan.

**TABLE 1: OPERATING REVENUE LESS SPEND**

Bowen Broken WS	Table reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Revenue	Table 3	5,464	5,805	5,854	5,751	6,298
Less – Routine Expenditure	Table 4 & 7	1,179	1,093	1,274	1,102	1,288
Less – Non-Routine Expenditure						
• Annuity Funded	Table 5, 6 & 7	184	355	151	311	1,322
• Non Annuity Funded	Table 5	155	449	911	-	-
<b>Surplus (Deficit)</b>		<b>3,946</b>	<b>3,907</b>	<b>3,517</b>	<b>4,338</b>	<b>3,689</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

Bowen Broken 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)	High-A1 Water Priority (ML)	High-A2 Water Priority (ML)	Medium Water Priority (ML)
Bowen Broken Rivers	1. Industrial		30,299	0	9,090	21,209	0
	2. Irrigation		5,676	0	0	0	5,676
	3. Urban		1,785	0	1,785	0	0
	4. Other		290	0	108	182	0
	5. SunWater		880	0	666	214	0
	Total	51	38,930	0	11,649	21,605	5,676

When it comes to apportioning costs, customers fall into four categories: High Priority, High-A1 Priority, High-A2 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 Bowen Broken Bulk Water scheme, the QCA's Headworks Utilisation Factor (HUF) — which determines how fixed costs are allocated — is 35% for High Priority and 65% for Medium Priority. This means High Priority customers pay a greater portion of costs on the basis that they use more of the water supply infrastructure located within the scheme.

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 43.1%. The 2018 budget is compiled taking into account the QCA water use assumption.

# REVENUE

SunWater's anticipated revenue for Bowen Broken Bulk Water in 2017/18 is provided in Table 3.

**TABLE 3: REVENUE**

Bowen Broken WS	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Irrigation	67	72	74	81	83
Industrial	4,910	5,172	5,266	5,143	5,226
Urban	-	-	-	-	-
Irrigation CSO	-	-	-	-	-
Revenue Transfers	472	478	503	515	977 <sup>1</sup>
Drainage	-	-	-	-	-
Other	16	9	10	12	12
Insurance Proceeds – Flood	-	74	-	-	-
<b>Revenue Total</b>	<b>5,464</b>	<b>5,805</b>	<b>5,854</b>	<b>5,751</b>	<b>6,298</b>

<sup>1</sup> Revenue Transfers represent the cost of bulk water supplies delivered through the distribution system(s). The revenue accrues to the distribution system before it is transferred to the Bulk Water Supply Scheme as a contribution to the cost of the bulk water service. In 2012, the QCA established the transfer cost for irrigation supplies at the cost reflective bulk water tariff. Now that the QCA prices path has ended SunWater has recalculated the cost reflective tariff and revenue transfers based on the actual cost for providing bulk water services. Any increases reflect increases in uncontrollable cost like insurance premiums, electricity, IGEM cost and flood damage. The revisions to revenue transfer arrangements will not affect prices paid by customers in 2018 and 2019, however it is important for SunWater to be transparent and signal to customers the cost pressures being experienced. These cost pressure will not flow to prices until after the completion of the next pricing review. Note also that the revenue transfer costs above do not include the bulk water costs of SunWater's channel distribution system losses.

# ROUTINE EXPENDITURE

SunWater has budgeted an increase in Bowen Broken 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**

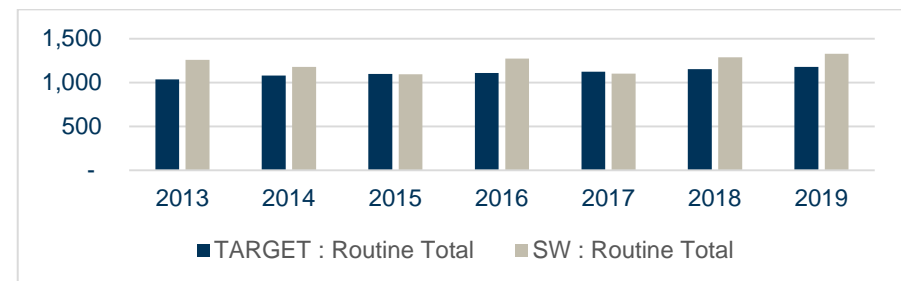
Bowen Broken WS	2014			2015			2016			2017			2018			
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000	% of target
Operations	634	479	(155)	580	482	(98)	536	479	(57)	541	480	(61)	593	492	(100)	120
Electricity	109	125	16	177	133	(43)	171	144	(27)	65	154	89	70	158	88	44
Insurance	173	49	(125)	119	49	(70)	103	50	(53)	147	51	(96)	147	52	(95)	281
<b>Operations Total</b>	<b>916</b>	<b>652</b>	<b>(264)</b>	<b>876</b>	<b>665</b>	<b>(212)</b>	<b>811</b>	<b>674</b>	<b>(137)</b>	<b>753</b>	<b>686</b>	<b>(68)</b>	<b>810</b>	<b>703</b>	<b>(107)</b>	<b>115</b>
Preventative Maintenance	140	204	63	165	205	40	297	205	(92)	197	206	9	229	211	(18)	109
Corrective Maintenance	123	222	99	52	226	174	166	228	62	152	231	79	249	237	(12)	105
<b>Routine Total</b>	<b>1,179</b>	<b>1,077</b>	<b>(101)</b>	<b>1,093</b>	<b>1,096</b>	<b>2</b>	<b>1,274</b>	<b>1,107</b>	<b>(168)</b>	<b>1,102</b>	<b>1,122</b>	<b>20</b>	<b>1,288</b>	<b>1,150</b>	<b>(137)</b>	<b>112</b>

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 Bowen Broken Bulk Water's preventive maintenance for 2018 is also 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.

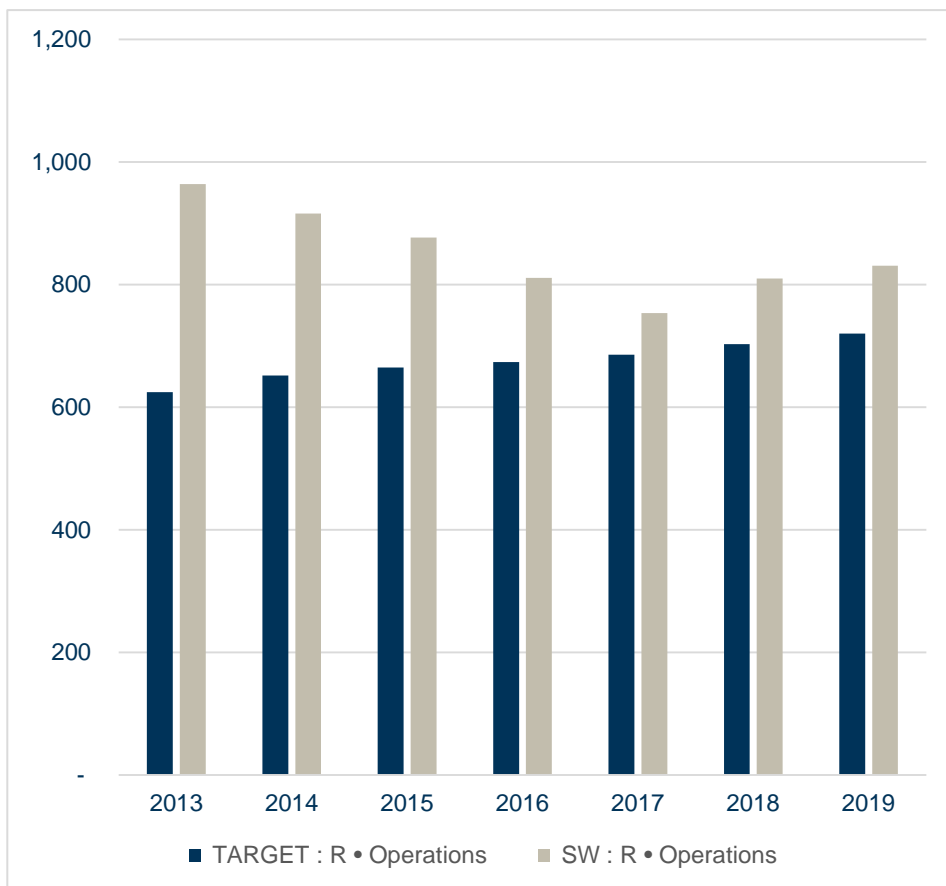
**FIGURE 2: ROUTINE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)**



## Operations

Bowen Broken Bulk Water's total operations budget in 2018 is 117% 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 flows, and monitoring customer deliveries
- emergency responses for channel overflows 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.

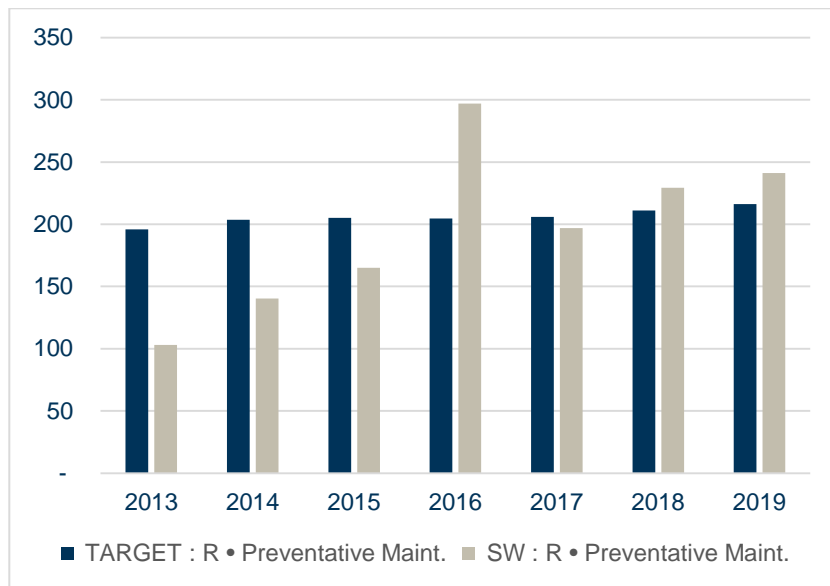


## Preventive maintenance

Preventive maintenance is an important activity and expense, as it ensures the ongoing operational performance and service capacity of Bowen Broken 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 110% 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 Bowen Broken 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.

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

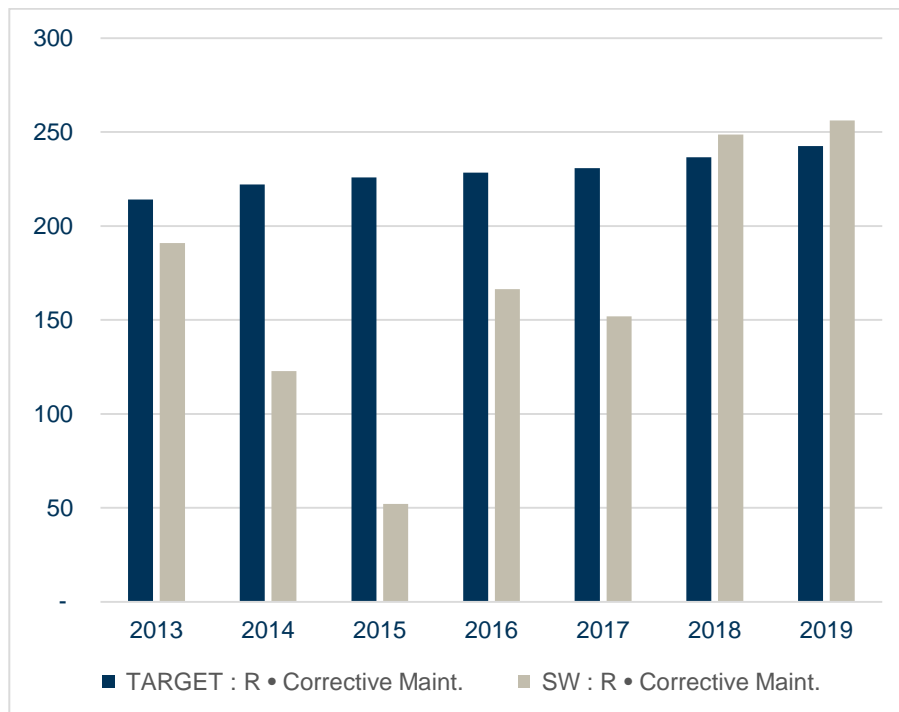
## Corrective maintenance

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.

Bowen Broken Bulk Water corrective maintenance for 2018 is budgeted above the QCA forecast. SunWater will continue to refine budgets with the aim of bringing the expenditure into line with target.

**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 Bowen Broken 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.

## 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.

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<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**

Bowen Broken 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	-	-	-	-	16	16	2	-	(2)	23	-	(23)	10	-	(10)	10	-	(10)	
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Corrective Maintenance (Flood)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R&E	184	170	(14)	355	250	(105)	149	227	78	288	89	(199)	1,312	41	(1,271)	702	58	(644)	
<b>Non-routine Total</b>	184	170	(14)	355	266	(89)	151	227	76	311	89	(222)	1,322	41	(1,281)	712	58	(654)	
Non Annuity Funded	155			449			911			-			-			-			

## 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 five 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>17BBR04: Plug the river conduit inlet permanently based on 2017 Options study</b>	5156571 The river conduit leaks water through the upstream stop logs at a rate that exceeds pumping capacity. The leak needs to be stopped to allow inspection/refurbishment of the conduit lining and guard valves. Due to the complexity, this is planned over two financial years.	268
<b>17BBR02 - Refurbish inner slope and crest at GOSS pending 2016 options study</b>	5193600 the upstream or inner slope at GOSS shows signs of beaching due to a lack of rock protection and the crest is continually cracking. This project is to assess what upstream slope protection is needed and how to prevent ongoing crest cracking.	244
<b>15BBR03 - Install pump station desilting pumps (refer 2015 options study)</b>	5193599 GOSS pumpstation is frequently inundated during floods, with fine silt and debris being deposited in the pumpstation inlet. Divers are required to clean the silt. This project is to install desilting pumps that will allow operators to clean the inlet without the use of divers. An options analysis was completed during 2016.	166
<b>Options analysis, risk assessment to install access platforms at Intake and Outlet Works Eungella Dam</b>	5160275 The regulating valves at Eungella Dam are not easily accessible for routine maintenance and inspection. This project is to construct a platform that will allow easier access.	78
<b>Repair the gabion protection works downstream on left abutment</b>	5156626 This project is to reinstate the downstream rock protection at Bowen River weir. The gabions and mattresses are slowly being damaged by flood waters and now need to be repaired before the rock they contain is lost.	67
<b>Other works</b>	There are 14 other non-routine projects for 2018 ranging from \$5,000 to \$66,000. Further detail will be tabled at the IAC meeting.	489
<b>Total</b>		<b>1,312</b>

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

<b>Project title</b>	<b>Project scope</b>	<b>2019 budget (\$'000)</b>
<b>17BBR04: Plug the river conduit inlet permanently based on 2017 Options study</b>	The river conduit leaks water through the upstream stop logs at a rate that exceeds pumping capacity. The leak needs to be stopped to allow inspection/refurbishment of the conduit lining and guard valves. Due to the complexity, this is planned over two financial years.	306
<b>17BBR02 - Refurbish inner slope and crest at GOSS pending 2016 options study</b>	5193659 the upstream or inner slope at GOSS shows signs of beaching due to a lack of rock protection and the crest is continually cracking. This project is to assess what upstream slope protection is needed and how to prevent ongoing crest cracking.	277
<b>Study: Bowen River Weir 5yr Dam Comprehensive Inspection</b>	5160293 This is a comprehensive inspection of Bowen River Weir. It is conducted in accordance with SunWaters' asset management policy to remain aware of the condition and risks of each storage structure.	93
<b>Replace existing flow meter (P2)</b>	5164294 This is an allowance for customer meter replacements. It will not be used if there are no meters to be replaced.	11
<b>Update Concrete, Zone, Excavation &amp; Protection Works Materials for KBB Bowen Broken Supply</b>	5178694 This is to review the type and volume of materials in the earth embankment of Eungella Dam to derive an improved asset valuation.	10
<b>Other works</b>	ADSCOPE-KBB Asset Delivery Scoping and Estimating Review.	5
<b>Total</b>		702

# 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\***

Bowen Broken 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		(2,708)	(2,770)	(2,870)	(2,799)	(2,881)	(3,969)
Net Spend	See below	(184)	(229)	(151)	(311)	(1,322)	(712)
Annuity Contribution		326	337	436	439	450	461
Interest		(203)	(207)	(215)	(210)	(216)	(297)
<b>SunWater – Closing Balance</b>		(2,770)	(2,870)	(2,799)	(2,881)	(3,969)	(4,517)
<b>QCA – Closing Balance</b>		(1,953)	(2,029)	(1,972)	(1,770)	(1,494)	(1,204)
<b>Difference</b>		(816)	(840)	(827)	(1,111)	(2,475)	(3,314)
<b>Net Spend Analysis</b>							
Spend	Table 5 Table 7	(184)	(355)	(151)	(311)	(1,322)	(712)
Insurance Proceeds Receipts							
• Prior Year							
• Current Year							
		-	52	-	-	-	-
<b>Net Spend</b>		<b>(184)</b>	<b>(229)</b>	<b>(151)</b>	<b>(311)</b>	<b>(1,322)</b>	<b>(712)</b>

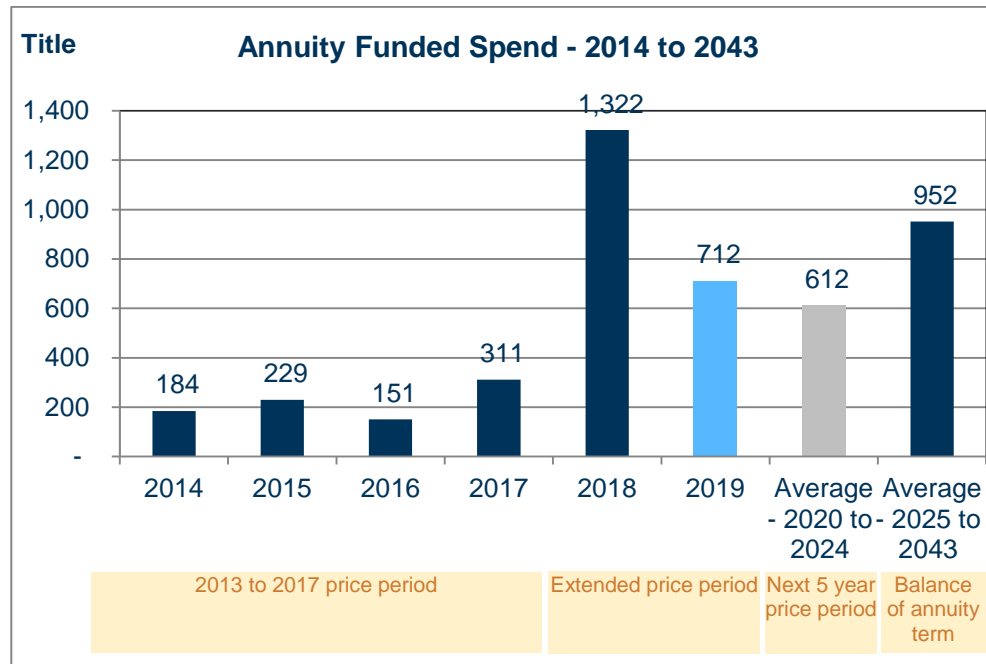
\*All 2017 and 2018 figures are subject to change once actual spend is known.



## 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 the 2018-19 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.

### Study: 20 Year Dam Safety Review Including anchor pull out test and intrusive inspection

- Year: 2020
- Current estimate: \$382,000
- Options analysis completed: No

### Carry out remedial works to stabilise the left bank hillside

- Year: 2024
- Current estimate: \$675,000
- 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

Bowen Broken 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>	5,464			5,805			5,854			5,751			6,298		
<b>Routine Spend</b>															
<b>Operations</b>															
Labour	147	126	(21)	134	130	(4)	113	135	21	118	139	20	139	142	4
Contractors	109	31	(78)	116	32	(84)	118	33	(85)	72	33	(39)	72	34	(38)
Materials	57	6	(51)	13	7	(7)	4	7	3	9	7	(2)	9	7	(2)
Electricity	109	125	16	177	133	(43)	171	144	(27)	65	154	89	70	158	88
Insurance	173	49	(125)	119	49	(70)	103	50	(53)	147	51	(96)	147	52	(95)
Other	42	42	1	53	43	(11)	36	44	8	63	45	(18)	42	46	4
Non-directs	279	273	(6)	263	271	7	265	262	(4)	279	257	(22)	331	263	(68)
	916	652	(264)	876	665	(212)	811	674	(137)	753	686	(68)	810	703	(107)
<b>Preventative Maintenance</b>															
Labour	33	53	20	33	55	22	64	56	(7)	43	58	15	52	60	7
Contractors	37	32	(6)	64	33	(31)	86	34	(53)	55	34	(21)	60	35	(25)
Materials	7	6	(1)	1	6	5	3	6	3	5	6	1	5	6	1
Other	0	3	3	4	3	(0)	10	3	(7)	11	3	(8)	8	4	(4)
Non-directs	62	110	48	64	108	44	133	105	(29)	83	104	20	104	106	2
	140	204	63	165	205	40	297	205	(92)	197	206	9	229	211	(18)
<b>Corrective Maintenance</b>															
Labour	25	35	10	4	36	32	10	37	27	6	38	33	10	39	29
Contractors	18	87	69	34	90	55	111	92	(19)	108	94	(14)	188	96	(92)
Materials	27	18	(9)	3	19	16	3	19	16	5	19	14	5	20	15
Other	3	5	2	2	5	4	15	6	(10)	16	6	(10)	16	6	(10)
Non-directs	49	77	28	10	76	67	27	74	47	17	73	56	30	75	45
	123	222	99	52	226	174	166	228	62	152	231	79	249	237	(12)
Routine Total	1,179	1,077	(101)	1,093	1,096	2	1,274	1,107	(168)	1,102	1,122	20	1,288	1,150	(137)
<b>Non-Routine Spend</b>															
Labour	57	29	(28)	80	60	(20)	26	38	11	50	15	(34)	163	7	(156)
Contractors	30	32	2	112	33	(79)	63	41	(22)	153	16	(136)	596	7	(589)
Materials	-	32	32	-	33	33	-	41	41	-	16	16	187	7	(180)
Other	2	17	15	7	18	11	6	22	16	8	9	1	21	4	(17)
Non-directs	96	61	(35)	156	122	(34)	56	85	30	101	33	(68)	355	16	(339)
Non-Routine Total	184	170	(14)	355	266	(89)	151	227	76	311	89	(222)	1,322	41	(1,281)
<b>Total Regulated Spend</b>	<b>1,363</b>	<b>1,248</b>	<b>(115)</b>	<b>1,449</b>	<b>1,362</b>	<b>(87)</b>	<b>1,425</b>	<b>1,334</b>	<b>(91)</b>	<b>1,413</b>	<b>1,211</b>	<b>(202)</b>	<b>2,609</b>	<b>1,191</b>	<b>(1,418)</b>
Non Annuity Funded Spend	155			449			911			-			-		
Surplus (Deficit)	3,946			3,907			3,517			4,338			3,389		

## 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.

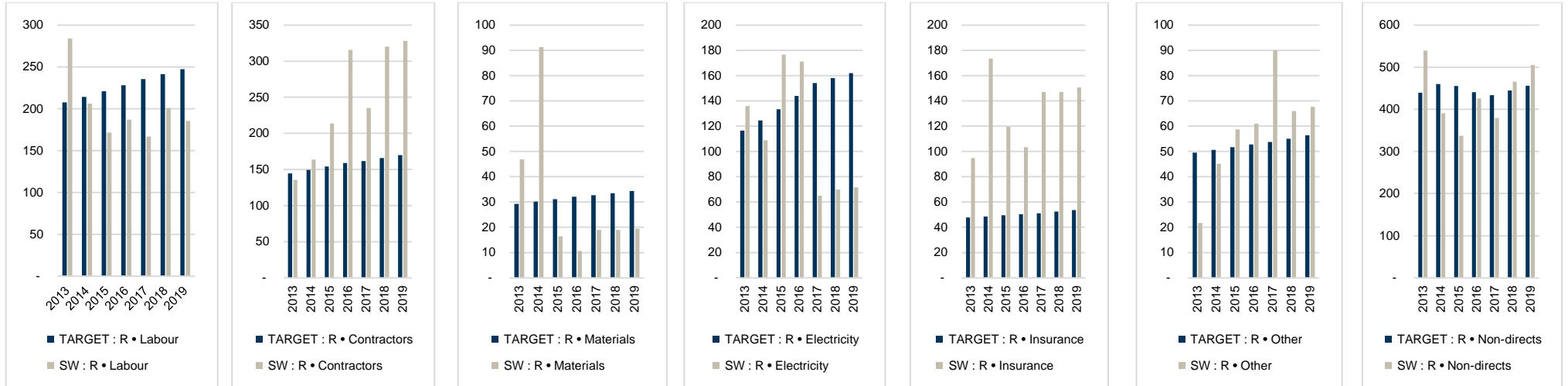
Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local administration support and other local labour not directly booked to activities within service contracts.

Corporate overhead costs are more generic than indirect costs and local overheads, and are spread across all service contracts 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

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