

2017/18 ANNUAL NETWORK SERVICE PLAN

NOGOA 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	16
Material projects 2025–43	16
Appendix 1: Total Expenditure by Expense Type	17
Notes.....	20

We're focused on reliability, efficiency and safety, ensuring the Nogoia 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. A major spillway improvement project is planned and 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 Nogoia Bulk Water's 392 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 Nogoia Bulk Water, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers.

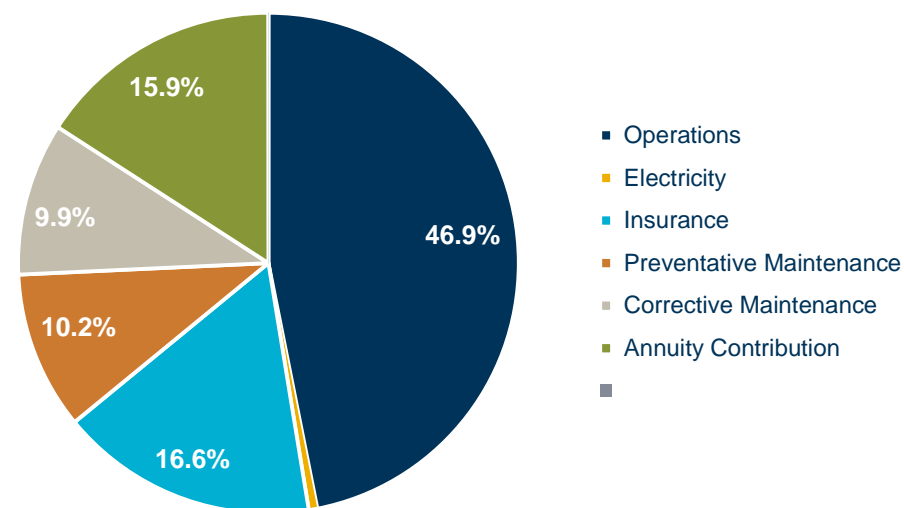
A high-level summary of the budgeted financial performance of the Nogoia Bulk Water service contract is presented in Table 1 below. Further detail on the planned spend, together with estimated revenue, is outlined on subsequent pages of this plan.

TABLE 1: OPERATING REVENUE LESS SPEND

Nogoia WS	Table reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Revenue	3	4,711	5,672	5,325	8,107	5,468
Less – Routine Expenditure	4 & 7	2,058	1,966	2,004	2,383	2,557
Less – Non-Routine Expenditure						
• Annuity Funded	5, 6 & 7	459	1,383	523	1,334	1,533
• Non Annuity Funded	5	-	1	7,864	26,500	41,229
Surplus (Deficit)		2,194	2,322	(5,065)	(22,109)	(39,852)

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

Nogoa 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)
Nogoa Mackenzie	Industrial		28,470	26,051	2,419
	Irrigation		161,082	2,515	158,566
	Urban		8,548	8,458	90
	Other		331	331	0
	SunWater		32,090	9,441	22,649
	Total		392	230,520	46,796

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 Nogoa Bulk Water scheme, the QCA's Headworks Utilisation Factor (HUF) — which determines how fixed costs are allocated — is 55% for High Priority and 45% 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 is 83.2%. The 2018 budget is compiled taking into account the QCA water use assumption.

REVENUE

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

TABLE 3: REVENUE

Nogoa WS	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Irrigation	911	923	960	987	1,036
Industrial	2,386	2,666	2,878	5,741	2,724
Urban	435	428	424	306	313
Irrigation CSO	2	-	-	-	-
Revenue Transfers	958	921	955	987	1,304 ¹
Drainage	-	-	-	-	-
Other	19	441	108	88	90
Insurance Proceeds – Flood	-	292	-	-	-
Revenue Total	4,711	5,672	5,325	8,107	5,468

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 Nogoia 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

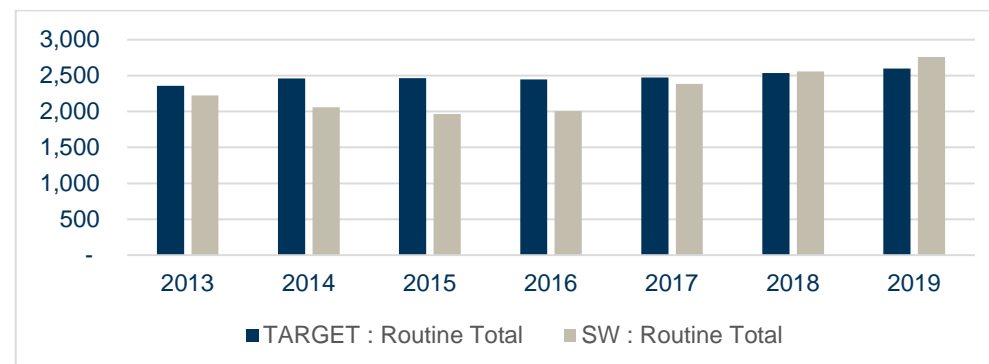
Nogoia WS	2014			2015			2016			2017			2018			
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Forecast \$000	Variance \$000	% of target
Operations	1,065	1,762	697	1,135	1,763	628	1,084	1,745	660	1,411	1,759	348	1,424	1,803	379	79
Electricity	16	14	(2)	15	15	1	12	16	5	16	18	2	17	18	1	94
Insurance	681	201	(480)	439	205	(234)	399	208	(190)	505	212	(294)	505	217	(288)	233
Operations Total	1,762	1,977	216	1,589	1,983	394	1,495	1,969	475	1,933	1,989	56	1,947	2,039	92	96
Preventative Maintenance	184	276	92	195	275	81	360	273	(88)	271	275	4	310	281	(29)	110
Corrective Maintenance	113	205	92	183	206	23	149	206	57	180	208	28	300	213	(87)	141
Routine Total	2,058	2,458	400	1,966	2,464	498	2,004	2,448	444	2,383	2,471	88	2,557	2,533	(24)	101

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 Nogoia Bulk Water's preventive and corrective maintenance for 2018 is also higher than the QCA forecast. 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.

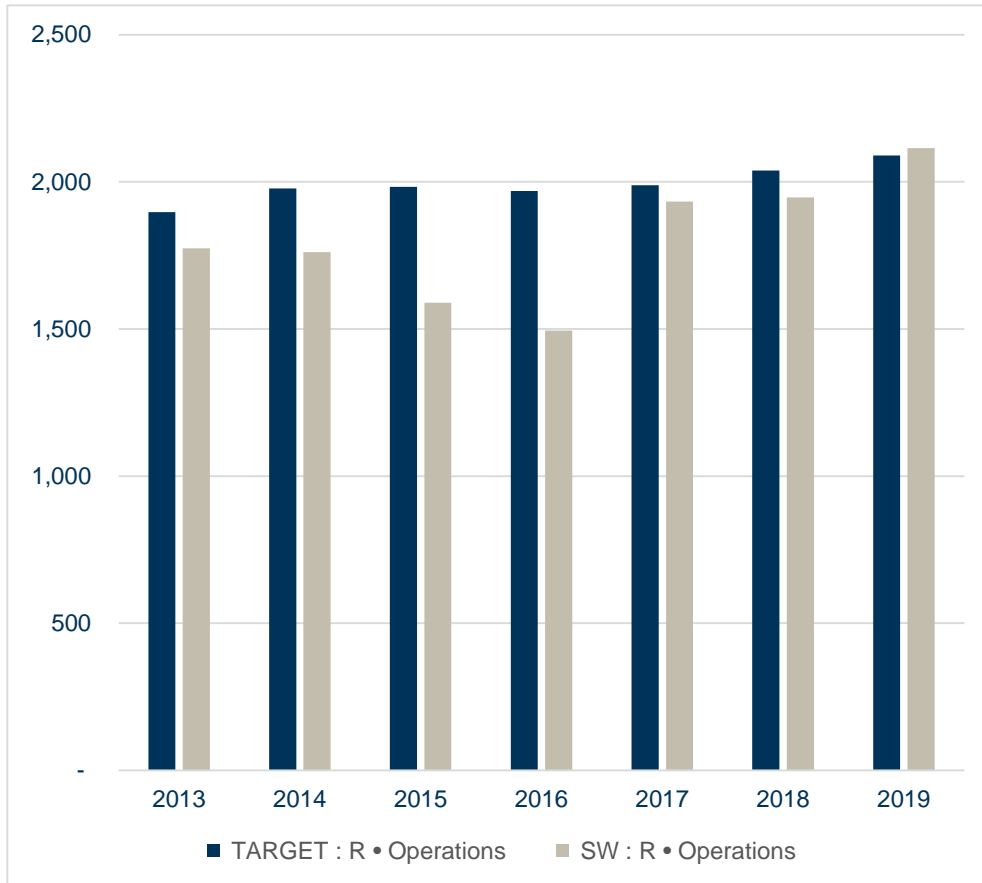
FIGURE 2: ROUTINE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)



Operations

Nogoa Bulk Water's total operations budget in 2018 is below the QCA forecast even with increases in insurance costs 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 of²:

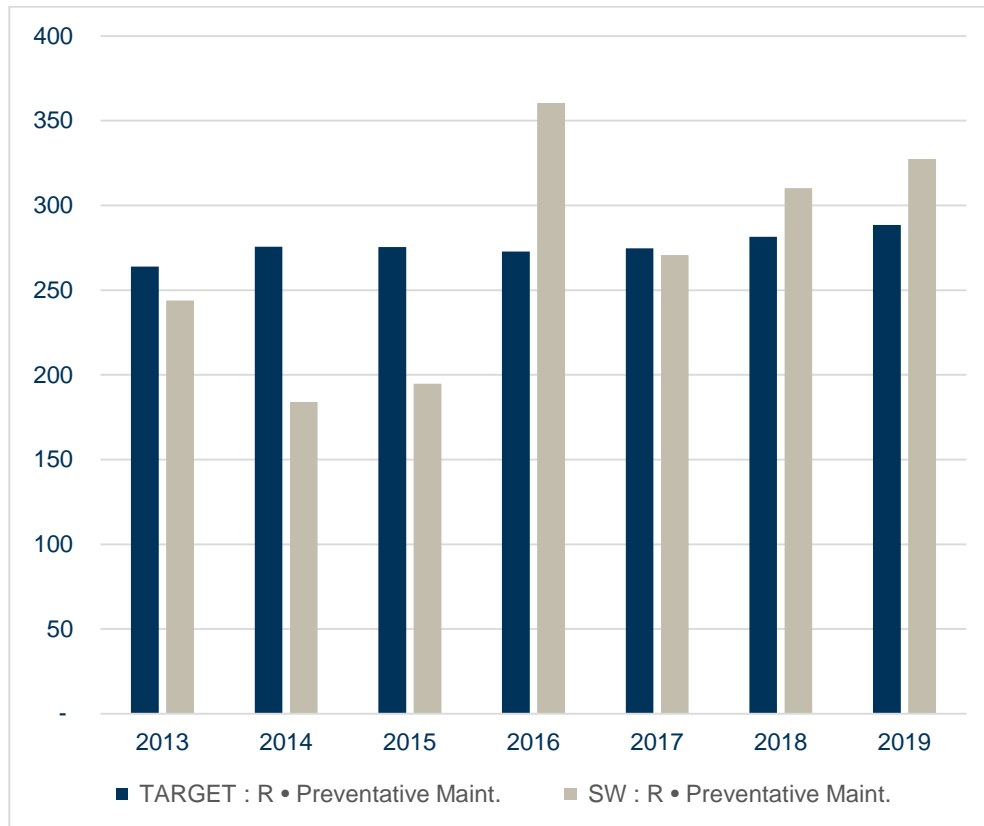
- scheduling and delivering water, including processing water orders, releasing water, operating pump stations, regulating and monitoring channel flows, and monitoring customer deliveries
- emergency responses for channel overflows and other emergency events
- meter reading
- administration of water 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 Nogoia 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 111% 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 Nogoia Bulk Water includes³:

- 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
 - 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.

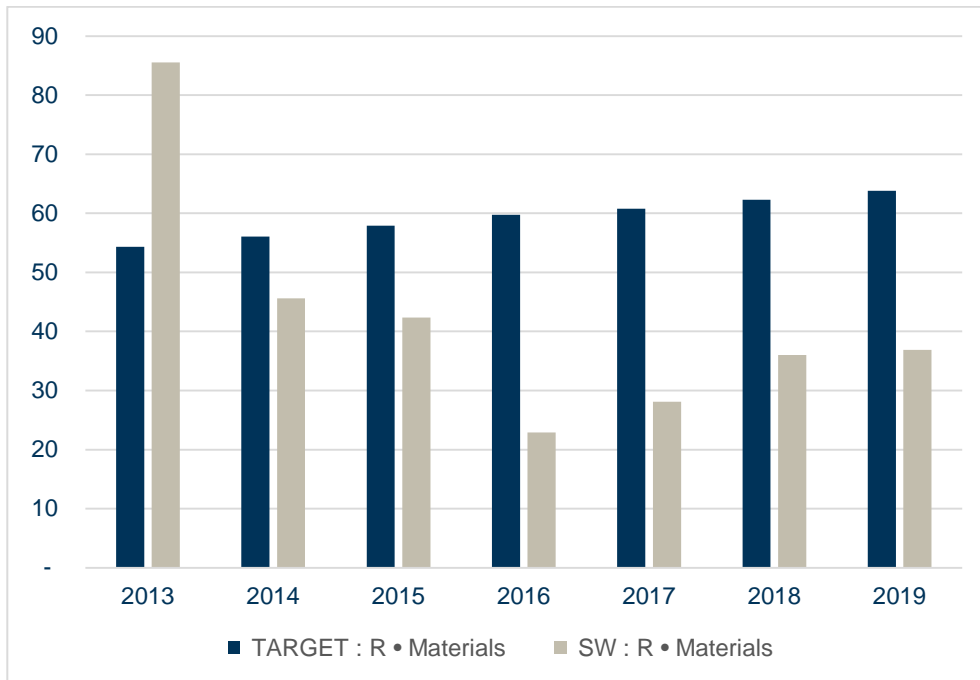
Corrective maintenance

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.

Nogoa 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 Nogoa Bulk Water it typically includes⁴:

- Dams & Weirs:
 - erosion control and repairing rock protection works
 - repairing fencing
 - repairing concrete structures
 - repairing regulator gates, control valves, etc.
 - Storages (balancing storages and reservoirs):
 - repairing control gates and valves
 - repairing walls, embankments and spillways
- 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 includes⁵:

- repair or correction of storage faults
- repair or correction of WTP 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

Nogoa 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	41	15	(26)	31	-	(31)	(122)	-	122	27	-	(27)	9	-	(9)	-	14	-	(14)
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	239	-	(239)	22	-	(22)	-	-	-	-	-	-	-	-	-	-	-	-	-
R&E	179	288	109	1,330	482	(848)	645	258	(387)	1,306	887	(419)	1,524	445	(1,079)	342	587	30	(557)

Nogoa WS	2014			2015			2016			2017			2018			2019			
Non-routine Total	459	303	(156)	1,383	482	(901)	523	258	(265)	1,334	887	(447)	1,533	445	(1,088)	344	602	30	(572)
Non Annuity Funded	-			1			7,864			26,500			41,229			-			

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)
20Y-Desktop Comprehensive Risk Assessment Review (last CRA was in 2009)	5159290 A comprehensive risk assessment for Fairbairn Dam is required as part of SunWater's dam safety management program (SunWater 2012).	163
Study: 5yr Dam Comprehensive Inspection (by 1 Dec, includes \$5k for elec. insp. and \$9k for appr. ch. works)	5160148 The comprehensive safety inspection of Fairbairn Dam will be carried out in accordance with the Queensland Dam Safety Management Guidelines (Feb 2002).	131
13NMA02 Stage 2 - Site Work - Improve the rock face stability on the right abutment adjacent to the Weemah inlet tower.	5196227 An inspection of the slope immediately below the lookout and above the access road to the intake tower was requested following a series of rockfalls that resulted in the deposition of debris onto the access track. The more recent events resulted in damage to the guard rail immediately adjacent to the bridge of the intake tower. A site inspection was completed by SunWater's Geologist Ms Erin Poirot and Senior Contract Geologist Mr Deryk Forster on 04 April 2014. Following this inspection, a memorandum was prepared, detailing the findings of the inspection. Refer to HB#1553471.	113
15NMA06 Replace piezometer instrumentation panels in both pits, connect 11 piezometers	5196224 GEL instrumentation has provided indicative prices to upgrade the Hydraulic piezometer monitoring equipment at Fairbairn dam. Project 15NMA06 is to replace piezometer instrumentation panels in both pits and connect 11 piezometers which are not connected.	104
Other works	There are forty-six other non-routine projects for 2018 ranging from \$5,000 to \$93,000. Further detail will be tabled at the IAC meeting.	1,012
Total		1,524

TABLE 7: NON-ROUTINE PROJECTS 2019

Project title	Project scope	2019 budget (\$'000)
Replace Cables & Cableways	5160446 Replacement is due to the age. Installed in 1972. Subject to condition assessment. Option Study is in 2018FY. In accordance with SunWater Whole of Life Maintenance Strategy & Object Codes (HB# 956033) the cables have to be replaced every 35-45 years.	99
Replace Meter Program (2 per year) - Mackenzie River	5195026 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.	52
14NMA08 Replace Spillway Access Ladder (Collapsible/Removable)	The ladder was washed out during the flood. Currently there is no safe access to the spillway for regular monthly inspections. WH&S issue.	38
Refurbish Trash Racks (subject to 5Y inspection in July 2017)	5160410 The trash racks were inspected in 2012 during the last five yearly inspection. The current condition of the trash racks is unknown. In accordance with SunWater Whole of Life Maintenance Strategy & Object Codes (HB# 956033) the trash racks have to be refurbished every 6 years.	30
Other works	There are twenty-two other non-routine projects for 2019 ranging from \$5,000 to \$28,000. Further detail will be tabled at the IAC meeting.	368
Total		587

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*

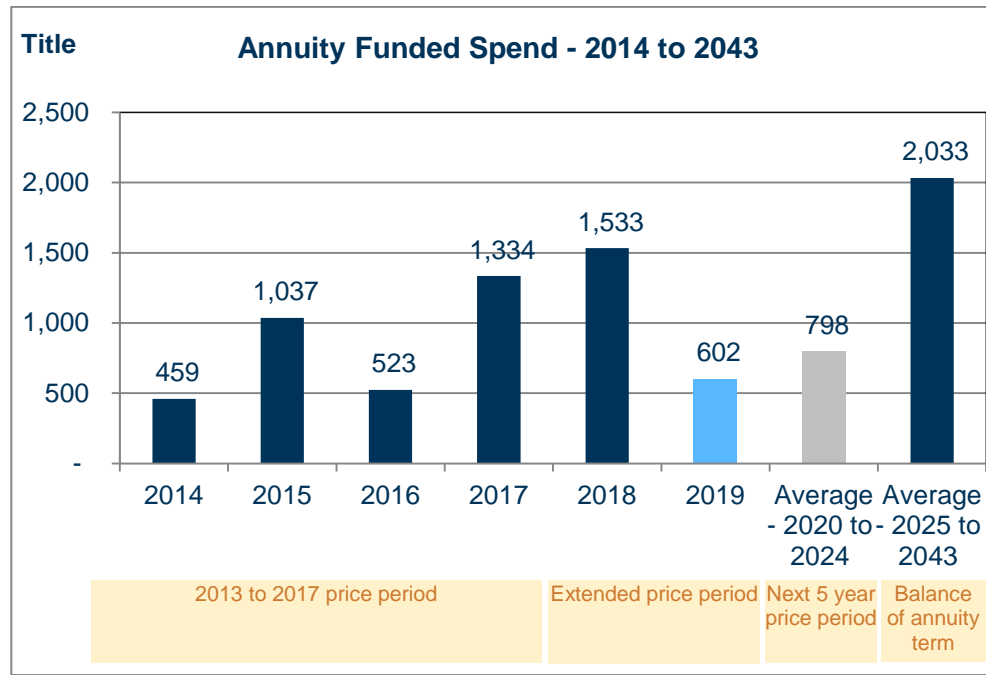
Nogoa WS	Table Reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000	2019 Forecast \$000
Annuity							
Opening Balance		(1,033)	(1,115)	(1,781)	(1,969)	(2,979)	(4,254)
Net Spend	See below	(459)	(1,037)	(523)	(1,334)	(1,533)	(602)
Annuity Contribution		454	455	468	470	482	494
Interest		(77)	(84)	(133)	(147)	(223)	(319)
SunWater – Closing Balance		(1,115)	(1,781)	(1,969)	(2,979)	(4,254)	(4,680)
QCA – Closing Balance		(1,131)	(1,242)	(1,125)	(1,626)	(1,710)	(1,374)
Difference		16	(538)	(844)	(1,354)	(2,543)	(3,305)
Net Spend Analysis							
Spend	Table 5 Table 7	(459)	(1,383)	(523)	(1,334)	(1,533)	(602)
Insurance Proceeds Receipts							
• Prior Year		-	54	-	-	-	-
• Current Year		-	292	-	-	-	-
Net Spend		(459)	(1,037)	(523)	(1,334)	(1,533)	(602)

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

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

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

FIGURE 6: ANNUITY EXPENDITURE TO 2043



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

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

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

Material projects 2018 and 2019

The evenness in spread of estimated project costs means there are no projects that exceed the materiality threshold for this service contract for 2018 and 2019.

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

Nogoa 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	4,711			5,672			5,325			8,107			5,468		
Routine Spend															
Operations															
Labour	279	500	221	257	516	259	251	533	281	342	550	208	309	564	255
Contractors	93	69	(24)	220	71	(149)	125	73	(52)	170	75	(96)	200	76	(124)
Materials	21	28	7	30	29	(1)	11	30	19	21	30	9	21	31	10
Electricity	16	14	(2)	15	15	1	12	16	5	16	18	2	17	18	1
Insurance	681	201	(480)	439	205	(234)	399	208	(190)	505	212	(294)	505	217	(288)
Other	112	48	(65)	99	49	(51)	112	50	(62)	107	51	(56)	142	52	(90)
Non-directs	560	1,117	557	528	1,098	569	585	1,059	474	772	1,054	282	753	1,080	328
	1,762	1,977	216	1,589	1,983	394	1,495	1,969	475	1,933	1,989	56	1,947	2,039	92
Preventative Maintenance															
Labour	63	80	17	61	83	22	105	86	(19)	78	88	10	83	91	8
Contractors	6	7	0	9	7	(2)	21	7	(13)	40	7	(32)	50	8	(42)
Materials	1	7	6	0	8	7	11	8	(3)	-	8	8	5	8	3
Other	2	7	6	11	7	(4)	9	7	(2)	5	8	2	10	8	(2)
Non-directs	111	174	62	113	170	57	214	164	(50)	148	163	15	163	167	5
	184	276	92	195	275	81	360	273	(88)	271	275	4	310	281	(29)
Corrective Maintenance															
Labour	22	47	25	35	48	13	24	50	26	39	52	12	75	53	(22)
Contractors	25	24	(1)	54	25	(30)	51	25	(26)	49	26	(23)	55	26	(29)
Materials	23	21	(3)	12	21	10	0	22	22	7	22	15	10	23	13
Other	1	10	9	14	10	(3)	25	11	(14)	9	11	2	12	11	(1)
Non-directs	42	104	61	68	102	33	49	98	49	76	98	21	148	100	(48)
	113	205	92	183	206	23	149	206	57	180	208	28	300	213	(87)

Nogoa WS	2014			2015			2016			2017			2018		
Routine Total	2,058	2,458	400	1,966	2,464	498	2,004	2,448	444	2,383	2,471	88	2,557	2,533	(24)
Non-Routine Spend															
Labour	81	46	(35)	283	73	(211)	122	45	(78)	207	148	(59)	211	71	(140)
Contractors	93	61	(32)	517	89	(428)	222	44	(178)	628	155	(473)	805	81	(724)
Materials	69	47	(22)	5	78	73	42	44	2	1	155	154	12	76	64
Other	67	24	(43)	72	43	(29)	(105)	30	134	76	89	13	54	43	(11)
Non-directs	148	125	(24)	506	200	(306)	241	95	(146)	421	340	(81)	450	173	(277)
Non-Routine Total	459	303	(156)	1,383	482	(901)	523	258	(265)	1,334	887	(447)	1,533	445	(1,088)
Total Regulated Spend	2,517	2,761	244	3,350	2,946	(404)	2,526	2,706	179	3,717	3,358	(358)	4,090	2,978	(1,112)
Non Annuity Funded Spend	-			1			7,864			26,500			41,229		
Surplus (Deficit)	2,194			2,322			(5,065)			(22,109)			(39,852)		

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.

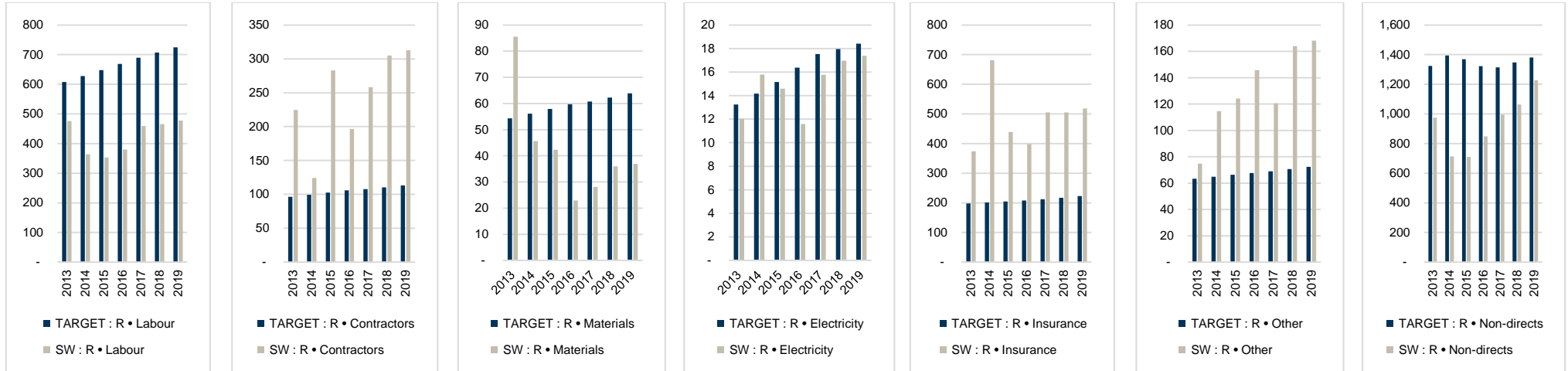
Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local administration support and other local labour not directly booked to activities within service contracts.

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	1.160	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.