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# 2016 Annual Network Service Plan

## Emerald Distribution

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		0
Irrigation		83,111
Urban		90
Other		0
SunWater		28,697
<b>Total</b>	<b>133</b>	<b>111,898</b>
QCA Assumed Water Usage for Irrigation		71.7%
QCA Assumed Water Usage for Total		74.9%

**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*	2,754	3,202	3,347	3,431
Drainage	346	365	355	382
Irrigation CSO	233	62	0	0
Industrial and Urban*	0	8	0	0
Other Revenue	33	15	8	8
<b>Total Revenue</b>	<b>3,366</b>	<b>3,652</b>	<b>3,710</b>	<b>3,821</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 SCl 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.)	832	95%	1,378	153%	1,127	123%	1,014	110%
Preventative	764	125%	966	153%	617	95%	727	110%
Corrective	181	63%	370	126%	311	103%	324	105%
Electricity	36	57%	161	237%	151	108%	206	136%
<b>Total Routine Expenses</b>	<b>1,814</b>	<b>99%</b>	<b>2,876</b>	<b>152%</b>	<b>2,206</b>	<b>110%</b>	<b>2,272</b>	<b>111%</b>

The budget routine spend is 11% above the QCA's target for 2016 however the budget falls to 9% over 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 largely 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 105% of the QCA target when the insurance over-run is taken into account.

### Preventive Maintenance

Preventive maintenance is budgeted 10% above the QCA's target for 2016. This is due to additional quantities and increase unit cost for Acrolein used to treat aquatic weeds in channels and drain maintenance not accounted for in the QCA targets.

### Corrective Maintenance

Corrective maintenance is budgeted 5% above the QCA's target for 2016.

### Electricity

Electricity costs are budgeted 36% higher than the QCA target in 2016 due to an assumption that more pumping will be required across 2016. Also, announced increases in electricity prices being much higher than the increases allowed for by the QCA. The QCA had allowed for tariff increases of around 35% over the first four years of the price path whereas actual increases have been over 50%. Resultant cost over-runs are beyond SunWater's control. SunWater will continue to review tariffs each year to identify the best tariff for the expected future operations.

<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 is likely to exceed the five-year QCA target. The proposed spend for 2015 is expected to be less than the 2015 budget shown below due to two crossing repair projects being removed because they were judged as low risk. The condition of these assets will continue to be monitored.

**Table 5 – Non-Routine Expenditure**

	2013 SunWater Actual \$'000	%of 2013-17 Target %	2014 SunWater Actual \$'000	%of 2013-17 Target %	2015 SunWater Budget \$'000	%of 2013-17 Target %	2016 SunWater Budget \$'000	%of 2013-17 Target %
<b>Annuity Funded</b>								
R&E - Annuity Funded	633		107		567		333	
Corrective	0		0		0		0	
Other	0		7		0		0	
Non-direct	138		52		66		51	
<b>Annuity Funded Total</b>	<b>771</b>	<b>44%</b>	<b>165</b>	<b>9%</b>	<b>632</b>	<b>36%</b>	<b>383</b>	<b>22%</b>
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	23		3		0		0	
Non-direct	1		5		0		0	
<b>Total Non-Annuity Funded</b>	<b>25</b>	<b>n/a</b>	<b>8</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>

The details for the three 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>
Selma Switchyard upgrade & Replacement of switchyard assets - SELMA PUMP STATION	This project is to replace the switchyard assets at SELMA pump station, to comply with the current Australian Standard. Existing isolators are also unserviceable and require replacement. Options for switchgear selection were reviewed in 2012 and the most cost effective replacement selected. This project is continuing from 2015.	210
Supply, Install, Commission for PLC and SCADA system - SELMA PUMP STATION	This project is to prepare documents, drawings, specifications and a cost estimate for the installation and commissioning of PLC and SCADA system for SELMA pump station. The project has been deferred since 2013 to fund higher priority projects.	53
Replace meter technology (Convert to EM) - SELMA IRRIGATION DISTRIBUTION	This project is to replace flume gate meters with EM meters to adhere to the current metering policy.	40
Install AWMA Control Gate in Check Structure - Selma S4 CK - SELMA IRRIGATION DISTRIBUTION	This project is to replace the existing drop board check structure with an AWMA control gates to address a manual handling hazard.	25
Reprofile drains - WEEMAH DRAINAGE	This project is to re-profile drains within the Weemah section to ensure no reduction in capacity.	20
Other works	Various smaller replacement and refurbishment projects.	35
<b>Total</b>		<b>383</b>



## 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**

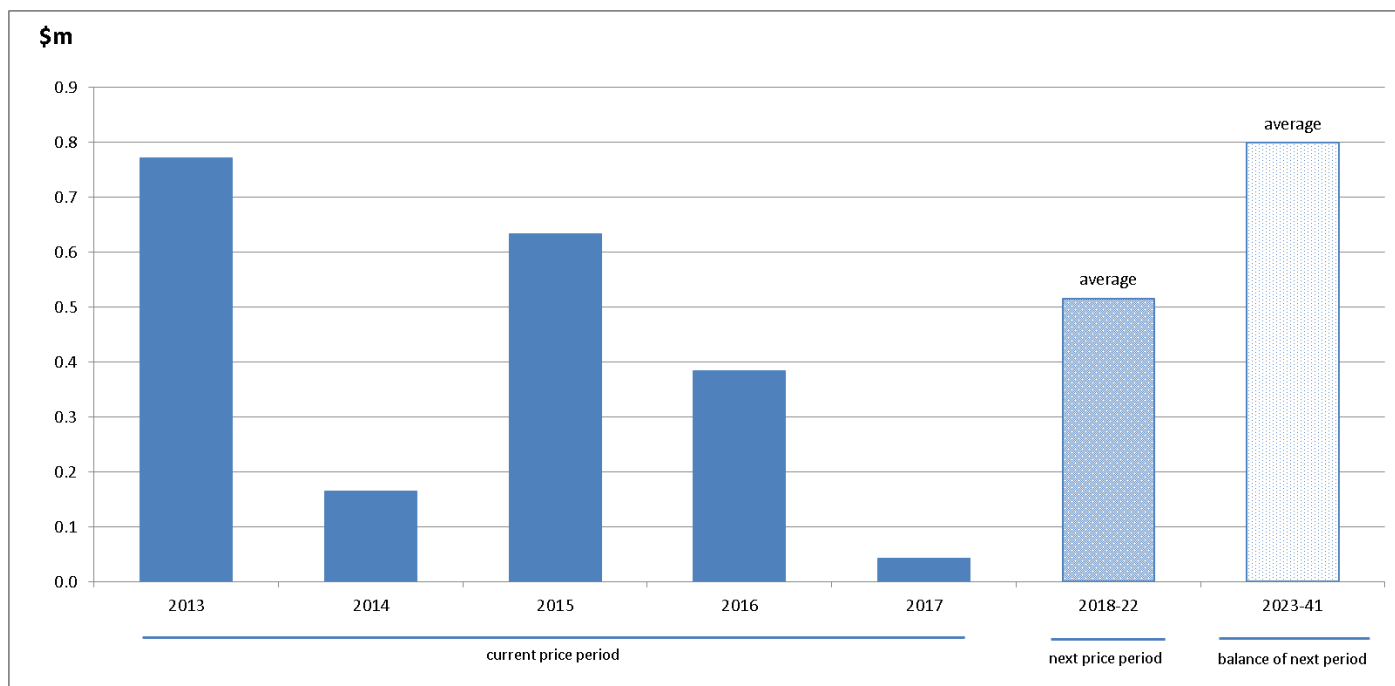
<b>ANNUITY</b>	<b>2013</b>	<b>2014</b>	<b>2015*</b>	<b>2016</b>
	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	(14)	(177)	292	389
<b>Annuity Income</b>	610	647	708	734
<b>Spend</b>	(771)	(165)	(632)	(383)
<b>Interest</b>	(1)	(13)	22	29
<b>Closing Balance</b>	(177)	292	389	769

\* 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 means there are no projects which exceed the materiality threshold for this service contract for the 2018-22 period.

### Material Projects 2023-41

The program of works for 2023-41 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer.

### **Replace HDPE Synthetic Liner 34225-36411M - SELMA IRRIGATION DISTRIBUTION**

Year: 2025

Current estimate: \$549k

Options analysis completed: No

The scheduled replacement of a 2,200m length of the HDPE lining along Selma Main Channel is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed. The HDPE liner will reach the end of its serviceable life in 2025.

### **Replace HDPE Synthetic Liner 31309-34225M - SELMA IRRIGATION DISTRIBUTION**

Year: 2026

Current estimate: \$844k

Options analysis completed: No

The scheduled replacement of a 2,900m length of the HDPE lining along Selma Main Channel is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed. The HDPE liner will reach the end of its serviceable life in 2025.

### **Replace Circuit Breaker, 22Kv Nu-Lec Indust - SELMA PUMP STATION**

Year: 2038

Current estimate: \$547k

Options analysis completed: No

The scheduled replacement of the 22Kv circuit breaker in the recloser in the Selma Pump Station Switchyard is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed. The circuit breaker will reach end of serviceable life in 2033.

## Appendix – Total Expenditure by Expense Type

Table 8 – Expenditure for Activity by Type

	2013 SunWater Actual \$'000	% of 2013 Target %	2014 SunWater Actual \$'000	% of 2014 Target %	2015 SunWater Budget \$'000	% of 2015 Target %	2016 SunWater Budget \$'000	% of 2016 Target %
<b>ROUTINE EXPENSES</b>								
<b>Operations</b>								
Labour	253		383		290		295	
Materials	3		120		15		7	
Contractors	0		3		3		3	
Other	155		232		314		186	
Non-direct	421		641		505		523	
<b>Operations Total</b>	<b>832</b>	<b>95%</b>	<b>1,378</b>	<b>153%</b>	<b>1,127</b>	<b>123%</b>	<b>1,014</b>	<b>110%</b>
<b>Preventative</b>								
Labour	129		168		91		134	
Materials	184		370		167		215	
Contractors	220		123		179		120	
Other	(0)		6		8		8	
Non-direct	232		300		171		250	
<b>Preventative Total</b>	<b>764</b>	<b>125%</b>	<b>966</b>	<b>153%</b>	<b>617</b>	<b>95%</b>	<b>727</b>	<b>110%</b>
<b>Corrective</b>								
Labour	52		42		73		76	
Materials	31		149		49		49	
Contractors	7		99		60		60	
Other	0		1		2		2	
Non-direct	91		80		128		137	
<b>Corrective Total</b>	<b>181</b>	<b>63%</b>	<b>370</b>	<b>126%</b>	<b>311</b>	<b>103%</b>	<b>324</b>	<b>105%</b>
<b>Electricity</b>	<b>36</b>	<b>57%</b>	<b>161</b>	<b>237%</b>	<b>151</b>	<b>108%</b>	<b>206</b>	<b>136%</b>
<b>Total Routine Expenses</b>	<b>1,814</b>	<b>99%</b>	<b>2,876</b>	<b>152%</b>	<b>2,206</b>	<b>110%</b>	<b>2,272</b>	<b>111%</b>
	2013 SunWater Actual \$'000	% of 2013-17 Target %	2014 SunWater Actual \$'000	% of 2013-17 Target %	2015 SW Budget \$'000	% of 2013-17 Target %	2016 SW Budget \$'000	% of 2013-17 Target %
<b>NON-ROUTINE EXPENSES</b>								
<b>Annuity Funded</b>								
R&E - Annuity Funded	633		107		567		333	
Corrective	0		0		0		0	
Other	0		7		0		0	
Non-direct	138		52		66		51	
<b>Total Annuity Funded Non-Routine</b>	<b>771</b>	<b>44%</b>	<b>165</b>	<b>9%</b>	<b>632</b>	<b>36%</b>	<b>383</b>	<b>22%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>2,586</b>		<b>3,041</b>		<b>2,838</b>		<b>2,655</b>	
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	23		3		0		0	
Non-direct	1		5		0		0	
<b>Total Non-Annuity Funded</b>	<b>25</b>	<b>n/a</b>	<b>8</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>TOTAL EXPENSES</b>	<b>2,611</b>		<b>3,050</b>		<b>2,838</b>		<b>2,655</b>	