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2016/17 Annual Network Service Plan

Maranoa Bulk Water

July 2016

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Introduction

A recommendation from the 2013-17 review of SunWater's irrigation pricing was for SunWater to produce annual Network Service Plans (NSPs) to help keep customers informed throughout the pricing period. These annual NSPs will focus on both routine expenditure (opex) and non-routine expenditure. In particular, the NSPs will cover:

- past performance for routine opex and non-routine expenditure,
- forecast opex and non-routine for the approaching year, and
- the long-term outlook for material non-routine spend.

This NSP compares SunWater's actuals for 2013, 2014 and 2015, budget for 2016 and budget for 2017 to the targets from the QCA's final report. The 2013-16 figures are provided for information only, with the focus the budget figures for 2017. The 2017 budget has been finalised following customer and shareholder consultation.

SunWater values customer feedback and will publish all submissions and SunWater's responses on our website. Customers can provide their feedback via email or post using one of the following addresses:

Email: nspfeedback@sunwater.com.au

Post: NSP Feedback
PO Box 15536 City East
Brisbane Qld 4002

Financial Summary

Table 1: Operating Revenue Less Spend

Maranoa WS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000
Revenue	3	31	31	(6)	(10)	(10)
Less - Routine Expenditure	4 & 7	26	40	24	43	42
Less - Non-Routine Expenditure						
• Annuity Funded	5, 6 & 7	-	-	4	-	-
• Non Annuity Funded	5	-	-	-	-	-
Surplus (Deficit)		5	(9)	(34)	(53)	(52)

Table 1 is a high level summary of the budgeted financial performance of the service contract. This document provides further detail of the planned spend on routine functions and non-routine projects across the 2017 year together with an estimate of revenue expected to be generated.

Figure 1: Breakdown of Total Scheme Costs – 2017 Budget

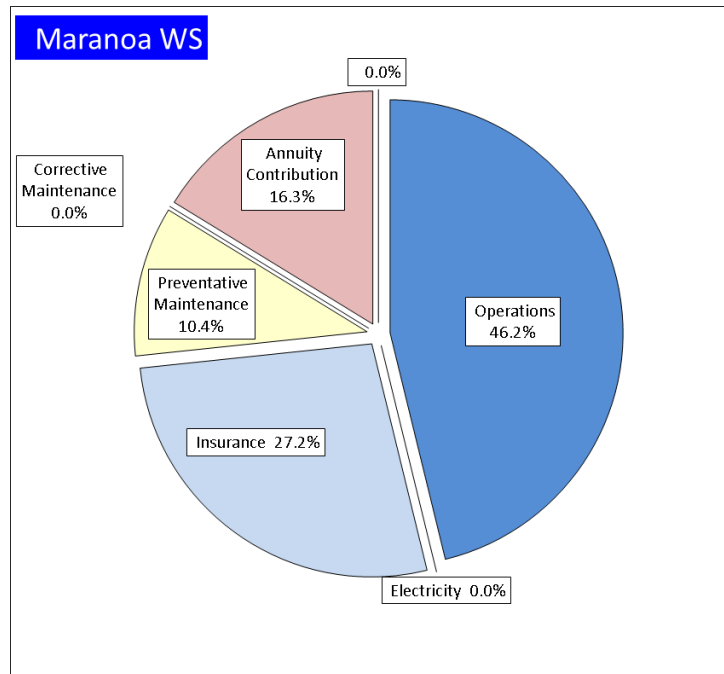


Figure 1 shows a high level summary of total scheme lower bound costs. These costs are apportioned to water entitlements in accordance with the methodology adopted by the QCA in their 2012 review of irrigation charges. The item “Annuity Contribution” refers to the annualised renewals annuity component of the scheme’s total lower bound costs.

Table 2: Water Data

Scheme	Customer Segment	No. of Customers	Water Entitlements (ML)	High Water Priority (ML)	Medium Water Priority (ML)
Maranoa River	2. Irrigation		800	0	800
	5. SunWater		5	0	5
	Total	4	805	0	805

QCA Assumed Water Usage

6.3%

The 2017 budget is compiled taking onto account the QCA water use assumption. All water entitlements in the scheme are medium priority.

Table 3: Revenue

Maranoa WS	2013	2014	2015	2016	2017
	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000
Irrigation	31	31	(6)	(10)	(10)
Industrial	-	-	-	-	-
Urban	-	-	-	-	-
Irrigation CSO	-	-	-	-	-
Revenue Transfers	-	-	-	-	-
Drainage	-	-	-	-	-
Other	-	-	-	-	-
Insurance Proceeds - Flood	-	-	-	-	-
Revenue Total	31	31	(6)	(10)	(10)

Note: Following feedback from customers, SunWater has unbundled bulk water charges from distribution system charges. This means that total revenue figures in past Performance Reports and NSPs may not match those above. There are no revenue transfers in this scheme.

Routine Expenditure

Table 4: Routine Operating Expenditure

Maranoa WS	2013			2014			2015			2016			2017				2013 to 2017			
	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 Target \$000	Variance \$000	% of target	SW Forecast \$000	QCA Target \$000	Variance \$000	% of target
Operations	15	19	4	20	19	(1)	9	19	11	25	19	(6)	23	19	(4)	120	92	96	4	96
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance	10	6	(5)	19	6	(13)	12	6	(6)	12	6	(7)	14	6	(8)	228	68	29	(39)	234
Operations Total	25	24	(1)	39	25	(14)	21	25	4	38	25	(12)	37	25	(12)	146	159	125	(34)	128
Preventative Maintenance	1	7	7	1	8	7	3	8	5	6	8	2	5	8	2	68	15	38	23	39
Corrective Maintenance	-	1	1	-	1	1	-	1	1	-	1	1	-	1	1	-	-	5	5	-
Routine Total	26	32	7	40	34	(6)	24	34	10	43	34	(9)	42	34	(8)	124	174	168	(7)	104

The budget routine spend is 24% or \$8K above the QCA's target for 2017 however the budget falls within target when the above-QCA increases in insurance are taken into account.

Operations

Operation activities include the day-to-day costs of the administration and management of the scheme, water delivery and meeting compliance obligations. Specific activities include the direct and non-direct cost of¹:

- Scheduling and delivering water, including processing water orders, releasing water, operating pump stations, regulation and monitoring of channel flows and monitoring of 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; and
- Managing enquiries from adjoining landholders, and in some cases developers, that require input and negotiations with SunWater's property and legal sections to resolve issues.

¹ Activities listed will not apply to all service contracts.

The operations budget in 2017 is \$12K above the QCA target, however this is largely due to the increases in insurance costs being higher than allowed for by the QCA. Increased premiums followed flood events that have occurred in the past few years in Queensland. The budget for operations drops to \$4K over the QCA target when the insurance over-runs are taken into account.

Preventive Maintenance

Preventive maintenance is maintaining the ongoing operational performance and service capacity of physical assets to the required standard. Preventive maintenance is cyclical in nature with a typical interval of 12 months or less. Preventive maintenance activities are based on the updated work instructions developed for operating the scheme and include an estimate of the resources required to implement that scope of work. Preventive maintenance includes²:

- Condition monitoring – the inspection, testing or measurement of physical assets to report and record its condition and performance for determination of 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; and
- Weed control – which includes the following activities:
 - Slashing channels and drains;
 - Acrolein treatment of channels;
 - Copper Sulphate treatment; and
 - 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.

Preventive maintenance is budgeted under the QCA's target for 2017.

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. Forecasts include provision for labour, materials and plant hire.

The corrective maintenance forecast does not include any 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.

There are two types of corrective maintenance – scheduled and emergency²:

- Scheduled corrective maintenance is maintenance that can be planned and scheduled, and includes:
 - Channels
 - De-silting channels and catch drains;

² Activities listed will not apply to all service contracts.

- Erosion control and repair of rock protection works;
 - Repair fencing;
 - Repair concrete structures; and
 - Repair regulator gates, control valves, etc.
- Drains
 - De-silting drains;
 - Erosion control and repair of rock protection works;
 - Repair fencing; and
 - Repair concrete structures.
- Pipelines
 - Pipe breaks
 - Repair air valves, scour valves, etc.;
 - Erosion control and repair of rock protection works; and
 - Repair concrete structures.
- Scheme Roads
 - Repair pot holes;
 - Grade roads; and
 - Repair, replace and paint guide posts and signs.
- Pump stations
 - Repair pumps and motors;
 - De-silt intake structures;
 - Repair concrete structure; and
 - Repair control building.
- Storages (balancing storages and reservoirs)
 - Repair control gates and valves;
 - Repair walls, embankments and spillways; and
 - Repair concrete structures.
- Meters
 - Repair bulk water meters; and
 - Repair customer meters.
- 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) and includes:
 - Repair or correction of pump station faults;
 - Repair or correction of channel faults;

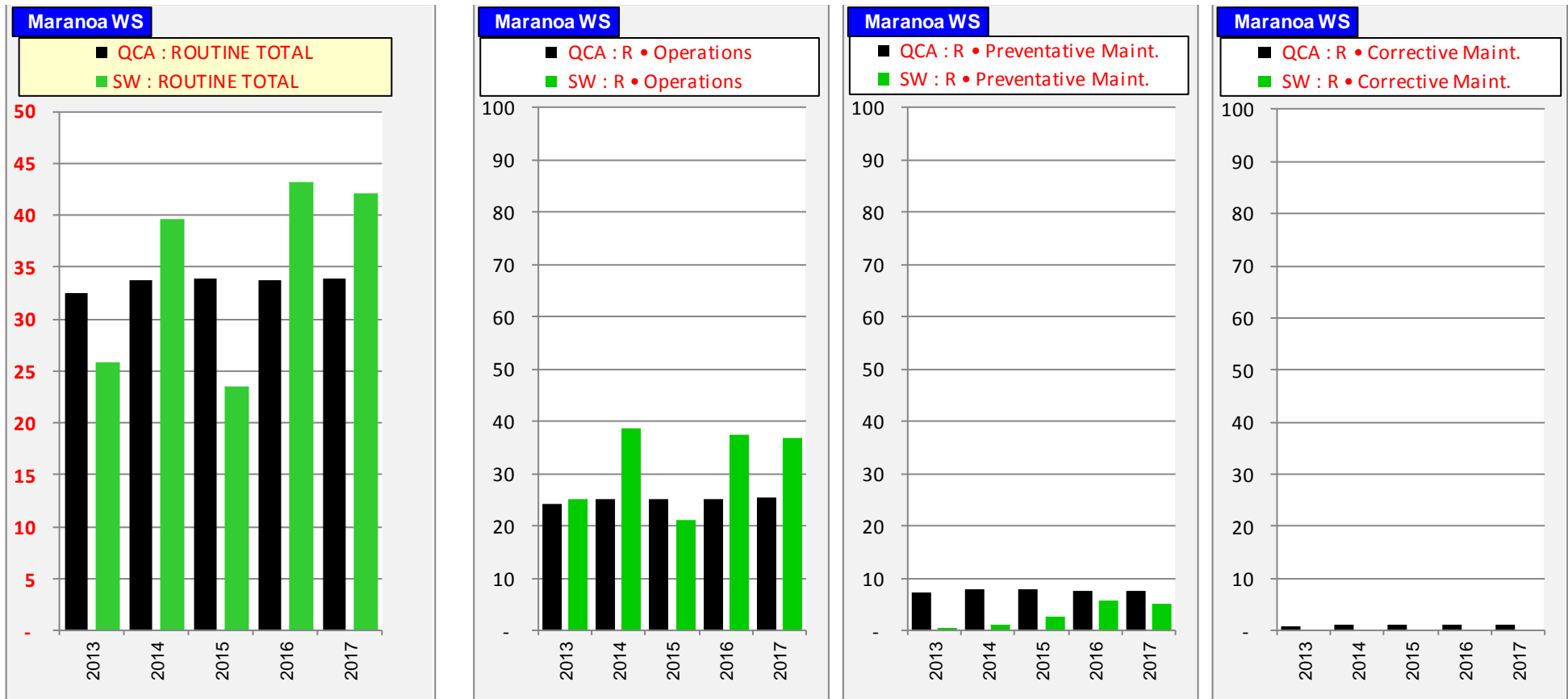
- Repair or correction of pipeline faults; and
- Response to theft or vandalism associated with scheme assets.

No corrective maintenance is budgeted across 2017.

Routine Cost – Summary and Charts

The information in Table 4 above is re-presented in the charts below to graphically show SunWater’s performance against the QCA targets.

Figure 2: Routine Expenditure by Activity compared to QCA Target (\$'000)



Non-Routine Expenditure

SunWater has developed a whole of life strategy around the replacement and maintenance of its asset portfolio which is based on the concept of optimised life. The key drivers in this approach are the risk and condition of each asset. The current condition of an asset drives an estimate of the future work required to ensure an asset continues to be able to provide the required level of service into the future. SunWater maintains a program of asset inspections and condition assessments which continually updates our knowledge of asset condition. This information feeds into the annual review of the renewals program, the most recent of which was completed in February 2016; items requiring immediate maintenance or replacement are included in the budget for the following year.

While the immediate program for the next year's budget is well defined; the further into the planning timeline, the more uncertain the estimates become. Consequently, the program of works is not a specific forecast of when individual projects are expected to be executed but rather it is portfolio level estimate of works based on the best-available risk and condition information for the service contract as a whole. This information feeds into calculation of the annuity to fund renewals. Having an annuity funding arrangement acknowledges that a long-term view of renewals spend is required to ensure adequate funding and to address issues such as inter-generational equity.

The QCA targets were set against an indicative program of works from the 2010-11 year. 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.

SunWater is focusing effort on reviewing renewals profiles so that assets are maintained to the required standard with the minimum spend. This review 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. This is expected to reduce the renewals profile going forward, reducing upward pressure on water charges.

Non-Routine Budget

The budget non-routine spend for 2017 is shown in the table below, along with the actual spend for 2013, 2014, 2015 and the budget spend for 2016.

Table 5: Non-Routine Expenditure

Maranoa WS	2013			2014			2015			2016			2017				2013 to 2017			
	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 Target \$000	Variance \$000	% of target	SW Forecast \$000	QCA Target \$000	Variance \$000	% of target
Annuity Funded																				
Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Corrective Maintenance (Flood)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
R&E	-	-	-	-	-	-	4	9	5	-	15	15	-	-	-	-	4	24	20	19
Non-routine Total	-	-	-	-	-	-	4	9	5	-	15	15	-	-	-	-	4	24	20	19
Non Annuity Funded	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

The details for the five major projects planned for 2017 are provided below:

Table 6: Non-Routine Projects 2017

Project Title	Project Scope	2017 Budget (\$'000)
No projects planned for 2017.		
Total		0

Annuity Balance

The estimated 2016 and 2017 annuity balances are shown below; the annuity contribution shown has been set by the QCA. SunWater aims to limit the annuity spend to the QCA's targets over the 5-year price path in order to manage the annuity balance to reasonable levels.

The impacts of budgeted non-routine spend on the annuity balance for 2017 is shown in the following table.

Table 7: Annuity Balance

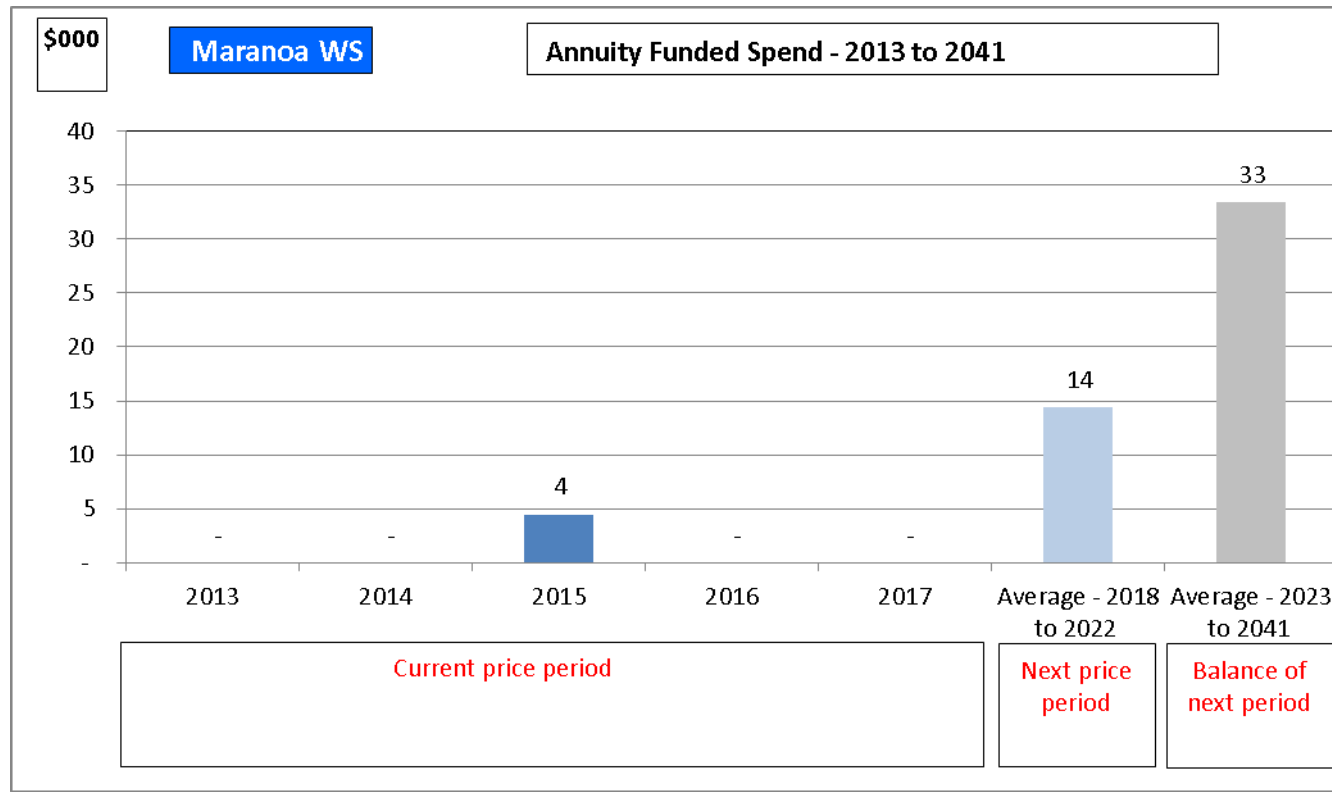
Maranoa WS		2013	2014	2015	2016	2017	2013 to 2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000	Forecast \$000
Annuity							
Opening Balance	See below	(7)	(2)	3	4	13	(7)
Net Spend		-	-	(4)	-	-	(4)
Annuity Contribution		5	5	6	8	8	33
Interest		(1)	(0)	0	0	1	1
SunWater - Closing Balance		(2)	3	4	13	22	22
QCA - Closing Balance	(1)	4	1	(5)	2	2	
Difference	(1)	(1)	3	18	20	20	
Net Spend Analysis							
Spend	5 & 7	-	-	(4)	-	-	(4)
Insurance Proceeds Receipts							
• Prior Year		-	-	-	-	-	-
• Current Year		-	-	-	-	-	-
Net Spend		-	-	(4)	-	-	(4)

* All 2016 and 2017 figures are subject to change once actual spend is known.

Overview of Annuity Funded Non-Routine Projects 2013-41

The renewals annuity is calculated over a 20-year planning period; given that the following pricing period ends in 2022, the estimated renewals spend out until 2041 will affect the next pricing review. The estimated renewals expenditure out to 2041 is shown in the chart following.

Figure 3: Annuity Expenditure 2013-41



All material renewals items out until 2041 are discussed in the sections following. Materiality is defined as >10% of the present value of the period in question. SunWater will develop options analyses for all material items in the annuity calculation planning period. These reports will be tailored to suit project complexity and budget, with detailed options analyses being completed within the current and following 5-year pricing periods and high-level options analyses for the 20-year period beyond the next price path. The materiality tests will be 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 2017-18

Refurbish rock mattresses, gabions – NEIL TURNER WEIR

Year: 2018

Current estimate: \$55k

Options analysis completed: No

The 2011 dam safety inspection identified the need for these repairs. Damage to the rock mattresses are not considered an imminent issue; however this based on current condition and historic performance. This work is scheduled for the year after the next 5-yearly inspection, when a more up-to-date assessment can be made.

Material Projects 2019-23

Projects in the program of works for 2019-23 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer

Study: Weir Program - 5yr Dam Comprehensive Inspection - NEIL TURNER WEIR

Year: 2020

Current estimate: \$17k

Options analysis completed: No

SunWater policy is to conduct annual and 5 yearly inspections on weir assets to ensure that the asset will be able to perform its designed function. The estimate to carry out the works is a built up figure using our works order system and recognised the time and rate of engineers and also the remoteness of the site. No options analysis is required.

Material Projects 2024-41

Projects in the program of works for 2024-41 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer

Refurbish rock mattresses, gabions - NEIL TURNER WEIR

Year: 2028 & 2038

Current estimate: \$164K

Options analysis completed: No.

This project refers to 2018 project mentioned above. In long term maintenance planning for the scheme, the best engineering estimate of how often you need to do major refurbishments to assets are used which is defined in the asset management planning methodology . In this case, it is anticipated perpetual refurbish the rock protection mattresses will be required every 10 years. This will be re-assessed with 5-yearly dam inspections. Options analysis will be completed closer to the implementation

Refurbish downstream protection works - NEIL TURNER WEIR

Year: 2038

Current estimate: \$202K

Options analysis completed: No.

This project also arises from the 2018 refurbish rock mattresses and gabions project. In long term maintenance planning for the scheme, the best engineering estimate of how often you need to do major refurbishments to assets are used which is defined in the asset management planning methodology . In this case, it is anticipated perpetual refurbish the rock protection mattresses will be required every 10 years. This will be re-assessed with 5-yearly dam inspections. Options analysis will be completed closer to the implementation.

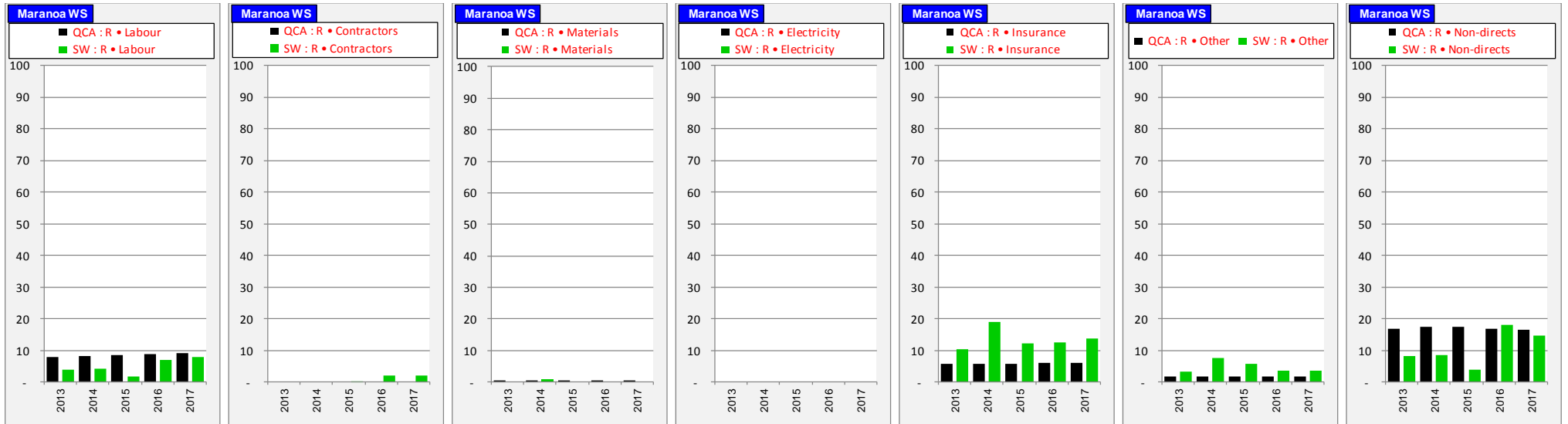
Appendix 1: Total Expenditure by Expense Type

Table 8: Expenditure for Activity by Type

Maranoa WS	2013			2014			2015			2016			2017			2013 to 2017		
	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 Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000
Revenue	31			31			(6)			(10)			(10)			35		
Routine Spend																		
Operations																		
Labour	4	5	2	4	5	2	1	6	5	6	6	(0)	7	6	(1)	21	28	7
Contractors	-	-	-	-	-	-	0	-	(0)	-	-	-	-	-	-	0	-	(0)
Materials	-	1	1	1	1	(0)	-	1	1	-	1	1	-	1	1	1	3	2
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance	10	6	(5)	19	6	(13)	12	6	(6)	12	6	(7)	14	6	(8)	68	29	(39)
Other	3	2	(2)	7	2	(6)	6	2	(4)	4	2	(2)	4	2	(2)	24	8	(15)
Non-directs	8	11	3	8	12	4	2	12	9	15	11	(4)	13	11	(2)	46	57	11
	25	24	(1)	39	25	(14)	21	25	4	38	25	(12)	37	25	(12)	159	125	(34)
Preventative Maintenance																		
Labour	0	2	2	0	3	2	1	3	2	1	3	2	1	3	2	4	13	10
Contractors	-	-	-	-	-	-	-	-	-	2	-	(2)	2	-	(2)	4	-	(4)
Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	0	-	(0)	-	-	-	-	-	-	0	-	(0)
Non-directs	0	5	5	1	5	5	2	5	3	3	5	2	2	5	3	7	25	18
	1	7	7	1	8	7	3	8	5	6	8	2	5	8	2	15	38	23
Corrective Maintenance																		
Labour	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	2	2
Contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-directs	-	1	1	-	1	1	-	1	1	-	1	1	-	1	1	-	3	3
	-	1	1	-	1	1	-	1	1	-	1	1	-	1	1	-	5	5
Routine - total	26	32	7	40	34	(6)	24	34	10	43	34	(9)	42	34	(8)	174	168	(7)
Non-Routine Spend																		
Labour	-	-	-	-	-	-	2	2	(0)	-	2	2	-	-	-	2	4	2
Contractors	-	-	-	-	-	-	-	2	2	-	3	3	-	-	-	-	4	4
Materials	-	-	-	-	-	-	-	2	2	-	3	3	-	-	-	-	4	4
Other	-	-	-	-	-	-	-	1	1	-	1	1	-	-	-	-	2	2
Non-directs	-	-	-	-	-	-	3	4	1	-	6	6	-	-	-	3	9	6
Non-Routine - Total	-	-	-	-	-	-	4	9	5	-	15	15	-	-	-	4	24	20
Total Regulated Spend	26	32	7	40	34	(6)	28	43	15	43	49	5	42	34	(8)	179	192	13
Non Annuity Funded Spend	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surplus (Deficit)	5			(9)			(34)			(53)			(52)			(144)		

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

Figure 4: Routine Expenditure by Expense Type (\$'000)



Notes

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

Although the QCA set 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 reported real dollars to nominal dollars multiply by the conversion factors listed below. The conversion factors are based on the QCA's assumed inflation rate of 2.5% p.a. For comparison, the QCA conversion factors based on assumed inflation of 2.5% are compared with conversion factors based on actual inflation as measured by the Brisbane All Groups Consumer Price Index taken in March each year.

Table 9: Conversion Factors for real \$2011 to Nominal Dollars

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

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