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# 2015 Annual Network Service Plan

## Bowen Broken Bulk

June 2014

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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

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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.

SunWater published draft 2015 NSPs for each of 30 Service Contracts during March 2014. 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>.

The feedback has led to changes being made to SunWater's plans for 2015. While the plans for 2015 are now complete, customer feedback is always welcome 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		30,299
Irrigation		5,677
Urban		1,785
Other		290
SunWater		879
<b>Total</b>	<b>52</b>	<b>38,930</b>
QCA Assumed Water Usage for Irrigation		11.7%
QCA Assumed Water Usage for Total		43.1%

**Table 3 – Revenue<sup>1</sup>**

	<b>2013 SunWater Actual \$'000</b>	<b>2014 SunWater Budget \$'000</b>	<b>2015 SunWater Budget \$'000</b>
Irrigation Revenue*	65	66	78
Industrial and Urban*	4,874	5,033	5,062
Other Revenue	(1)	12	8,652
<b>Total Revenue</b>	<b>4,938</b>	<b>5,111</b>	<b>13,792</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.

Other revenue budgeted for 2015 relates to SunWater's assumption that funds will be received to offset the cost of the proposed Eungella Dam safety upgrade project.

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<sup>1</sup> The 2015 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 Budget</b>	<b>% of 2014 Target</b>	<b>2015 SunWater Budget</b>	<b>% of 2015 Target</b>
	\$'000	%	\$'000	%	\$'000	%
Operations (Excl. Elect.)	828	163%	514	98%	642	121%
Preventative	103	53%	179	88%	177	86%
Corrective	191	89%	211	95%	212	94%
Electricity	136	117%	140	112%	80	60%
<b>Total Routine Expenses</b>	<b>1,258</b>	<b>122%</b>	<b>1,044</b>	<b>97%</b>	<b>1,111</b>	<b>101%</b>

The budget routine spend is 1% above the QCA's target for 2015 however the budget falls to 95% of target when the above-QCA increases in insurance are taken into account.

### Operations

The operations budget in 2015 is 21% above the QCA target, however this is mostly 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 107% of the QCA target when the insurance over-run is taken into account.

### Preventive Maintenance

Preventive maintenance is budgeted below the QCA's target for 2015.

### Corrective Maintenance

Corrective maintenance is budgeted below the QCA's target for 2015.

### Electricity

Electricity costs are budgeted at \$54k below the QCA target in 2015. This is despite the QCA limiting estimated tariff increases to around 30% over the first three years of the price path when actual increases have been around 50%. Bowen Broken electricity costs can vary by +/- \$80k from year-to-year due to normal variability. SunWater will continue to review tariffs each year to identify the best tariff for the expected future operations.

<sup>2</sup> The 2015 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, the most recent of which was completed in February 2014; 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.

### 2015 Non-Routine Budget

The budget non-routine spend for 2015 is shown in the table below, along with the actual spend for 2013 and the budget spend for 2014. Overall, it is expected that the 2013-17 spend for non-routine can be controlled to meet the five-year QCA target within the framework of SunWater's Reliability Centred Maintenance (RCM) approach and risk based prioritisation.

**Table 5 – Non-Routine Expenditure**

	2013 SunWater Actual \$'000	% of 2013-17 Target %	2014 SunWater Budget \$'000	% of 2013-17 Target %	2015 SunWater Budget \$'000	% of 2013-17 Target %
<b>Annuity Funded</b>						
R&E - Annuity Funded	90		239		122	
Corrective	(1)		0		0	
Other	0		0		0	
Non-direct	16		122		86	
<b>Annuity Funded Total</b>	<b>106</b>	<b>12%</b>	<b>362</b>	<b>40%</b>	<b>208</b>	<b>23%</b>
<b>Non-Annuity Funded</b>						
R&E - Non-Annuity Funded	(0)		0		8,487	
Non-direct	(0)		0		153	
<b>Total Non-Annuity Funded</b>	<b>(0)</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>8,640</b>	<b>n/a</b>

The details for the major annuity-funded projects planned for 2015 are provided below:

**Table 6 – Non-Routine Projects 2015**

<b>Project Title</b>	<b>Project Scope</b>	<b>2015 Budget (\$'000)</b>
Design and construct weed deflector - GATTONVALE PUMP STATION	A weed deflector is needed to prevent weed from blocking the GOSS Pumpstation intake.	52
Design & Fabricate Inlet Structure Bulkhead - GOSS PSTN - GATTONVALE PUMP STATION	A design is needed with modifications to the fabricated gate. This will overcome existing issues with fitting the gate in place.	40
Write O&M Manual for GOSS & DATA Book Pt 1 - GATTONVALE OFF STREAM STORAGE	This project is to write and operations and maintenance manual and data books for Gattongvale Offstream Storage.	29
Study: 5yr Dam Comprehensive Inspection	Five-yearly inspection is a regulatory requirement. Scope is to inspect all aspects: documentations, condition assessments. If possible, operation test all mechanical equipment and physical inspections (including conduit inspections).	21
Other works		66
Total		208

SunWater does not propose to fund the Eungella Dam safety upgrade project from the scheme annuity.



## Annuity Balance

The estimated 2014 and 2015 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 2015 is shown in the following table. The balances for 2014 and 2015 are estimates only at this stage because the final actual spends for 2014 and 2015 will not be known until after each of these years is completed.

**Table 7 – Annuity Balances**

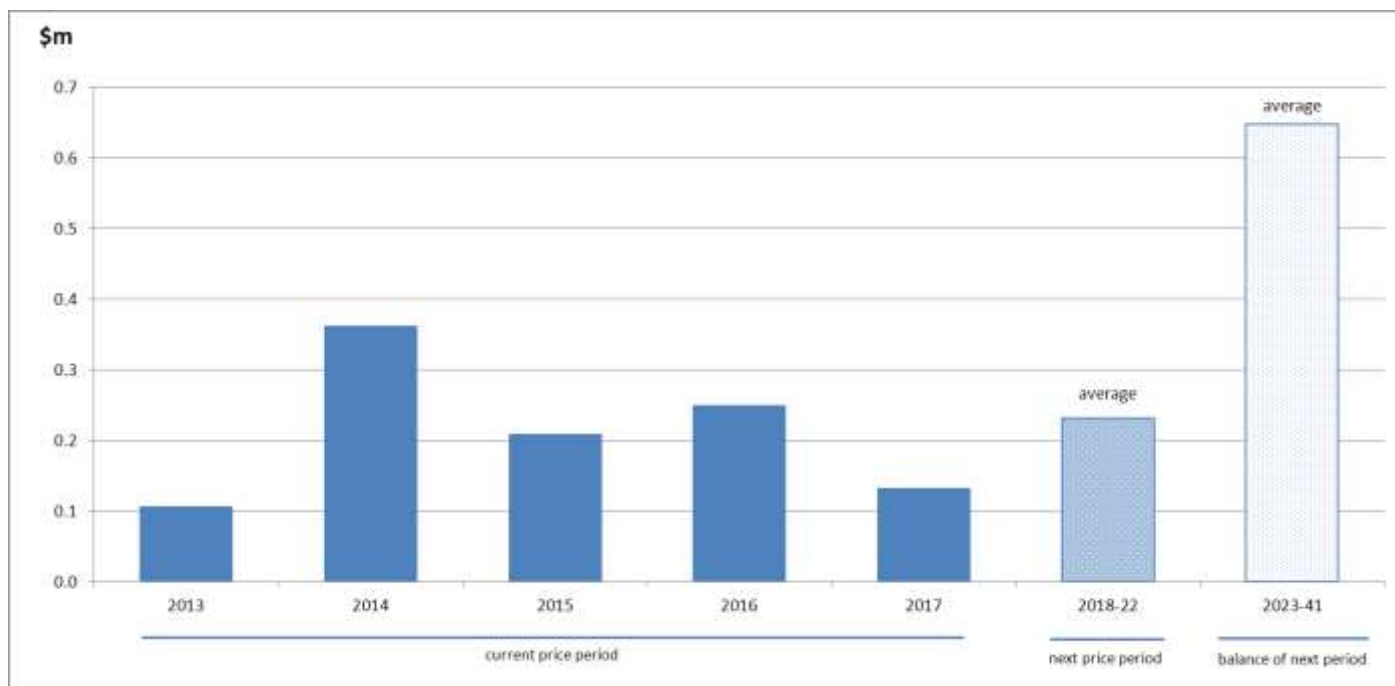
	<b>2013</b>	<b>2014*</b>	<b>2015*</b>	<b>2016</b>	<b>2017</b>
	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	(2,722)	(2,708)	(2,947)		
<b>Annuity Income</b>	324	326	337	436	439
<b>Spend</b>	(106)	(362)	(208)		
<b>Interest</b>	(204)	(203)	(221)		
<b>Closing Balance</b>	(2,708)	(2,947)	(3,039)		

\* All 2014 and 2015 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 2015-17

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 2015-17 period.

## Material Projects 2018-22

The program of works for 2018-22 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer.

### Replace Treatment Plant Unit - EUNGELLA DAM WTP

Year: 2021

Current estimate: \$168k

Options analysis completed: No

The estimated end of life of this asset is 2021. Condition will be monitored over time to assess ageing and deterioration to better determine replacement timelines. An option analysis will be carried out prior to the replacement based on time based replacement/renewal strategy.

### Study: 20yr Dam Safety Review (by 1 Oct 2020) - EUNGELLA DAM

Year: 2021

Current estimate: \$134k

Options analysis completed: No

Eungella Dam is a category 1 referable structure and the 20 Year Dam Safety Review is required for Queensland Government Regulatory Compliance. The review is a procedure for systematically assessing the safety of a dam after its original construction. It is a fresh engineering assessment of the integrity of all elements of a dam. It usually incorporates a:

- current failure impact assessment,
- detailed review of structural, hydraulic, hydrologic and geotechnical design aspects,
- review of historical operational performance,
- review of surveillance reports,
- comprehensive inspection of the dam, and
- comparison of the standards used for building and upgrading the dam against current design standards.

Given this requirement is mandatory, an options analysis will not be completed.

### Maintain & Stabilise embankment and replace protection - GATTONVALE OFF STREAM STORAGE

Year: 2021

Current estimate: \$127k

Options analysis completed: No

Ongoing repairs to upstream slope rock cover are required as per condition assessment in 2011. Cracks in the crest were observed in the past inspection. It is planned to maintain and stabilise the embankment and replace protection works, however an option analysis will be carried out prior to implementation of this project.

## 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 \$'000	% of 2013 Target %	2014 SunWater Budget \$'000	% of 2014 Target %	2015 SunWater Budget \$'000	% of 2015 Target %
<b>ROUTINE EXPENSES</b>						
<b>Operations</b>						
Labour	218		114		126	
Materials	17		21		21	
Contractors	65		60		86	
Other	116		91		163	
Non-direct	412		228		247	
<b>Operations Total</b>	<b>828</b>	<b>163%</b>	<b>514</b>	<b>98%</b>	<b>642</b>	<b>121%</b>
<b>Preventative</b>						
Labour	29		47		48	
Materials	4		19		8	
Contractors	16		20		30	
Other	0		0		0	
Non-direct	54		93		90	
<b>Preventative Total</b>	<b>103</b>	<b>53%</b>	<b>179</b>	<b>88%</b>	<b>177</b>	<b>86%</b>
<b>Corrective</b>						
Labour	37		35		31	
Materials	26		40		31	
Contractors	55		60		85	
Other	1		4		2	
Non-direct	72		73		63	
<b>Corrective Total</b>	<b>191</b>	<b>89%</b>	<b>211</b>	<b>95%</b>	<b>212</b>	<b>94%</b>
<b>Electricity</b>	<b>136</b>	<b>117%</b>	<b>140</b>	<b>112%</b>	<b>80</b>	<b>60%</b>
<b>Total Routine Expenses</b>	<b>1,258</b>	<b>122%</b>	<b>1,044</b>	<b>97%</b>	<b>1,111</b>	<b>101%</b>
<b>NON-ROUTINE EXPENSES</b>						
<b>Annuity Funded</b>						
R&E - Annuity Funded	90		239		122	
Corrective	(1)		0		0	
Other	0		0		0	
Non-direct	16		122		86	
<b>Total Annuity Funded Non-Routine</b>	<b>106</b>	<b>12%</b>	<b>362</b>	<b>40%</b>	<b>208</b>	<b>23%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>1,364</b>		<b>1,406</b>		<b>1,319</b>	
<b>Non-Annuity Funded</b>						
R&E - Non-Annuity Funded	(0)		0		8,487	
Non-direct	(0)		0		153	
<b>Total Non-Annuity Funded</b>	<b>(0)</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>8,640</b>	<b>n/a</b>
<b>TOTAL EXPENSES</b>	<b>1,364</b>		<b>1,406</b>		<b>9,959</b>	