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# 2016 Annual Network Service Plan

## Nogoa Bulk

June 2015

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## Notes

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

Most of the financial figures in the QCA's final report on SunWater's irrigation pricing were presented in real dollars (\$2011). To allow comparison to this NSP, convert the QCA final report real dollar figures to nominal dollars by, multiplying the QCA \$real figures by the following factors, which are based on the QCA's assumed inflation rate of 2.5% p.a.

**Table 1 – Conversion Factors for real \$2011 to Nominal Dollars**

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Conversion Factor	1.051	1.077	1.104	1.131	1.160

## 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.

## 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.

SunWater published draft 2016 NSPs for each of thirty Service Contracts during March 2015. This was followed by consultation meetings held throughout regional Queensland over March and April. These discussions involved many customers and other stakeholders at Irrigation Advisory Committee meetings and other forums. Valuable feedback was received from customers that can be found, along with SunWater's responses, at <http://www.sunwater.com.au/schemes/nsp/annual-nsp-and-performance-reports>

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](mailto:nspfeedback@sunwater.com.au)

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

## Water Data

Table 2 – Water Data

	No. of Customers	Water Entitlements ML
Industrial		29,420
Irrigation		160,133
Urban		8,549
Other		346
SunWater		32,191
<b>Total</b>	<b>390</b>	<b>230,639</b>
QCA Assumed Water Usage for Irrigation		71.4%
QCA Assumed Water Usage for Total		83.2%

**Table 3 – Revenue<sup>1</sup>**

	<b>2013 SunWater Actual \$'000</b>	<b>2014 SunWater Actual \$'000</b>	<b>2015 SunWater Budget \$'000</b>	<b>2016 SunWater Budget \$'000</b>
Irrigation Revenue*	987	911	953	949
Irrigation CSO	6	2	0	0
Industrial and Urban*	2,216	2,821	2,405	3,027
Other Revenue	16	0	4	4
<b>Total Revenue</b>	<b>3,225</b>	<b>3,734</b>	<b>3,362</b>	<b>3,980</b>

\* Bulk water charges have not been unbundled from Distribution charges therefore a portion of the Distribution revenue is attributable to the Bulk service contract.

<sup>1</sup> The budget figures form the basis for SunWater's SCI submission, which is yet to be agreed with SunWater's shareholding Ministers. While the budgets are not expected to change from here, there is always the possibility of further directions from Government and these may have budget implications.

## Routine Expenditure

**Table 4 – Routine Operating Expenditure<sup>2</sup>**

	<b>2013 SunWater Actual</b>	<b>%of 2013 Target</b>	<b>2014 SunWater Actual</b>	<b>%of 2014 Target</b>	<b>2015 SunWater Budget</b>	<b>%of 2015 Target</b>	<b>2016 SunWater Budget</b>	<b>%of 2016 Target</b>
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
Operations (Excl. Elect.)	1,762	94%	1,746	89%	2,243	114%	2,149	110%
Preventative	244	92%	184	67%	272	99%	375	137%
Corrective	204	104%	113	55%	144	70%	185	90%
Electricity	12	91%	16	111%	16	104%	16	96%
<b>Total Routine Expenses</b>	<b>2,222</b>	<b>94%</b>	<b>2,058</b>	<b>84%</b>	<b>2,675</b>	<b>109%</b>	<b>2,725</b>	<b>111%</b>

The budget routine spend is 11% above the QCA's target for 2015 however the budget falls to 101% of target when the above-QCA increases in insurance are taken into account.

### Operations

The operations budget in 2016 is 10% above the QCA target, however this is entirely due to the increases in insurance costs being much greater than allowed for by the QCA. Increased premiums followed flood events that have occurred in the past few years in Queensland. This cost over-run is beyond SunWater's control. The budget for operations drops to 97% of the QCA target when the insurance over-run is taken into account.

### Preventive Maintenance

The preventive maintenance budget in 2016 is 37% above the QCA target. This is due to a review of the preventative maintenance program and reallocation of resources from operational activities.

### Corrective Maintenance

Corrective maintenance is budgeted 10% below the QCA's target for 2016.

### Electricity

Electricity costs are budgeted 4% lower than the QCA target in 2016 despite the fact that the QCA had allowed for tariff increases of around 35% over the first four years of the price path whereas actual increases have been around 50%.

<sup>2</sup> The budget figures form the basis for SunWater's SCI submission, which is yet to be agreed with SunWater's shareholding Ministers. While the budgets are not expected to change from here, there is always the possibility of further directions from Government and these may have budget implications.

## 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 and 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 a snapshot of the estimated program of works taken during the 2010-11 year. While this was the best estimate of expected work at the time, there has been significant project churn since this estimate was made. This can mean that, in some cases, the QCA's funding allowance for renewals work does not cover the total expenditure required to maintain asset condition to the required standard. In addition, there are unexpected events, such as floods, that are not allowed for in the QCA's annuity funding allowance. Notwithstanding these points, SunWater aims to limit renewals expenditure to the QCA's targets over the 2013-17 price path in order to manage the annuity balance to reasonable levels.

## Non-Routine Budget

The budget non-routine spend for 2016 is shown in the table below, along with the actual spend for 2014 and the budget spend for 2015. Overall, the 2013-17 non-routine spend will exceed the five-year QCA target. There has been significant corrective works in this service contract to repair flood damage; corrective works are unplanned and were not allowed for in the QCA's targets. Dam safety inspections have identified potential scour risks in the spillway and public safety risks on the right abutments. Both risks have significant consequences and require urgent action to investigate and correct.

**Table 5 – Non-Routine Expenditure**

	<b>2013 SunWater Actual</b>	<b>%of 2013-17 Target</b>	<b>2014 SunWater Actual</b>	<b>%of 2013-17 Target</b>	<b>2015 SunWater Budget</b>	<b>%of 2013-17 Target</b>	<b>2016 SunWater Budget</b>	<b>%of 2013-17 Target</b>
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
<b>Annuity Funded</b>								
R&E - Annuity Funded	561		99		894		1,136	
Corrective	62		178		51		0	
Other	(471)		34		0		0	
Non-direct	407		148		279		401	
<b>Annuity Funded Total</b>	<b>559</b>	<b>27%</b>	<b>459</b>	<b>23%</b>	<b>1,224</b>	<b>60%</b>	<b>1,537</b>	<b>75%</b>
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	36		0		0		0	
Non-direct	64		0		0		0	
<b>Total Non-Annuity Funded</b>	<b>100</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>

The details for the five major projects planned for 2016 are provided below:

**Table 6 – Non-Routine Projects 2016**

<b>Project Title</b>	<b>Project Scope</b>	<b>2016 Budget (\$'000)</b>
Improve rock face stability on right abutment adjacent to Weemah inlet tower - FAIRBAIRN DAM	An inspection of the slope immediately below the lookout and above the access road to the intake tower was requested following a series of rock falls that resulted in the deposition of debris onto the access track. 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 and the investigation recommended the slope be stabilised to prevent further possible issues.	318
Desktop geological review, anchor test, cut-out, visual inspection and coring -Upgrade FAIRBAIRN DAM	During inspections, and while undertaking repair work on the Fairbairn Dam spillway chute, several areas of drummy concrete were found which required further investigation. This project is to undertake an investigation using Ground Penetrating Radar (GPR) and CCTV cameras to determine the extent of voids beneath the concrete spillway chute.	286
Refurbish system, test & report on SCADA design & PLC control system performance - FAIRBAIRN DAM WTP	A condition assessment performed by SunWater in 2014 revealed the poor condition of SCADA and PLC equipment. It is recommended to replace the SCADA control board & PLC, and provide air con as temperatures in this control room can rise to 40°C.	170
Decommissioning of Rubber Bag - BEDFORD WEIR	The existing rubber dam was deflated following a serious public safety incident and requires decommissioning.	124
Continue Fairbairn Dam Sewage System - Strategy and Implementation Program - FAIRBAIRN DAM WASTE WATER	Despite a previous upgrade, the Fairbairn STP still struggles to achieve regulatory requirements. This is due to fact that requirements of the permit for evaporation and concentration limits are conflicting. This needs to be negotiated and the outcomes implemented under this project to reduce the risk of breaching permit conditions. The options to be explored include water saving measures, potential use for irrigation, and limiting the possibility of effluent seeping from the unlined ponds.	82
Other works	Various smaller replacement and refurbishment projects.	557
Total		1,537



## Annuity Balance

The estimated 2015 and 2016 annuity balances are shown below; the annuity income shown has been set by the QCA until the end of the current price path in 2017. 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 impact of the budget non-routine spend on the annuity balance for 2016 is shown in the following table. The balances for 2015 and 2016 are estimates only at this stage because the final actual spends for 2015 and 2016 will not be known until after each of these years is completed.

**Table 7 – Annuity Balances**

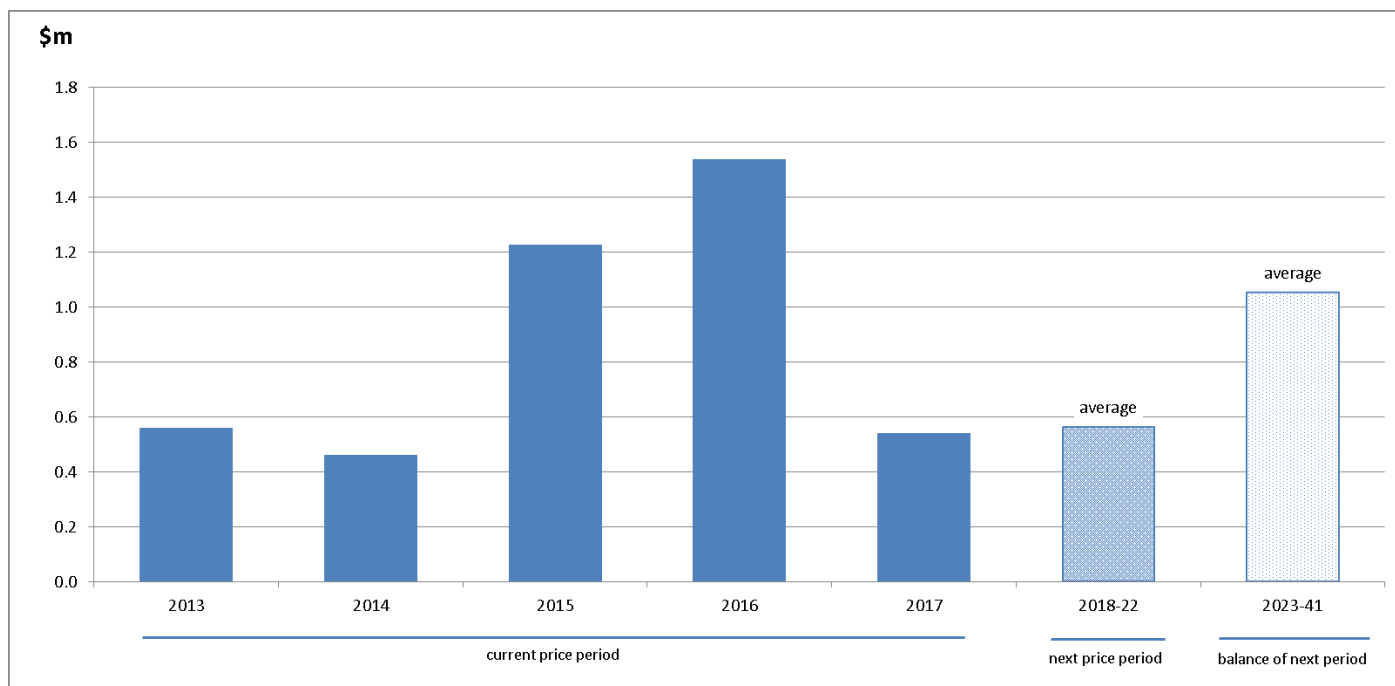
<b>ANNUITY</b>	<b>2013</b>	<b>2014</b>	<b>2015*</b>	<b>2016</b>
	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	(853)	(1,033)	(1,115)	(1,968)
<b>Annuity Income</b>	443	454	455	468
<b>Spend</b>	(559)	(459)	(1,224)	(1,537)
<b>Interest</b>	(64)	(77)	(84)	(147)
<b>Closing Balance</b>	(1,033)	(1,115)	(1,968)	(3,183)

\* All 2015 and 2016 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 1 – 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 churn, some items will no longer require options analysis in future years and new items may join the list.

## Material Projects 2016-17

The evenness in the spread of estimated project costs and/or spend that has already occurred over 2013-15 means there are no projects which exceed the materiality threshold for this service contract for the 2016-17 period.

## Material Projects 2018-22

The evenness in the spread of estimated project costs and/or spend that has already occurred over 2013-15 means there are no projects which exceed the materiality threshold for this service contract for the 2016-17 period.

## Material Projects 2023-41

The evenness in the spread of estimated project costs means there are no projects which exceed the materiality threshold for this service contract for the 2023-41 period.

## Appendix – Total Expenditure by Expense Type

Table 8 – Expenditure for Activity by Type

	2013 SunWater Actual	% of 2013 Target	2014 SunWater Actual	% of 2014 Target	2015 SunWater Budget	% of 2015 Target	2016 SunWater Budget	% of 2016 Target
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
<b>ROUTINE EXPENSES</b>								
<b>Operations</b>								
Labour	350		279		211		237	
Materials	64		21		33		33	
Contractors	176		93		873		704	
Other	440		794		601		545	
Non-direct	733		560		525		629	
<b>Operations Total</b>	<b>1,762</b>	<b>94%</b>	<b>1,746</b>	<b>89%</b>	<b>2,243</b>	<b>114%</b>	<b>2,149</b>	<b>110%</b>
<b>Preventative</b>								
Labour	75		63		60		87	
Materials	2		1		1		1	
Contractors	20		6		90		81	
Other	3		2		4		4	
Non-direct	143		111		116		201	
<b>Preventative Total</b>	<b>244</b>	<b>92%</b>	<b>184</b>	<b>67%</b>	<b>272</b>	<b>99%</b>	<b>375</b>	<b>137%</b>
<b>Corrective</b>								
Labour	50		22		45		35	
Materials	20		23		12		16	
Contractors	28		25		4		53	
Other	6		1		0		0	
Non-direct	100		42		83		82	
<b>Corrective Total</b>	<b>204</b>	<b>104%</b>	<b>113</b>	<b>55%</b>	<b>144</b>	<b>70%</b>	<b>185</b>	<b>90%</b>
<b>Electricity</b>	<b>12</b>	<b>91%</b>	<b>16</b>	<b>111%</b>	<b>16</b>	<b>104%</b>	<b>16</b>	<b>96%</b>
<b>Total Routine Expenses</b>	<b>2,222</b>	<b>94%</b>	<b>2,058</b>	<b>84%</b>	<b>2,675</b>	<b>109%</b>	<b>2,725</b>	<b>111%</b>
	2013 SunWater Actual	% of 2013-17 Target	2014 SunWater Actual	% of 2013-17 Target	2015 SW Budget	% of 2013-17 Target	2016 SW Budget	% of 2013-17 Target
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
<b>NON-ROUTINE EXPENSES</b>								
<b>Annuity Funded</b>								
R&E - Annuity Funded	561		99		894		1,136	
Corrective	62		178		51		0	
Other	(471)		34		0		0	
Non-direct	407		148		279		401	
<b>Total Annuity Funded Non-Routine</b>	<b>559</b>	<b>27%</b>	<b>459</b>	<b>23%</b>	<b>1,224</b>	<b>60%</b>	<b>1,537</b>	<b>75%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>2,781</b>		<b>2,517</b>		<b>3,899</b>		<b>4,261</b>	
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	36		0		0		0	
Non-direct	64		0		0		0	
<b>Total Non-Annuity Funded</b>	<b>100</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>TOTAL EXPENSES</b>	<b>2,881</b>		<b>2,517</b>		<b>3,899</b>		<b>4,261</b>	