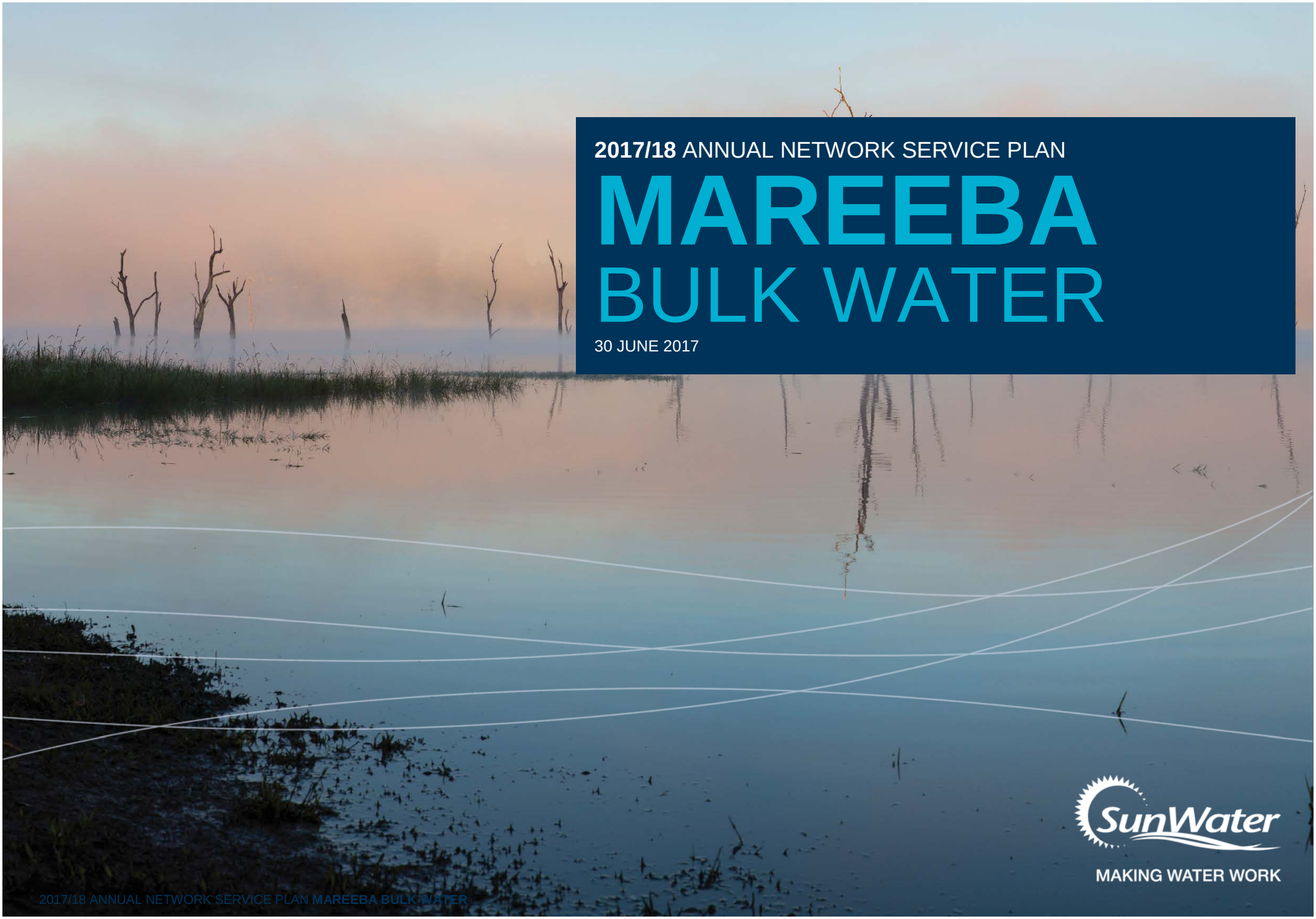


2017/18 ANNUAL NETWORK SERVICE PLAN

MAREEBA BULK WATER

30 JUNE 2017

SunWater

MAKING WATER WORK

CONTENTS

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

Charlie Martens
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 Mareeba Bulk Water's 1,123 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

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 Mareeba Bulk Water, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers.

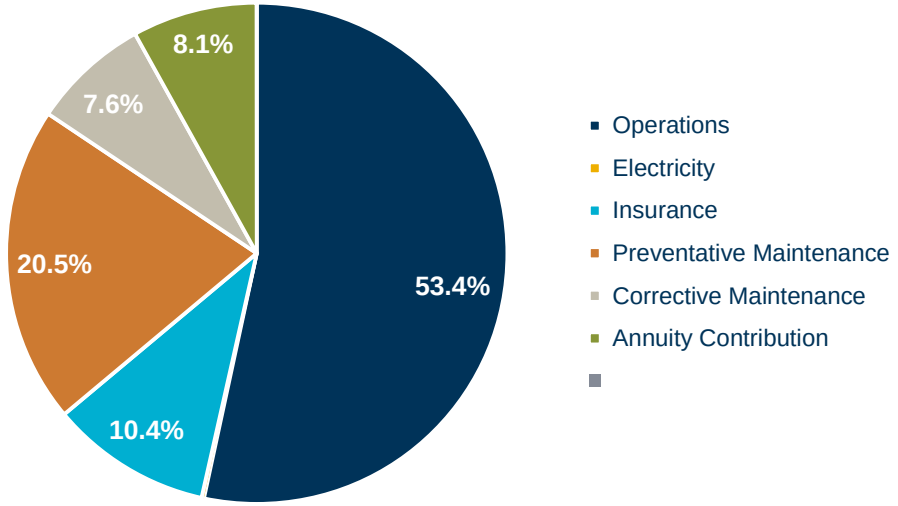
A high-level summary of the budgeted financial performance of the Mareeba Bulk Water service contract is presented in Table 1 below. Further detail on the planned spend, together with estimated revenue, is outlined on subsequent pages of this plan.

TABLE 1: OPERATING REVENUE LESS SPEND

Mareeba WS	Table reference	2014 Actual $000	2015 Actual $000	2016 Actual $000	2017 Forecast $000	2018 Budget $000
Revenue	Table 1	2,246	2,402	1,667	1,550	1,885
Less – Routine Expenditure	Table 4 & Table 7	1,038	1,223	1,270	1,183	1,407
Less – Non-Routine Expenditure						
• Annuity Funded	Table 5, Table 6 & Table 7	209	78	474	471	279
• Non Annuity Funded	Table 5	3	0	-	-	-
Surplus (Deficit)		**996**	**1,100**	**(78)**	**(104)**	**199**

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

Mareeba 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)
Mareeba Dimbulah	Industrial		1,561	135	1,426
	Irrigation		151,202	0	151,202
	Urban		6,656	5,901	755
	Other		0	0	0
	SunWater		45,005	8,000	37,005
	Total	1,123	204,424	14,036	190,388

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 Mareeba Bulk Water scheme, the QCA's Headworks Utilisation Factor (HUF) — which determines how fixed costs are allocated — is 53% for High Priority and 47% 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.

*QCA assumed water use is69.4%. The 2018 budget is compiled taking onto account the QCA water use assumption.

REVENUE

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

TABLE 3: REVENUE

Mareeba WS	2014 Actual $000	2015 Actual $000	2016 Actual $000	2017 Forecast $000	2018 Budget $000
Irrigation	132	77	255	93	18
Industrial	1,245	1,475	484	563	563
Urban	330	340	345	351	360
Irrigation CSO	-	-	-	-	-
Revenue Transfers	532	512	537	539	940 [1]
Drainage	-	-	-	-	-
Other	5	4	46	4	4
Insurance Proceeds – Flood	-	(6)	-	-	-
Revenue Total	**2,246**	**2,402**	**1,667**	**1,550**	**1,885**

[1] 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 Mareeba 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

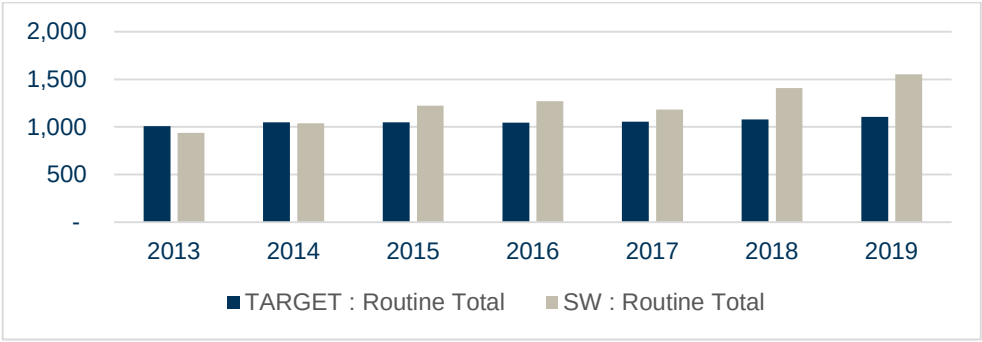
Mareeba WS	2014			2015			2016			2017			2018			
	SW Actual $000	QCA Target $000	Variance $000	SW Actual $000	QCA Target $000	Variance $000	SW Actual $000	QCA Target $000	Variance $000	SW Forecast $000	QCA Target $000	Variance $000	SW Budget $000	QCA Forecast $000	Variance $000	% of target
Operations	552	728	177	586	728	142	697	723	26	733	729	(5)	817	747	(70)	109
Electricity	2	6	5	3	7	3	3	7	4	2	8	6	2	8	6	28
Insurance	321	85	(236)	211	86	(124)	190	88	(103)	159	89	(70)	159	92	(67)	174
Operations Total	874	819	(54)	800	821	21	890	818	(72)	894	826	(69)	978	846	(132)	116
Preventative Maintenance	148	204	56	314	204	(110)	342	201	(140)	233	203	(30)	313	208	(105)	151
Corrective Maintenance	16	25	9	109	25	(84)	38	25	(13)	56	25	(31)	116	26	(90)	444
Routine Total	1,038	1,049	11	1,223	1,050	(173)	1,270	1,044	(226)	1,183	1,054	(129)	1,407	1,080	(327)	130

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 Mareeba 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 and an increased compliance and monitoring for dam safety compliance, inspections and emergency management planning and systems implementation. 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.

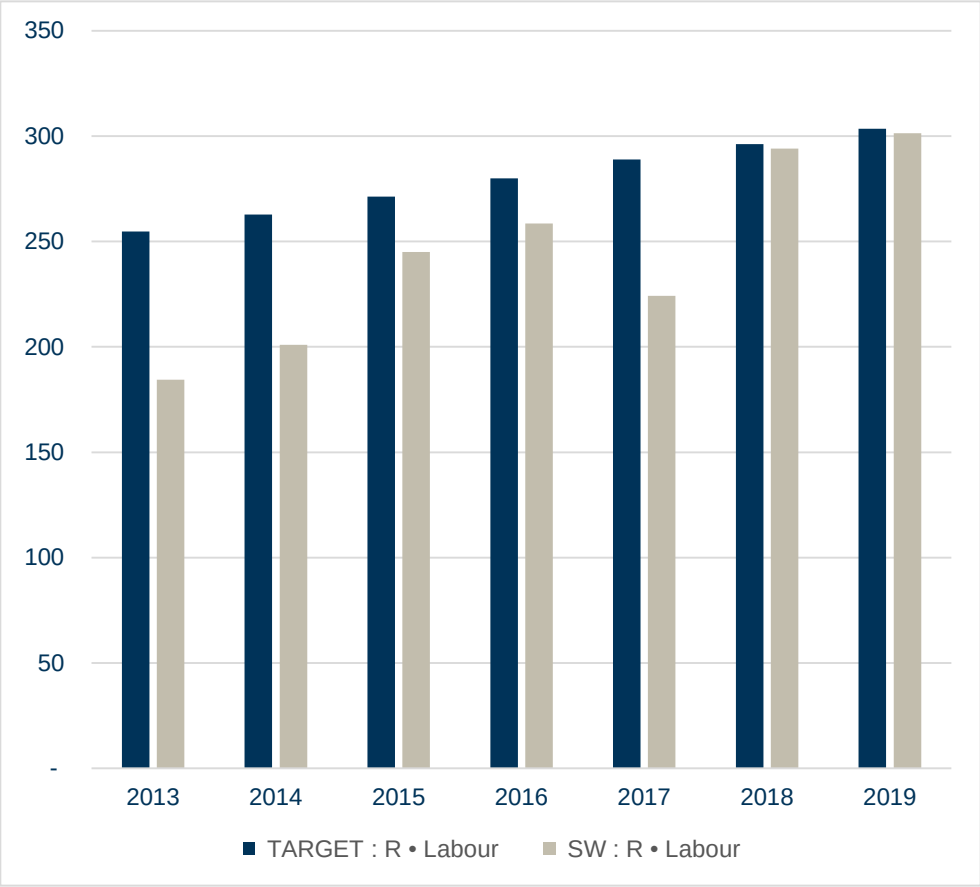
FIGURE 2: ROUTINE EXPENDITURE COMPARED TO QCA TARGET/FORECAST ($'000)



Operations

Mareeba 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[2]:

- 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.

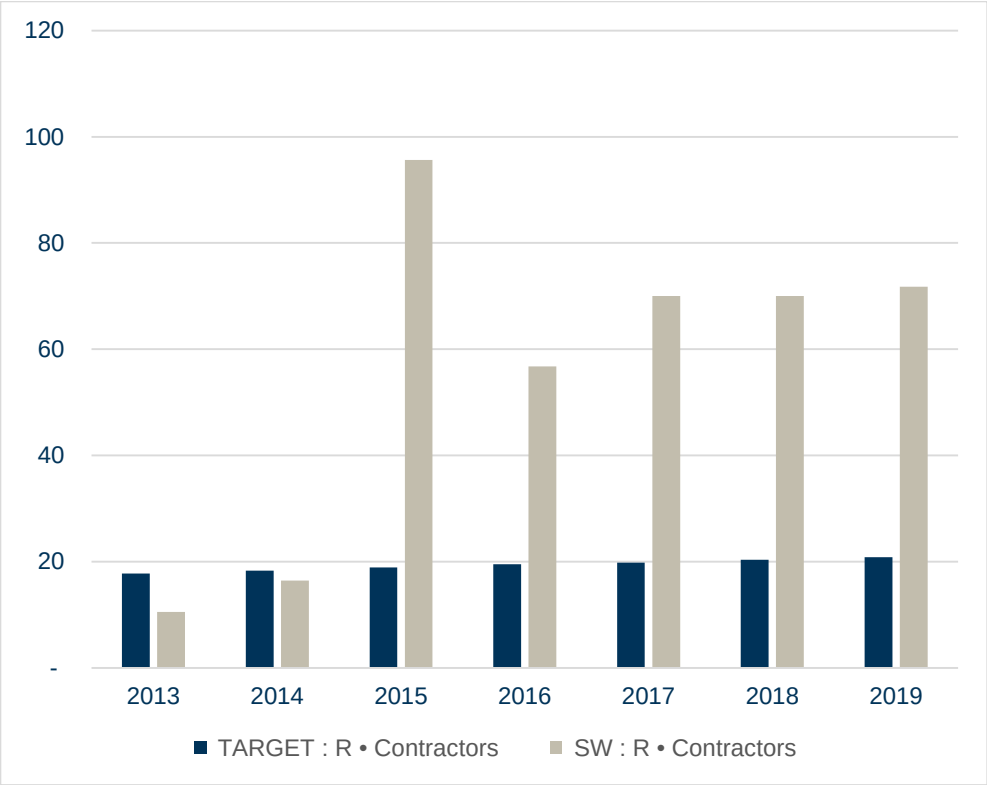
[2] Activities listed will not apply to all service contracts.

Preventive maintenance

Preventive maintenance is an important activity and expense, as it ensures the ongoing operational performance and service capacity of Mareeba 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 and internal support to deliver the required schedule of preventive maintenance work has had a significant impact on the 2018 budget, increasing it to 152% 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 Mareeba Bulk Water includes[3]:

- 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.

3 Activities listed will not apply to all service contracts.

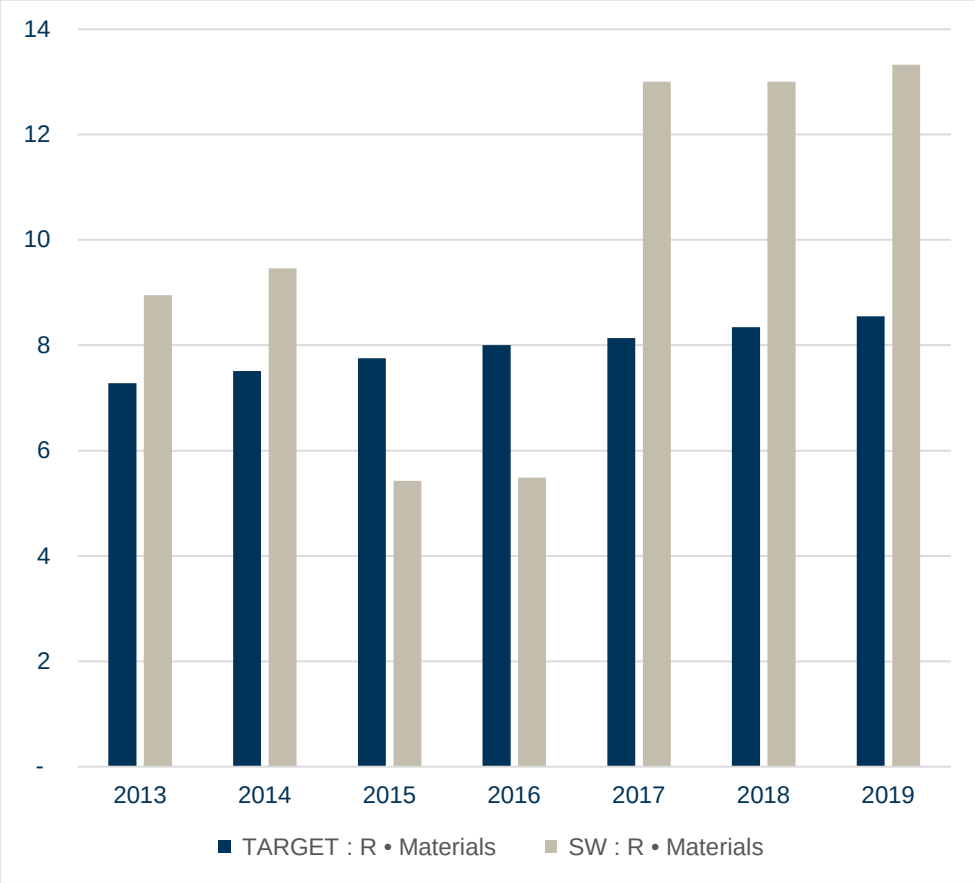
Corrective maintenance

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.

Mareeba Bulk Water corrective maintenance for 2018 is budgeted above the QCA forecast. This is a result of SunWater's need for additional contractors and internal support to correct minor failed items such as failed meters, and hazards. 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 Mareeba Bulk Water it typically includes[4]:

- 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.
- 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[5]:

- 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.

4 Activities listed will not apply to all service contracts.

5 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

Mareeba 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
Annuity Funded																			
Operations	-	-	-	-	-	-	1	-	(1)	13	3	(10)	5	-	(5)	-	7	-	(7)
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R&E	209	89	(120)	78	-	(78)	473	106	(367)	458	237	(221)	274	69	(206)	400	234	192	(42)
Non-routine Total	209	89	(120)	78	-	(78)	474	106	(368)	471	240	(231)	279	69	(211)	407	241	192	(49)

Mareeba WS	2014	2015	2016	2017	2018	2019
Non Annuity Funded	3	0	-	-	-	-

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)
Investigate and rectify cavitation issue - environmental release pipe and valves - TF Dam river outlet (2014 DS Rec 2.7.6)	5194533 River Outlet Regulating Valve - During the 2013 5yearly inspection non-significant cavitation was heard and observed. It was assumed it was happening after the pipe was reconfigured to include the environmental pipeline on top of the conduit. Since 2015 it is happening at lower flows (i.e. smaller releases) as reported by Storage Supervisor. This requires an investigation and review of the environmental pipeline design. The work instructions were amended to restrict the cone valve opening no more than 50% at any time until the issue is investigated.	55
16TIN01 Overhaul the gearbox & replace the gate bottom seal, fixings, protection steel painting (2013 DS Rec. 6.4.11 b&c)	5196275 River Outlet Radial Gate - This project was identified during the 2013 five yearly dam safety inspection and is to overhaul the gearbox & replace the gate (spare gate is located in the Tinaroo dam shed). The gearbox has minor oil leaks, the gate bottom seal is missing completely. Due to delay with the installation of the hydro unit (project 15TIN08) the hydro conduit cannot be used for irrigation releases. In such case there is no option to isolate irrigation conduit for radial gate repair works (this project 16TIN01). The project 16TIN01 to repair the radial gate is being deferred to 2018FY and site works will commence after the hydro unit is installed.	44
Refurbish Vertical Lift Gate, replace bolts, seal and rebuild the cracked head, see attached CA that was done in Sept 2015		38
15TIN03 Repair 7 eroded areas & divert stormwater from the dam to avoid future erosion (2013 DS Rec. 6.2 a&b), see quote HB#1977386.	5159827 Saddle Dam - This project was identified during the 2013 five yearly dam safety inspection and is to repair a few erosion areas which were observed on the downstream face. This can be done as corrective.	31
15TIN04 Repair damaged area of the guard valve - River Outlet (2013 DS Rec. 6.4.4)	"5160634 The project was deferred from 2015 to 2018. River Outlet Guard Valve – there was a damage in one area of the body near the seating ring at the 5 to 6 o'clock position. The coating has failed in this area and very deep pitting of several millimetres is evident. It appears that the corrosion product is being removed due to high local velocities at this point. This area of the valve should be re-coated after the pitting is filled with a high strength two pack filler. CA score was 3 in 2014. "	29
Other works	There are five other non-routine projects for 2018 ranging from $5,000 to $28,000. Further detail will be tabled at the IAC meeting.	78
Total		**274**

TABLE 7: NON-ROUTINE PROJECTS 2019

Project title	Project scope	2019 budget ($'000)
Study: 5yr Dam Comprehensive Inspection (by Dec, includes $5k Elec Insp), see notes.	5160648 The comprehensive safety inspection of Tinaroo Falls Dam will be carried out in accordance with the Queensland Dam Safety Management Guidelines (Feb 2002).	146
Replace Meter Program (2 per year) - Barron River (P2)	"5164316 A summary of SunWater policy on customer river meters is: 1. Customer meters are a 'run to failure' asset. This makes their replacement at an individual level virtually impossible to plan in WMS. 2. Replacement of customer meters will now be brought back into the price path for funding, including over the next two years. Meters have a standard life of 20 years therefore SunWater needs to plan to replace them at some stage. As a result, the following decisions were made: 1. Plan to replace customer meters at the planning level in WMS, not at the individual item level. 2. Actual costs once accrued will go against the individual asset therefore a work order will be created once a meter has failed. 3. A project at service contract level will need to be created in WMS, against which a high level WBS will be created by finance."	21
Consider and install a standalone SCADA for Tinaroo Falls Dam (Radial Gate) - Option Analysis	Irrigation Outlet - The Rubicon system is basically owned and operated by the Irrigation System group in Mareeba. The RMSS 2560 requires to consider if a stand alone SCADA system can be installed for Tinaroo Falls Dam. This corrective action is a direct result of incident number 2560 where ""TINAROO FALLS DAM: SCADA system error resulted in an uncontrolled release of water from a radial gate at Tinaroo Falls Dam potentially causing damage to SunWater channel."" It is recommended: Upgrade the PLC and provide a Citect SCADA computer on site to provide remote operation. Offsite access to the SCADA computer can be made using SunWater 3G network. The SCADA system should include functions for the control and monitoring of radial gate 1 and the vertical lift gates at the main channel outlet. The system may also incorporate the existing mini-hydro SCADA program. Refer to HB#1888000.	20
Replace SCADA Telemetry And Controls - Option Analysis	5160633 River Outlet. In accordance with SunWater Whole of Life Maintenance Strategy & Object Codes (HB# 956033) the SCADA Telemetry And Controls have to be replaced every 10-15 years.	17
Update Concrete, Zone, Excavation & Protection Works Materials for MBM Mareeba Supply	5178697 This project was identified during the 2015 asset revaluation and is to review the concrete, zone, excavation and protection works materials to ensure that they accurately reflect the makeup of the assets for use in future asset valuations and estimates.	7
Other works	There are four other non-routine projects for 2019 ranging from $5,000 to $7,000. Further detail will be tabled at the IAC meeting.	23
Total		234

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*

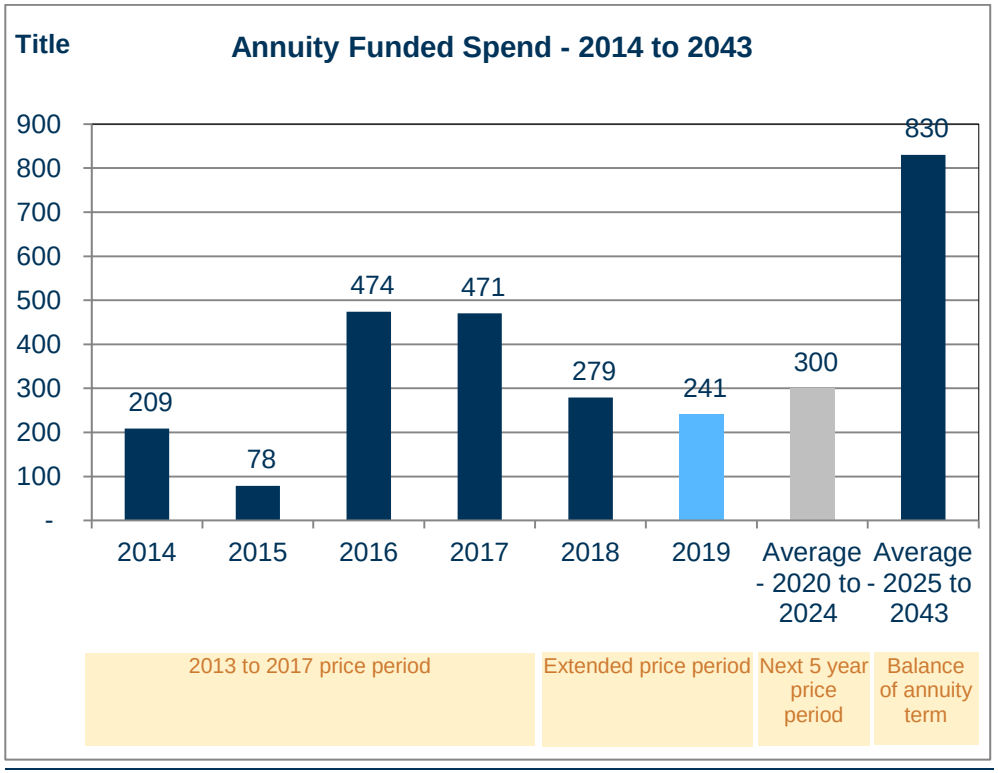
Mareeba WS	Table Reference	2014 Actual $000	2015 Actual $000	2016 Actual $000	2017 Forecast $000	2018 Budget $000	2019 Forecast $000
Annuity							
Opening Balance		940	910	1,016	734	439	316
Net Spend	See below	(209)	(78)	(474)	(471)	(279)	(241)
Annuity Contribution		108	116	117	120	123	126
Interest		70	68	76	55	33	24
SunWater – Closing Balance		910	1,016	734	439	316	225
QCA – Closing Balance		778	952	1,034	992	1,121	1,139
Difference		132	63	(300)	(554)	(806)	(915)
Net Spend Analysis							
Spend	Table 5 Table 7	(209)	(78)	(474)	(471)	(279)	(241)
Insurance Proceeds Receipts							
• Prior Year		-	6	-	-	-	-
• Current Year		-	(6)	-	-	-	-
Net Spend		**(209)**	**(78)**	**(474)**	**(471)**	**(279)**	**(241)**

*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

Study: Five-yearly comprehensive dam inspection — Tinaroo Falls Dam

- Year: 2019
- Current estimate: $146,000
- Options analysis completed: No

SunWater conducts inspections on dam assets annually and comprehensive inspections on a five-yearly basis — to ensure that our assets are able to perform their designed function to required standards.

The estimate to carry out the five-yearly comprehensive dam inspection was calculated using our works order system, and recognises the time and rate of engineers, as well as the remoteness of the site.

No options analysis is required.

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.

Post tensioning permanent strand anchors testing — Tinaroo Falls Dam

- Year: 2022
- Current estimate: $216,000
- Options analysis completed: No

In line with best practice and ANCOLD Guidelines*, SunWater conducts five-yearly tests of post tensioning permanent strand anchors. This will be the second time we have undertaken five-yearly post-construction testing.

Given this is a dam safety regulatory requirement, an options analysis will not be completed.

**Tinaroo Falls Dam has been assessed as an 'extreme' hazard category dam in accordance with ANCOLD Guidelines on Assessment of the Consequences of Dam Failure.*

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

Mareeba 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
Revenue	2,246			2,402			1,667			1,550			1,885		
Routine Spend															
Operations															
Labour	147	194	47	141	200	60	166	207	41	158	213	56	178	219	41
Contractors	7	16	10	14	17	3	8	17	9	10	18	8	10	18	8
Materials	5	3	(2)	2	3	1	1	3	2	3	3	(0)	3	3	0
Electricity	2	6	5	3	7	3	3	7	4	2	8	6	2	8	6
Insurance	321	85	(236)	211	86	(124)	190	88	(103)	159	89	(70)	159	92	(67)
Other	92	79	(13)	134	80	(54)	141	82	(59)	167	83	(84)	162	85	(77)
Non-directs	301	436	135	295	428	133	381	414	33	396	412	16	464	422	(42)
	874	819	(54)	800	821	21	890	818	(72)	894	826	(69)	978	846	(132)
Preventative Maintenance															
Labour	52	62	11	93	64	(29)	90	66	(23)	61	69	8	89	70	(19)
Contractors	2	1	(1)	11	1	(10)	24	1	(23)	35	1	(34)	35	1	(34)
Materials	2	3	0	1	3	2	3	3	0	5	3	(2)	5	3	(2)
Other	0	4	3	33	4	(30)	36	4	(32)	15	4	(11)	10	4	(6)
Non-directs	91	134	43	175	132	(43)	189	127	(62)	117	126	9	174	129	(45)
	148	204	56	314	204	(110)	342	201	(140)	233	203	(30)	313	208	(105)
Corrective Maintenance															
Labour	2	6	4	11	7	(4)	3	7	4	6	7	1	27	7	(20)
Contractors	7	1	(6)	70	1	(69)	25	1	(24)	25	1	(24)	25	1	(24)
Materials	2	2	(0)	3	2	(1)	2	2	1	5	2	(3)	5	2	(3)
Other	-	2	2	1	2	1	1	2	1	8	2	(6)	5	2	(3)
Non-directs	4	14	9	24	14	(10)	8	13	5	12	13	1	54	13	(40)

Mareeba WS	2014			2015			2016			2017			2018		
	16	25	9	109	25	(84)	38	25	(13)	56	25	(31)	116	26	(90)
Routine Total	**1,038**	**1,049**	**11**	**1,223**	**1,050**	**(173)**	**1,270**	**1,044**	**(226)**	**1,183**	**1,054**	**(129)**	**1,407**	**1,080**	**(327)**
Non-Routine Spend															
Labour	56	13	(42)	14	-	(14)	48	19	(29)	41	40	(1)	45	11	(34)
Contractors	25	14	(11)	37	-	(37)	310	21	(288)	322	43	(279)	130	12	(118)
Materials	2	14	12	-	-	-	0	21	21	4	43	39	4	12	8
Other	19	8	(11)	0	-	(0)	8	12	3	10	23	13	6	7	0
Non-directs	107	39	(69)	28	-	(28)	109	33	(76)	93	91	(3)	94	26	(68)
Non-Routine Total	**209**	**89**	**(120)**	**78**	**-**	**(78)**	**474**	**106**	**(368)**	**471**	**240**	**(231)**	**279**	**69**	**(211)**
Total Regulated Spend	**1,247**	**1,138**	**(109)**	**1,301**	**1,050**	**(251)**	**1,745**	**1,150**	**(594)**	**1,654**	**1,294**	**(360)**	**1,687**	**1,149**	**(538)**
Non Annuity Funded Spend	3			0			-			-			-		
Surplus (Deficit)	996			1,100			(78)			(104)			199		

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.

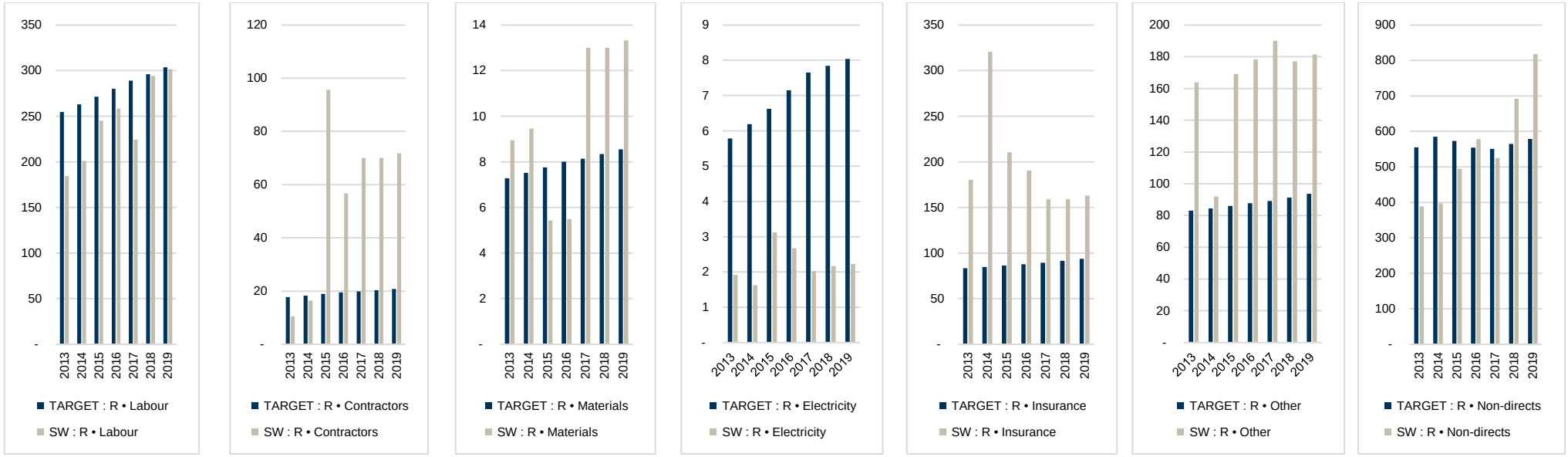
Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local administration support and other local labour not directly booked to activities within service contracts.

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	

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