

2017/18 ANNUAL NETWORK SERVICE PLAN

BOYNE RIVER BULK WATER

30 JUNE 2017



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

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

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

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

John Kelly
Service Manager

INTRODUCTION

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

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

This annual Network Service Plan (NSP) is designed to keep Boyne River Bulk Water's 167 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 Boyne River Bulk Water, with a focus on projects that improve efficiency and performance, and allow us to deliver the best possible service to our customers.

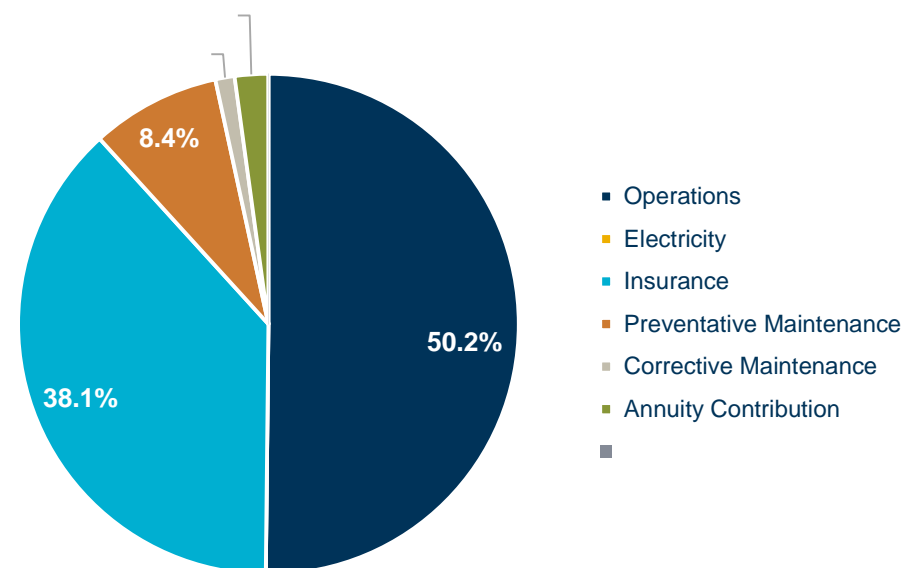
A high-level summary of the budgeted financial performance of the Boyne River Bulk Water service contract is presented in Table 1 below. Further detail on the planned spend, together with estimated revenue, is outlined on subsequent pages of this plan.

TABLE 1: OPERATING REVENUE LESS SPEND

Boyne River WS	Table reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Revenue	Table 1	1,797	3,213	180	(2,504)	1,120
Less – Routine Expenditure	Table 4 & Table 7	159	644	551	596	790
Less – Non-Routine Expenditure						
• Annuity Funded	Table 5, Table 6 & Table 7	1,676	3,425	3,712	14,734	8,417
• Non Annuity Funded	Table 5	-	3	3	-	-
Surplus (Deficit)		(38)	(859)	(4,086)	(17,834)	(8,087)

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

Boyne River 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 pipeline distribution losses.

TABLE 2: WATER DATA

Scheme	Customer Segment	No. of Customers	Water Entitlements (ML)	High Water Priority (ML)	Medium Water Priority (ML)
Boyne River and Tarong	Industrial		30,453	29,910	543
	Irrigation		9,142	0	9,142
	Urban		1,825	1,825	0
	Other		480	480	0
	SunWater		1,625	1,625	0
	Total	167	43,525	33,840	9,685

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 Boyne River Bulk Water scheme, the QCA's Headworks Utilisation Factor (HUF) — which determines how fixed costs are allocated — is 90% for High Priority and 10% 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 53.9%. The 2018 budget is compiled taking onto account the QCA water use assumption.

REVENUE

SunWater's anticipated revenue for Boyne River Bulk Water is provided in Table 3.

TABLE 3: REVENUE

Boyne River WS	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000
Irrigation	374	408	243	251	257
Industrial	13	15	20	(3,366)	20
Urban	53	54	-	-	-
Irrigation CSO	-	-	-	-	- ¹
Revenue Transfers	1,351	2,377	(201)	597	828 ²
Drainage	-	-	-	-	-
Other	7	4	0	14	15
Insurance Proceeds – Flood	-	355	118	-	-
Revenue Total	1,797	3,213	180	(2,504)	1,120

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

² 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 Boyne River 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*

Boyne River 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	(77)	224	301	454	223	(230)	292	222	(70)	193	225	32	405	230	(175)	176
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance	198	56	(142)	121	57	(64)	128	58	(70)	307	59	(249)	307	60	(247)	511
Operations Total	121	280	159	574	280	(294)	419	279	(140)	500	283	(217)	713	291	(422)	245
Preventative Maintenance	38	98	60	64	99	34	99	98	(2)	66	98	32	68	100	33	67
Corrective Maintenance	-	25	25	5	26	20	33	26	(7)	30	26	(5)	10	26	16	38
Routine Total	159	404	245	644	404	(240)	551	403	(149)	596	407	(189)	790	417	(373)	189

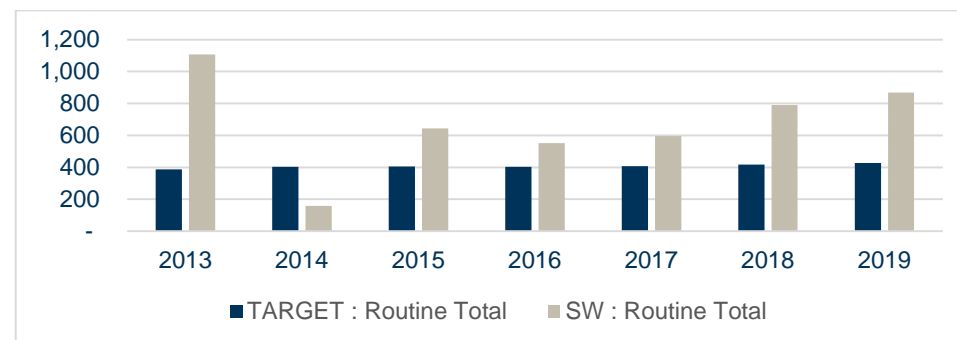
*SunWater's 2018 budget figures are draft as at the time of consultation. These figures will not be locked down until late in the financial year prior.

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 Boyne River Bulk Water's operations costs for 2018 is also significantly 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.

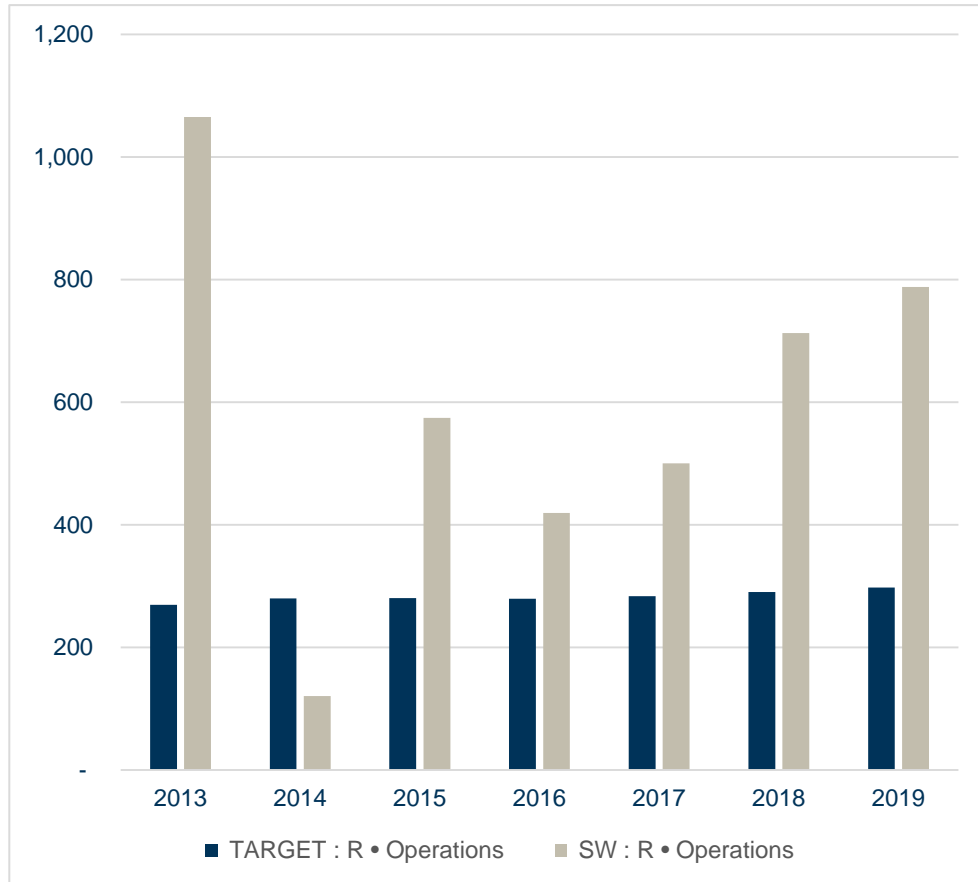
FIGURE 2: ROUTINE EXPENDITURE COMPARED TO QCA TARGET/FORECAST (\$'000)



Operations

Boyne River Bulk Water's total operations budget in 2018 is significantly 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 of³:

- 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.

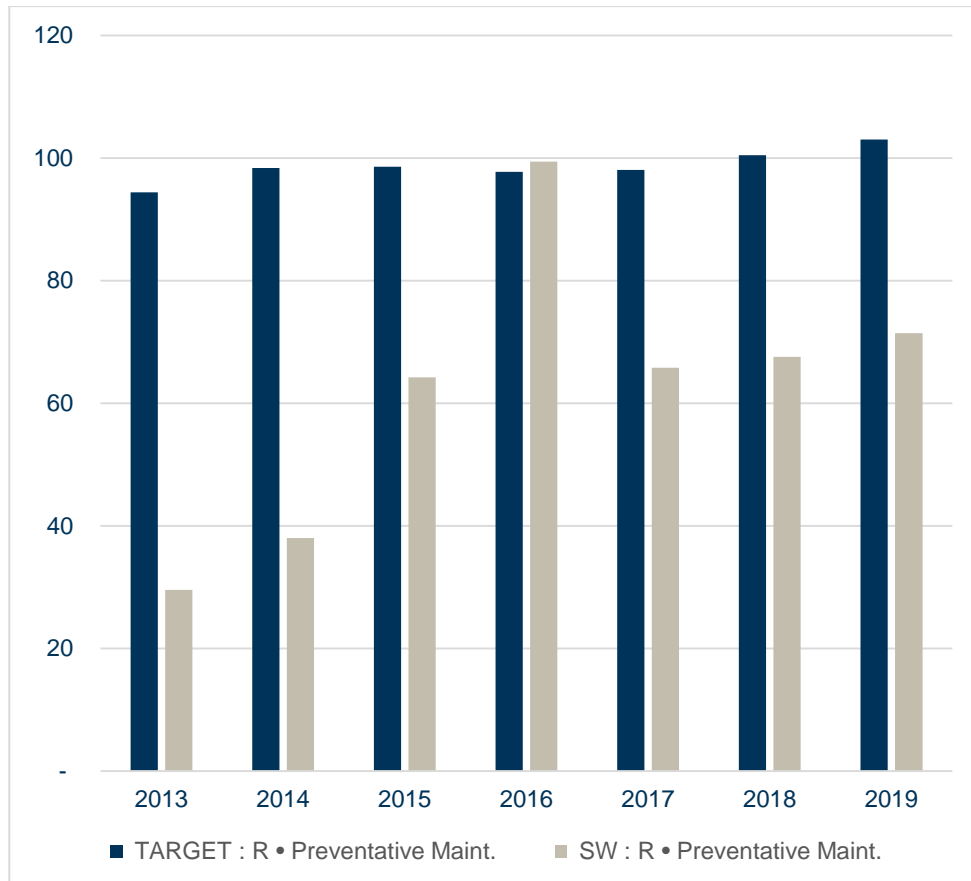
³ Activities listed will not apply to all service contracts.

Preventive maintenance

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

SunWater's preventive maintenance budget is below the QCA forecast for 2018.

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 Boyne River Bulk Water includes⁴:

- 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.

⁴ Activities listed will not apply to all service contracts.

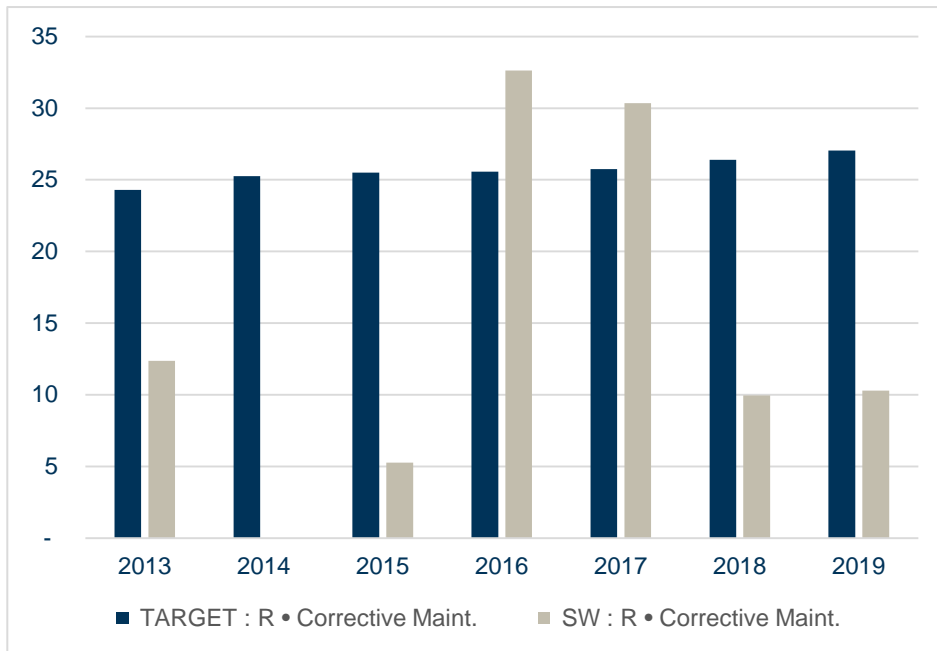
Corrective maintenance

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.

Boyne River Bulk Water corrective maintenance for 2018 is budgeted below the QCA forecast.

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 Boyne River Bulk Water it typically includes⁵:

- 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.

⁵ Activities listed will not apply to all service contracts.

- Pump stations:
 - repairing pumps and motors
 - de-silting intake structures
 - repairing concrete structures
 - repairing control buildings.
 - Storages (balancing storages and reservoirs):
 - repairing control gates and valves
 - repairing walls, embankments and spillways
 - repairing concrete structures.
- Meters:
 - repairing bulk water meters
 - repairing customer meters.

Emergency corrective maintenance

Emergency corrective maintenance is maintenance that has to be carried out immediately to restore normal operation or supply to customers or to meet regulatory obligations (e.g. rectify a safety hazard). It typically includes⁶:

- 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.

⁶ 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

Boyne River 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	-	-	-	-	-	-	588	-	(588)	11	-	(11)	3	-	(3)	7	-	(7)	-
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	1,506	-	1,506)	3,395	-	(3,395)	2,952	-	(2,952)	14,534	-	(14,534)	8,103	-	(8,103)	11,107	-	(11,107)	-

Boyne River WS	2014			2015			2016			2017			2018			2019			
R&E	171	185	14	31	112	81	172	9	(164)	189	225	36	311	37	(274)	792	252	(540)	315
Non-routine Total	1,676	185	(1,492)	3,425	112	(3,313)	3,712	9	(3,703)	14,734	225	(14,509)	8,417	37	(8,380)	11,906	252	(11,654)	---
Non Annuity Funded	-			3			3			-			-			-			

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)
12BYR17 Boondooma Spillway Flood Damage Repairs	5160509 This is to continue the spillway flood damage repairs at Boondooma Dam after the 2011 and 2013 floods.	8,103
14BYR04 Investigate and implement options for safely opening/closing decking grating (2015DS Rec 2.7.1) inc Options Study	5167186 The inlet tower grating at Boondooma Dam poses WHS hazards to operators when it is opened, and during the opening and closing phases. This project is to redesign the inlet grating to overcome the hazards in time for the comprehensive inspection in 2019.	84
Refurbish Reg Valve 1 (2014DS 4.2a, 4.2c, 4.2.1a)	5151484 Corrosion and deep pitting around No. 1 guard valve seal and disc was observed during the 2014 inspection. This project is to refurbish the guard valve to maintain its serviceability.	49
Refurbish Reg Valve 2 (2014DS 4.2a, 4.2c, 4.2.1a)	5151484 Corrosion and deep pitting around No. 2 guard valve seal and disc was observed during the 2014 inspection. This project is to refurbish the guard valve to maintain its serviceability.	49
Replace Meter Program (2 per year) - Boyne River (P2)	5173605 This is an allowance for customer meter replacements. It will not be used if there are no meters to be replaced.	31
Other works	There are six other non-routine projects for 2018 ranging from \$5,000 to \$30,000. Further detail will be tabled at the IAC meeting.	98
Total		8,414

TABLE 7: NON-ROUTINE PROJECTS 2019

Project title	Project scope	2019 budget (\$'000)
12BYR17C Boondooma Spillway Flood Damage Repairs - Contingency Amount	5196296 This is a contingency to cover additional costs incurred during the spillway flood damage repair work.	9,034
12BYR17 Boondooma Dam Spillway Flood Damage Repairs	5196387 This is a contingency to cover additional costs incurred during the spillway flood damage repair work.	2,074
Study: 20yr Dam Safety Review - Boondooma Dam (See Notes)	5145960 This is a 20year dam safety review of Boondooma Dam to be conducted in accordance with the QLD dam safety management guidelines	360
Study: 5yr Dam Comprehensive Inspection - Civil, Mech & Elec (by 1 Jun 2019)	5173687 This is a comprehensive inspection of Boondooma Dam and will be done as part of the 20year dam safety review, in accordance with the QLD dam safety management guidelines.	129
Replace the main rubber seal GV01 (2014DS 4.3.1a)	5151523 This is to replace the rubber seal on guard valve 1 at Boondooma Dam. It will be done during the 5yr/20yr inspections when the conduit will be dewatered.	51
Other works	There are ten other non-routine projects for 2018 ranging from \$5,000 to \$53,000.	252
Total		8,840

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*

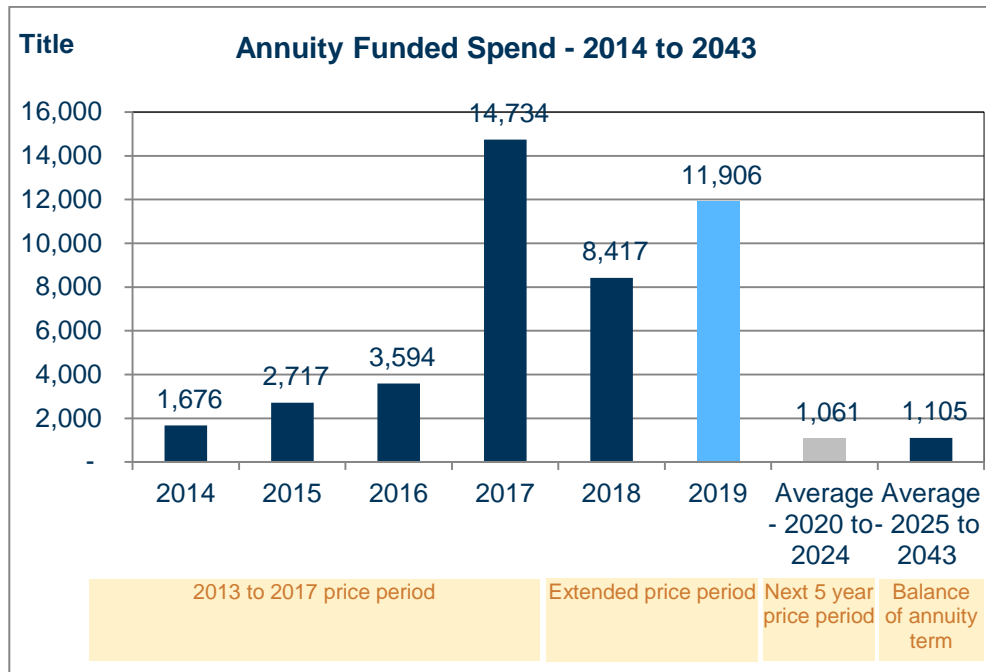
Boyne River WS	Table Reference	2014 Actual \$000	2015 Actual \$000	2016 Actual \$000	2017 Forecast \$000	2018 Budget \$000	2019 Forecast \$000
Annuity							
Opening Balance		(2,108)	(3,929)	(6,924)	(11,019)	(26,561)	(36,950)
Net Spend	See below	(1,676)	(2,717)	(3,594)	(14,734)	(8,417)	(11,906)
Annuity Contribution		13	17	17	17	17	18
Interest		(158)	(294)	(519)	(825)	(1,989)	(2,768)
SunWater – Closing Balance		(3,929)	(6,924)	(11,019)	(26,561)	(36,950)	(51,606)
QCA – Closing Balance		1,053	1,037	1,123	999	1,055	900
Difference		(4,983)	(7,961)	(12,142)	(27,560)	(38,005)	(52,506)
Net Spend Analysis							
Spend	Table 5 Table 7	(1,676)	(3,425)	(3,712)	(14,734)	(8,417)	(11,906)
Insurance Proceeds Receipts							
• Prior Year		-	353	-	-	-	-
• Current Year		-	355	118	-	-	-
Net Spend		(1,676)	(2,717)	(3,594)	(14,734)	(8,417)	(11,906)

*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

Boondooma Spillway Flood Damage Repairs — Boondooma Dam

- Year: 2018
- Current estimate: \$8,103,000
- Options analysis completed: No
- This is to continue the spillway flood damage repairs at Boondooma Dam after the 2011 and 2013 floods

Boondooma Spillway Flood Damage Repairs Contingency — Boondooma Dam

- Year: 2019
- Current estimate: \$9,034,000
- Options analysis completed: No
- This is to continue the spillway flood damage repairs at Boondooma Dam after the 2011 and 2013 floods

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.

Refurbish Unlined Spillway Floor - Boondooma Dam

- Year: 2023
- Current estimate: \$1,306,000
- Options analysis completed: No
- The spillway floor of the dam is unlined (bare rock). This project is to refurbish those sections of the spillway floor showing signs of deterioration

Material projects 2025–43

Projects in the program of works for 2025-43 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer.

Refurbish Unlined Spillway Floor - Boondooma Dam

- Year: 2028 & 2033
- Current estimate: \$1,575,00 & \$1,748,000
- Options analysis completed: No
- The spillway floor of the dam is unlined (bare rock). This project is to refurbish those sections of the spillway floor showing signs of deterioration

APPENDIX 1: TOTAL EXPENDITURE BY EXPENSE TYPE

Table 9: Expenditure for Activity by Type

Boyne River 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	1,797			3,213			180			(2,504)			1,120		
Routine Spend															
Operations															
Labour	77	64	(13)	82	66	(16)	70	68	(2)	78	70	(8)	87	72	(15)
Contractors	211	3	(208)	(83)	3	87	(131)	3	134	(117)	3	120	15	4	(11)
Materials	3	2	(1)	2	2	1	1	2	1	1	2	1	3	2	(1)
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance	198	56	(142)	121	57	(64)	128	58	(70)	307	59	(249)	307	60	(247)
Other	(504)	11	515	286	11	(274)	182	12	(170)	15	12	(3)	39	12	(27)
Non-directs	135	144	8	168	141	(27)	170	136	(34)	216	137	(79)	261	140	(121)
	121	280	159	574	280	(294)	419	279	(140)	500	283	(217)	713	291	(422)
Preventative Maintenance															
Labour	13	29	16	22	30	9	27	31	4	22	32	10	19	33	14
Contractors	-	1	1	2	1	(1)	10	1	(9)	0	1	1	10	1	(9)
Materials	0	3	3	0	3	3	1	3	3	1	3	3	1	3	3
Other	1	2	1	0	2	2	6	3	(3)	1	3	2	1	3	2
Non-directs	23	62	40	40	62	21	55	59	4	41	59	17	37	60	23
	38	98	60	64	99	34	99	98	(2)	66	98	32	68	100	33
Corrective Maintenance															
Labour	-	6	6	1	6	5	3	6	3	6	6	0	1	6	5
Contractors	-	1	1	1	1	0	11	1	(10)	12	1	(10)	5	1	(4)
Materials	-	5	5	-	5	5	5	5	1	1	6	5	2	6	4
Other	-	1	1	2	1	(1)	6	1	(5)	-	1	1	-	1	1
Non-directs	-	12	12	2	12	11	8	12	4	12	12	(0)	2	12	10
	-	25	25	5	26	20	33	26	(7)	30	26	(5)	10	26	16
Routine Total															
Non-Routine Spend															
Labour	328	27	(301)	704	3	(701)	751	1	(750)	3,292	23	(3,269)	843	4	(839)
Contractors	437	34	(403)	952	-	(952)	956	2	(954)	5,327	20	(5,307)	5,411	4	(5,407)
Materials	104	28	(76)	12	94	82	12	2	(10)	6	20	14	454	10	(444)
Other	192	26	(166)	386	2	(385)	466	1	(465)	-	11	11	78	3	(75)
Non-directs	616	70	(546)	1,370	13	(1,356)	1,526	3	(1,523)	6,109	151	(5,958)	1,632	16	(1,615)
Non-Routine Total	1,676	185	(1,492)	3,425	112	(3,313)	3,712	9	(3,703)	14,734	225	(14,509)	8,417	37	(8,380)
Total Regulated Spend	1,835	588	(1,247)	4,069	516	(3,553)	4,263	411	(3,851)	15,330	632	(14,698)	9,207	454	(8,753)
Non Annuity Funded Spend	-			3			3			-			-		
Surplus (Deficit)	(38)			(859)			(4,086)			(17,834)			(8,087)		

Non-direct costs explained

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

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

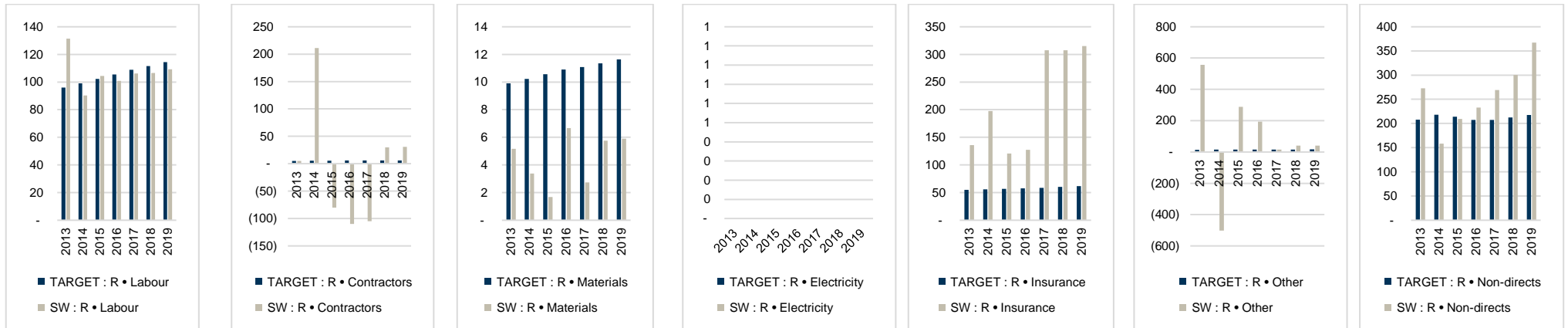
Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local administration support and other local labour not directly booked to activities within service contracts.

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

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

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

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



NOTES

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

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

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

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

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

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