

2017/18 ANNUAL NETWORK SERVICE PLAN

# UPPER BURNETT 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.....	11
Non-routine projects for 2018 and 2019 .....	13
Annuity Balance .....	15
Overview of annuity-funded, non-routine projects to 2043.....	16
Material projects 2018 and 2019.....	16
Material projects 2020–24 .....	17
Material projects 2025–43 .....	17
Appendix 1: Total Expenditure by Expense Type .....	18
Notes.....	21

We're focused on reliability, efficiency and safety, ensuring the Upper Burnett 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.

**Milton Pukallus**  
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 Upper Burnett Bulk Water's 158 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 Upper Burnett Bulk Water, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers.

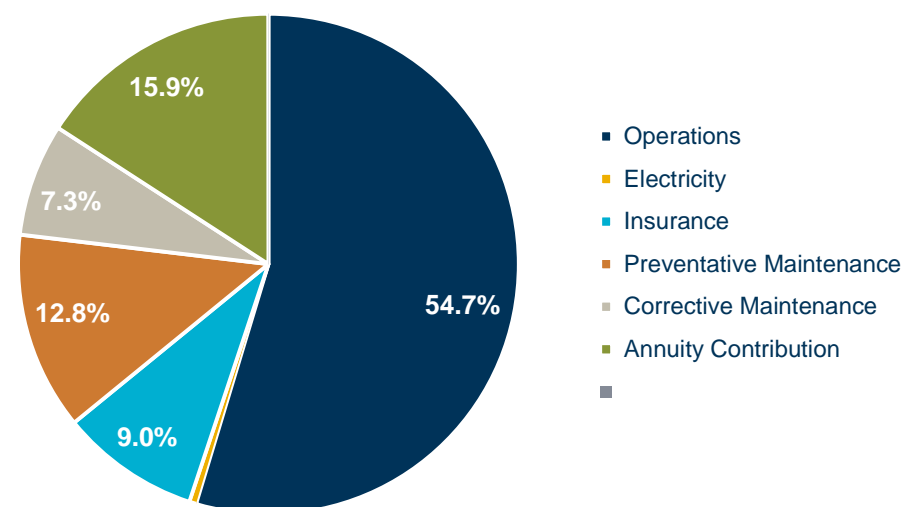
A high-level summary of the budgeted financial performance of the Upper Burnett Bulk Water service contract is presented in Table 1 below. Further detail on the planned spend, together with estimated revenue, is outlined on subsequent pages of this plan.

**TABLE 1: OPERATING REVENUE LESS SPEND**

Upper Burnett WS	Table reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Revenue	Table 1	1,475	1,897	2,772	1,480	1,517
Less – Routine Expenditure	Table 4 & Table 7	840	789	939	880	1,017
Less – Non-Routine Expenditure						
• Annuity Funded	Table 5, Table 6 & Table 7	2,465	279	375	800	1,535
• Non Annuity Funded	Table 5	105	28	4	-	-
<b>Surplus (Deficit)</b>		<b>1,936)</b>	<b>801</b>	<b>1,455</b>	<b>(199)</b>	<b>(1,035)</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

Upper Burnett 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)
Upper Burnett	Industrial		119	0	119
	Irrigation		28,469	0	28,469
	Urban		1,930	1,520	410
	SunWater		18,032	10	18,022
	Total	158	48,550	1,530	47,020

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 Upper Burnett Bulk Water scheme, the QCA's Headworks Utilisation Factor (HUF) — which determines how fixed costs are allocated — is 83% for High Priority and 17% 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 66%. The 2018 budget is compiled taking into account the QCA water use assumption.

# REVENUE

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

**TABLE 3: REVENUE**

Upper Burnett WS	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Irrigation	764	764	788	822	842
Industrial	16	22	24	25	25
Urban	586	605	613	624	639
Irrigation CSO	-	-	-	-	-
Revenue Transfers	-	-	-	-	-
Drainage	-	-	-	-	-
Other	109	26	7	10	11
Insurance Proceeds – Flood	-	480	1,339	-	-
<b>Revenue Total</b>	<b>1,475</b>	<b>1,897</b>	<b>2,772</b>	<b>1,480</b>	<b>1,517</b>

# ROUTINE EXPENDITURE

SunWater has budgeted an increase in Upper Burnett 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**

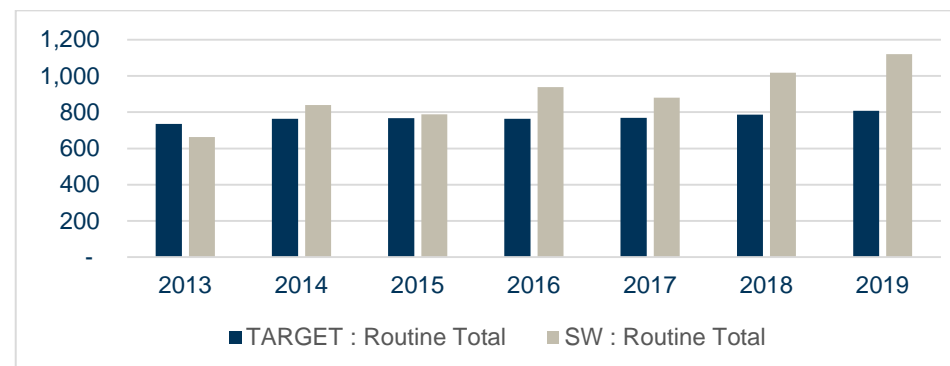
Upper Burnett WS	2014			2015			2016			2017			2018			
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000	% of target
Operations	493	507	14	531	508	(23)	587	504	(83)	588	506	(82)	661	519	(142)	127
Electricity	7	8	1	5	8	3	2	9	7	10	10	(0)	5	10	5	54
Insurance	235	68	(167)	147	69	(78)	132	70	(62)	109	71	(37)	109	73	(36)	149
Operations Total	<b>734</b>	<b>582</b>	<b>(152)</b>	<b>683</b>	<b>585</b>	<b>(97)</b>	<b>721</b>	<b>583</b>	<b>(139)</b>	<b>707</b>	<b>587</b>	<b>(120)</b>	<b>775</b>	<b>602</b>	<b>(173)</b>	<b>129</b>
Preventative Maintenance	77	146	69	94	146	52	156	145	(11)	97	145	48	155	149	(6)	104
Corrective Maintenance	29	36	7	12	36	23	62	36	(26)	76	36	(41)	88	37	(51)	238
Routine Total	<b>840</b>	<b>764</b>	<b>(76)</b>	<b>789</b>	<b>767</b>	<b>(22)</b>	<b>939</b>	<b>763</b>	<b>(175)</b>	<b>880</b>	<b>768</b>	<b>(112)</b>	<b>1,017</b>	<b>787</b>	<b>(230)</b>	<b>129</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.

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.

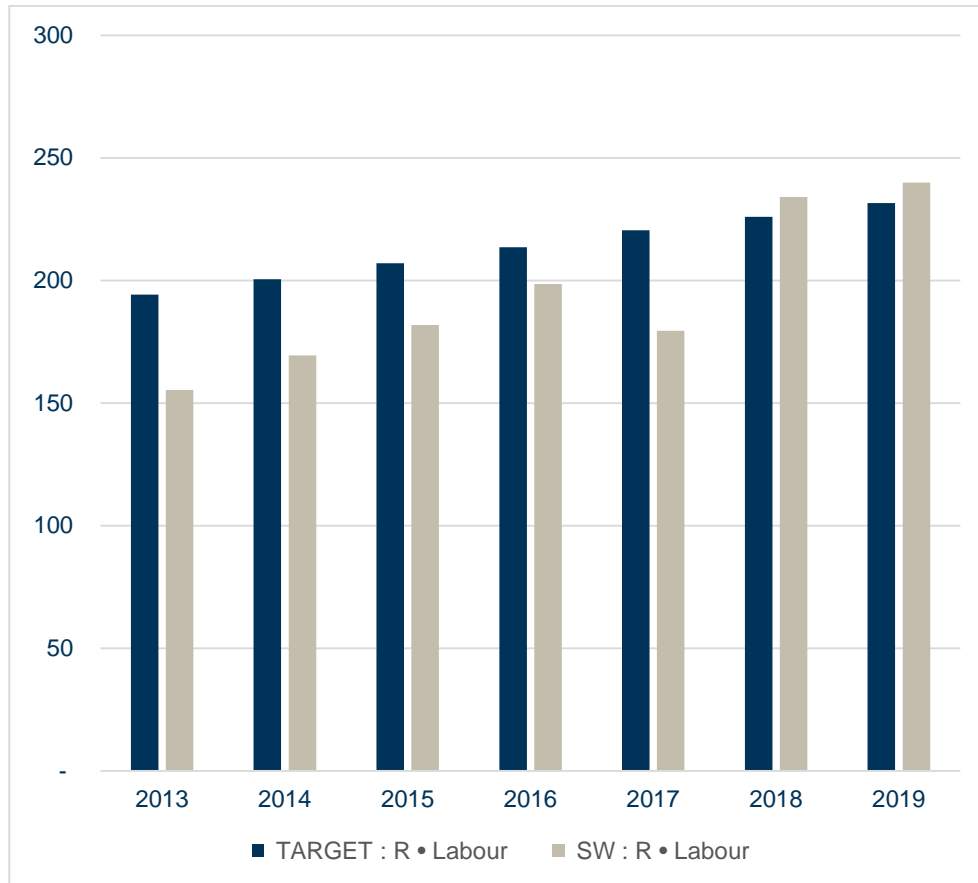
**FIGURE 2: ROUTINE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)**



# Operations

Upper Burnett 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. However, this budget falls within the forecast when the above-QCA increases in insurance are taken into account.

**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>1</sup>:

- scheduling and delivering water, including processing water orders, releasing water, operating dams and weirs, regulating and monitoring stream 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>1</sup> Activities listed will not apply to all service contracts.

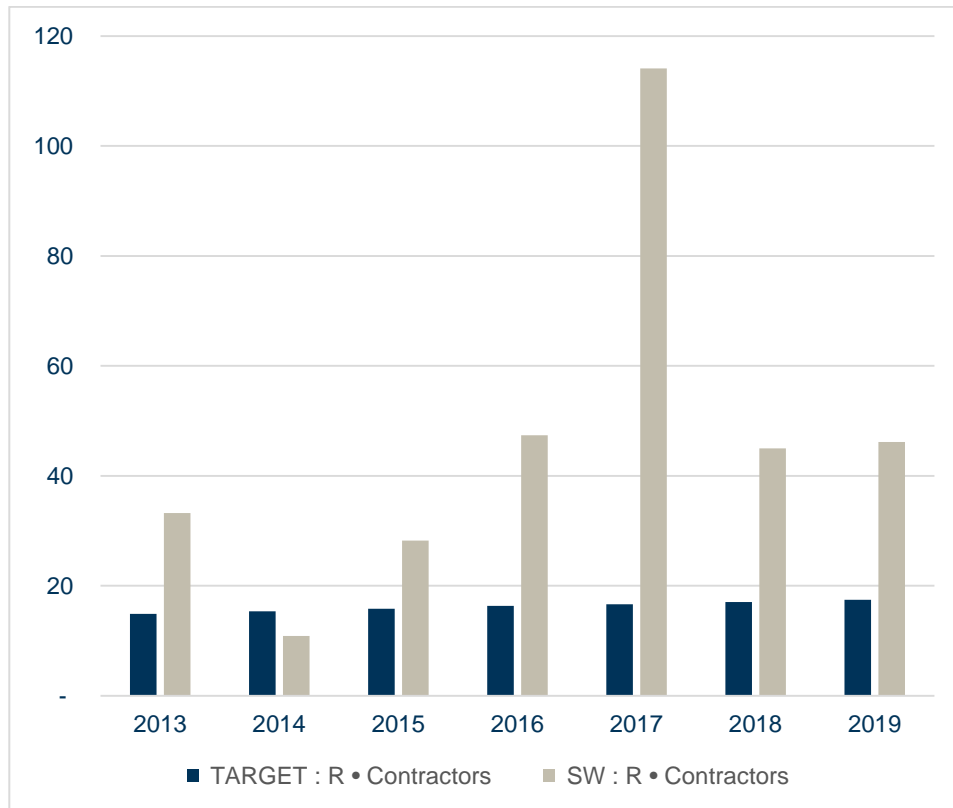


## Preventive maintenance

Preventive maintenance is an important activity and expense, as it ensures the ongoing operational performance and service capacity of Upper Burnett 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.

Preventive maintenance 2018 budget is 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 Upper Burnett Bulk Water includes<sup>2</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 control equipment (pumps, actuators, hydraulic systems, electrical motors, valves, switchboards and associated equipment), outlet works (regulator gates, trash screens, civil works, signs, structures, etc.), and other infrastructure.
- Servicing — planned maintenance activities normally expected to be carried out routinely on physical assets including valves, cranes, hydraulic systems, sump pumps and associated equipment.
- Weed control — management of weeds, including:
  - slashing
  - spraying and other activities to control operational and noxious weeds within dams, weirs and other land managed by SunWater.

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

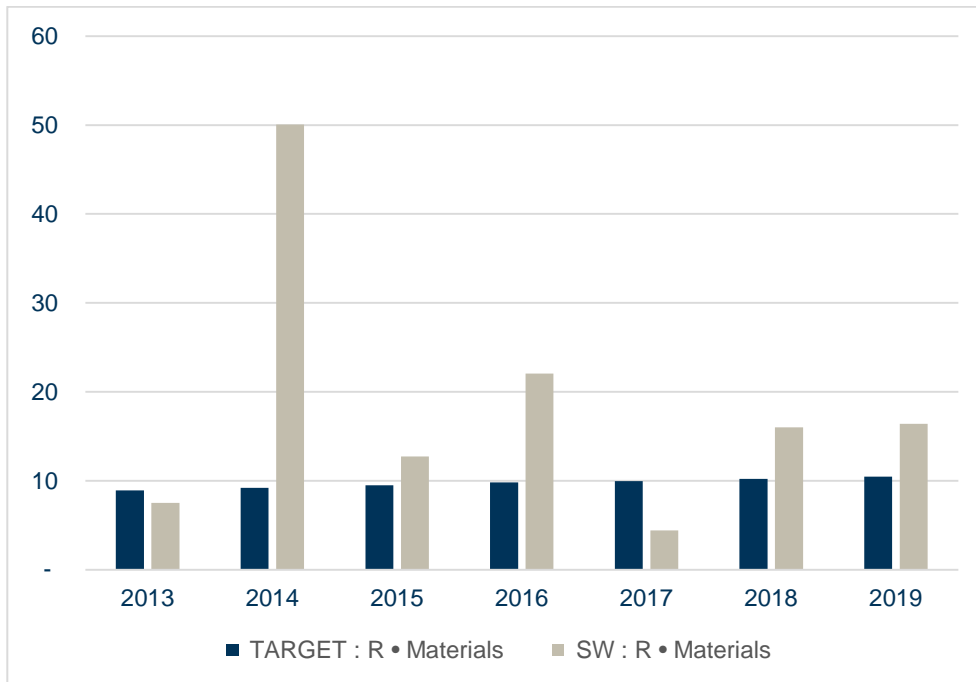
## Corrective maintenance

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.

Upper Burnett 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 Upper Burnett Bulk Water it typically includes<sup>3</sup>:

- repairing concrete structures
- repairing regulator gates, control valves, etc.
- de-silting drains
- repairing fencing
- erosion control and repairing rock protection works
- repairing pot holes
- grading roads
- repairing, replacing, and painting guide posts and signs.
- 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>4</sup>:

- repair or correction of PLC or control system faults
- repair or correction of fishway faults
- repair or correction of release equipment faults or supply
- rectification of an urgent public safety hazard
- response to theft or vandalism associated with scheme assets.

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

<sup>4</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**

Upper Burnett 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	-	-	-	-	-	-	6	-	(6)	18	-	(18)	159	-	(159)	-	9	-	(9)
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	2,229	-	(2,229)	108	-	(108)	276	-	(276)	-	-	-	-	-	-	-	-	-	-

Upper Burnett WS	2014			2015			2016			2017			2018			2019			
R&E	237	250	13	171	224	53	93	160	67	781	276	(506)	1,376	388	(988)	355	518	175	(343)
<b>Non-routine Total</b>	2,465	250	(2,215)	279	224	(55)	375	160	(214)	800	276	(524)	1,535	388	(1,147)	396	527	175	(352)
<b>Non Annuity Funded</b>	<b>105</b>			<b>28</b>			<b>4</b>			<b>-</b>			<b>-</b>			<b>-</b>			

## 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>Replace: Timber Cribs inc options study</b>	5193273 The timber cribs downstream of Jones Weir right bank are deteriorating. If they fail there is the potential for the downstream bank to slump. This project is to replace the damaged cribs.	96
<b>Assess and Modify Emergency and Exit Lighting as required (2016DS Rec 9.8a/b)</b>	5194930 A risk assessment after the 2016 Wuruma Dam inspection determined that the gallery emergency lighting needs to be upgraded to meet current standards.	89
<b>Refurbish Screen - repaint &amp; repair</b>	5193242 The inlet trash screens at Claude Wharton Weir need patch painting to prevent further corrosion.	85
<b>Replace old TPC cable in gallery and change asbestos covers (2016 DS Recs 9.5a/b/c, 9.11b, 9.11b)</b>	5194929 A risk assessment after the 2016 Wuruma Dam inspection determined that the cabling and asbestos covers in the gallery needs to be replaced.	85
<b>Study: WEIR PROGRAM - 5yr Dam Comprehensive Inspection - Civil, Mech &amp; Elec (by 1 Nov 2017)</b>		70
<b>Other works</b>	There are 29 other non-routine projects for 2018 ranging from \$5,000 to \$70,000. Further detail will be tabled at the IAC meeting.	873
<b>Total</b>		<b>1376</b>

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

<b>Project title</b>	<b>Project scope</b>	<b>2019 budget (\$'000)</b>
<b>Refurb conduits internal surface - preferable to cement line. 2005 Weir Insp Rec. 10.1a</b>	5159754 The John Goleby Weir conduit lining was observed to be deteriorating during the 2005 inspection. ongoing assessments determined that the need for immediate replacement was not needed. A further assessment will be conducted in April 2017. If the project can be deferred again, it will.	91
<b>Replace Meter Program (3 per year) - Upper Burnett (P2)</b>	5164204 This is an allowance for customer meter replacements. It will not be used if there are no meters to be replaced.	55
<b>Replace 1600mm Flap Valve</b>	5159796 The flap valve on John Goleby weir is coming close to the end of its life. Its condition will be further assessed during April 2017. If the project can be deferred it will be.	48
<b>Replace Outlet Works Screen</b>	5159796 The screen at John Goleby weir has not been seen for many years. It will be further assessed during April 2017 and the project deferred if it can be.	48
<b>Refurbish Valve &amp; Actuator - 915mm dia butterfly valve seals (2006 DS Report Rec 6.7a)</b>	5160517 The 2016 inspection of Wuruma Dam confirmed the need to refurbish No.2 guard valve due to excessive corrosion and pitting.	38
<b>Other works</b>	There are eleven other non-routine projects for 2019 ranging from \$5,000 to \$38,000. Further detail will be tabled at the IAC meeting.	238
<b>Total</b>		<b>518</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\***

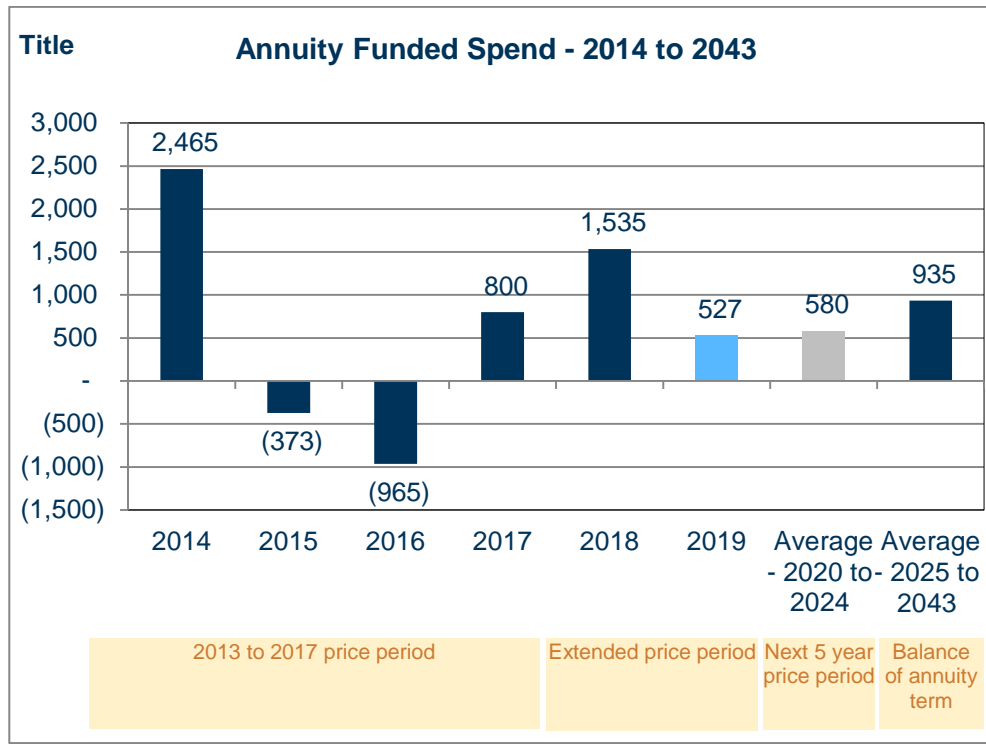
Upper Burnett WS	Table Reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000	2019 Forecast \$000
<b>Annuity</b>							
Opening Balance		(401)	(2,724)	(2,380)	(1,414)	(2,133)	(3,636)
Net Spend	See below	(2,465)	373	965	(800)	(1,535)	(527)
Annuity Contribution		173	175	180	187	192	196
Interest		(30)	(204)	(178)	(106)	(160)	(272)
<b>SunWater – Closing Balance</b>		<b>(2,724)</b>	<b>(2,380)</b>	<b>(1,414)</b>	<b>(2,133)</b>	<b>(3,636)</b>	<b>(4,239)</b>
<b>QCA – Closing Balance</b>		<b>336</b>	<b>312</b>	<b>355</b>	<b>293</b>	<b>118</b>	<b>148</b>
<b>Difference</b>		<b>(3,060)</b>	<b>(2,692)</b>	<b>(1,769)</b>	<b>(2,426)</b>	<b>(3,754)</b>	<b>(4,387)</b>
<b>Net Spend Analysis</b>							
Spend	Table 5 Table 7	(2,465)	(279)	(375)	(800)	(1,535)	(527)
Insurance Proceeds Receipts							
• Prior Year		-	172	-	-	-	-
• Current Year		-	480	1,339	-	-	-
<b>Net Spend</b>		<b>(2,465)</b>	<b>373</b>	<b>965</b>	<b>(800)</b>	<b>(1,535)</b>	<b>(527)</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

The evenness in spread of estimated project costs means there are no projects that exceed the materiality threshold for this service contract for the 2020-24 period.

## 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

Upper Burnett 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>	1,475			1,897			2,772			1,480			1,517		
<b>Routine Spend</b>															
<b>Operations</b>															
Labour	137	146	9	149	151	2	145	155	10	134	160	26	164	164	1
Contractors	10	10	(1)	27	10	(17)	17	10	(6)	79	11	(68)	25	11	(14)
Materials	39	3	(36)	12	3	(9)	13	4	(10)	-	4	4	10	4	(6)
Electricity	7	8	1	5	8	3	2	9	7	10	10	(0)	5	10	5
Insurance	235	68	(167)	147	69	(78)	132	70	(62)	109	71	(37)	109	73	(36)
Other	49	35	(14)	55	36	(20)	82	36	(45)	52	37	(15)	60	38	(22)
Non-directs	258	313	55	287	308	21	330	298	(32)	323	294	(28)	402	302	(100)
	734	582	(152)	683	585	(97)	721	583	(139)	707	587	(120)	775	602	(173)
<b>Preventative Maintenance</b>															
Labour	27	45	18	32	47	15	44	48	4	31	50	19	49	51	2
Contractors	-	3	3	1	4	3	11	4	(7)	6	4	(2)	5	4	(1)
Materials	1	3	2	1	3	2	2	3	1	1	3	2	2	3	1
Other	2	2	1	2	2	0	6	2	(3)	1	2	1	3	2	(1)
Non-directs	48	92	45	59	91	32	94	88	(6)	58	87	29	95	89	(6)
	77	146	69	94	146	52	156	145	(11)	97	145	48	155	149	(6)
<b>Corrective Maintenance</b>															
Labour	6	10	3	1	10	8	9	10	1	14	10	(4)	21	11	(10)
Contractors	0	2	2	-	2	2	20	2	(18)	29	2	(27)	15	2	(13)

<b>Upper Burnett WS</b>	<b>2014</b>			<b>2015</b>			<b>2016</b>			<b>2017</b>			<b>2018</b>		
Materials	10	3	(7)	-	3	3	7	3	(4)	4	3	(0)	4	4	(0)
Other	0	1	1	8	1	(7)	5	1	(4)	1	1	(0)	6	1	(5)
Non-directs	12	20	8	3	19	17	20	19	(2)	28	19	(10)	42	19	(23)
	29	36	7	12	36	23	62	36	(26)	76	36	(41)	88	37	(51)
Routine Total	840	764	(76)	789	767	(22)	939	763	(175)	880	768	(112)	1,017	787	(230)
<b>Non-Routine Spend</b>															
Labour	140	39	(100)	50	36	(14)	49	31	(18)	125	48	(77)	248	65	(183)
Contractors	1,906	43	(1,863)	123	37	(86)	180	-	(180)	350	51	(299)	728	55	(673)
Materials	26	43	17	3	42	39	5	50	46	11	48	38	11	80	70
Other	48	24	(24)	3	21	18	25	9	(16)	60	27	(33)	32	34	2
Non-directs	346	101	(245)	100	88	(12)	116	69	(46)	254	102	(152)	517	154	(363)
Non-Routine Total	2,465	250	(2,215)	279	224	(55)	375	160	(214)	800	276	(524)	1,535	388	(1,147)
<b>Total Regulated Spend</b>	<b>3,305</b>	<b>1,014</b>	<b>(2,292)</b>	<b>1,068</b>	<b>991</b>	<b>(77)</b>	<b>1,314</b>	<b>924</b>	<b>(390)</b>	<b>1,680</b>	<b>1,044</b>	<b>(636)</b>	<b>2,552</b>	<b>1,175</b>	<b>(1,377)</b>
Non Annuity Funded Spend	105			28			4			-			-		
Surplus (Deficit)	(1,936)			801			1,455			(199)			(1,035)		

## 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.

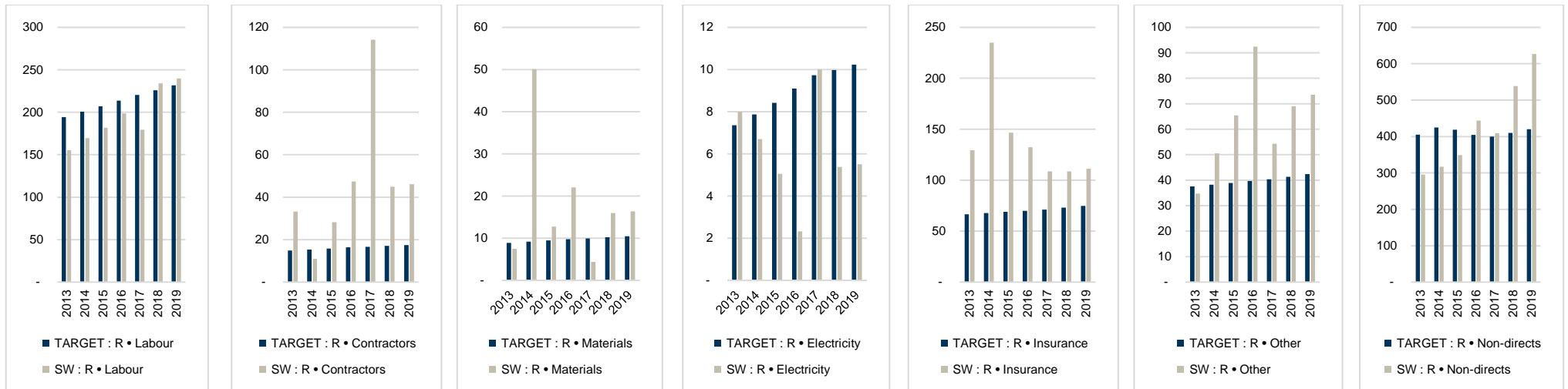
Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local administration support and other local labour not directly booked to activities within service contracts.

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.