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# 2016 Annual Network Service Plan

## Barker Barambah 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

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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 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		60
Irrigation		31,361
Urban		2,100
Other		0
SunWater		794
<b>Total</b>	<b>171</b>	<b>34,315</b>
QCA Assumed Water Usage for Irrigation		37.9%
QCA Assumed Water Usage for Total		55.1%

**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	566	807	797	822
Irrigation CSO	1	0	0	0
Industrial and Urban	325	190	195	169
Other Revenue	8	8	8	8
<b>Total Revenue</b>	<b>900</b>	<b>1,005</b>	<b>1,001</b>	<b>999</b>

<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.)	598	103%	751	125%	720	119%	734	131%
Preventative	46	41%	49	43%	98	84%	100	87%
Corrective	22	43%	34	63%	54	101%	51	95%
Electricity	10	62%	28	159%	13	68%	13	63%
<b>Total Routine Expenses</b>	<b>676</b>	<b>89%</b>	<b>861</b>	<b>109%</b>	<b>884</b>	<b>112%</b>	<b>897</b>	<b>120%</b>

The budget routine spend is 20% above the QCA's target for 2016 however the budget falls to 101% of target when the above-QCA increases in insurance is taken into account.

### Operations

The operations budget in 2016 is 31% above the QCA target; however this is almost 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 105% of the QCA target when the insurance over-run is taken into account.

### Preventive Maintenance

Preventive Maintenance is 87% of the QCA target, reflecting a higher use of contactors to undertake a number of maintenance tasks, such as electrical and mechanical servicing, utilising specialist private sector organisations.

### Corrective Maintenance

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

### Electricity

Electricity costs are budgeted at \$7k below the QCA target in 2016 reflecting SunWater's estimates for pumping requirements in the pumped sections. Barker Barambah electricity costs can vary significantly from year-to-year but represent less than 1% of total routine costs.

<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. The corrective works in 2013 and 2014 mean that the 2013-17 spend for non-routine works will exceed the five-year QCA target. Corrective works are unplanned and were not allowed for in the QCA's targets.

**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	31		70		39		34	
Corrective	33		444		20		0	
Other	5		1		0		73	
Non-direct	51		100		9		50	
<b>Annuity Funded Total</b>	<b>120</b>	<b>35%</b>	<b>615</b>	<b>178%</b>	<b>68</b>	<b>20%</b>	<b>157</b>	<b>45%</b>
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	0		5		0		0	
Non-direct	0		0		0		0	
<b>Total Non-Annuity Funded</b>	<b>0</b>	<b>n/a</b>	<b>5</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>

The detail for the major projects planned for 2016 is provided below:

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

<b>Project Title</b>	<b>Project Scope</b>	<b>2016 Budget (\$'000)</b>
Replace Meter Program (3 per year)	Some meters have been assessed as being in an unacceptable condition. They require replacement to maintain the accuracy of meter reads in accordance with SunWater's Metering Policy.	31
WHS issue: Install handrail and steps to provide safe access to outlet platform - SILVERLEAF WEIR	Current access to the outlet valve platform at Silverleaf Weir is via a set of concrete steps that does not have a handrail and was assessed as a High WHS risk. It is an Australian Standard Requirement that all steps are hand-railed and should therefore be rectified immediately.	17
Update EAP - BJELKE-PETERSEN DAM	This is a statutory requirement of the Dam Safety Regulator.	4
Other works	Various replacement and refurbishment projects.	105
<b>Total</b>		<b>157</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**

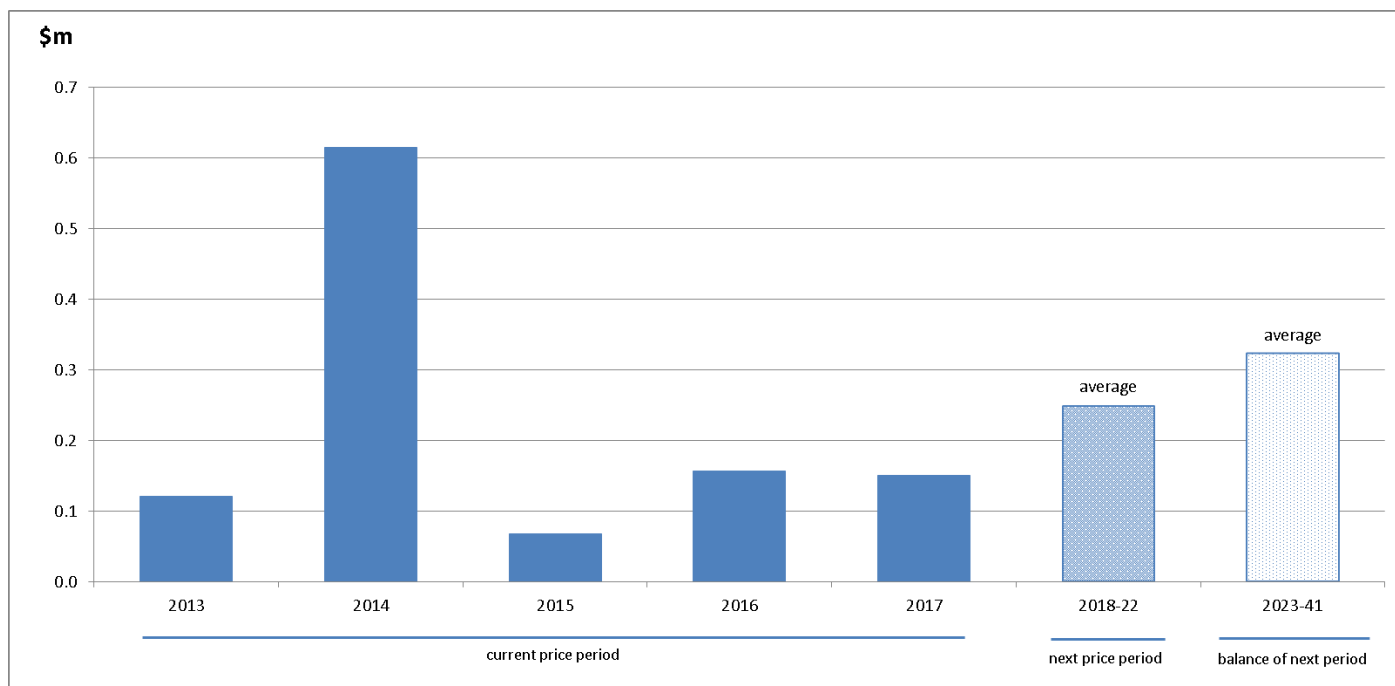
<b>ANNUITY</b>	<b>2013</b>	<b>2014</b>	<b>2015*</b>	<b>2016</b>
	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	(1,270)	(1,254)	(1,734)	(1,693)
<b>Annuity Income</b>	231	230	238	240
<b>Spend</b>	(120)	(615)	(68)	(157)
<b>Interest</b>	(95)	(94)	(130)	(127)
<b>Closing Balance</b>	(1,254)	(1,734)	(1,693)	(1,736)

\* 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 following chart. The large spike in spending in 2014 was to cover necessary flood repairs.

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

Projects in 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.

### Manufacture and install new inlet structure from design in 2009 - SILVERLEAF WEIR

Year: 2018

Current estimate: \$378k

Options analysis completed: No

The existing structure has corroded away and is becoming a WHS issue. This project is to manufacture and install a new inlet structure. The estimate is based on the manufacture and installation as per the approved 2009 design. An options analysis will be completed closer to the implementation date to confirm the preferred option.

### **5yr Dam Comprehensive Inspection - BJELKE-PETERSEN DAM**

Year: 2019

Current estimate: \$133k

Options analysis completed: No

Bjelke-Petersen Dam is classed as a major dam with annual inspections and a comprehensive inspection every 5 years. These inspections are undertaken under SunWater policy. This inspection has allowed for internal inspection of the conduit using a dive team to perform the inspection to give certainty on asset condition and to identify any faults or defects which can be planned for repair rather than have sudden failures.

### **Replace Switchboard - Design, Procure - BJELKE-PETERSEN DAM**

Year: 2022

Current estimate: \$149k

Options analysis completed: No

The scheduled replacement of a switchboard at Bjelke-Petersen Dam is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed.

## **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.

### **20yr Dam Safety Review - BJELKE-PETERSEN DAM**

Year: 2023

Current estimate: \$419k

Options analysis completed: No

Bjelke-Petersen 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.

### **Replace Cables & Cableways - design, procure - BJELKE-PETERSEN DAM**

Year: 2032

Current estimate: \$239k

Options analysis completed: No

The scheduled replacement of cables and cableways at Bjelke-Petersen Dam is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed.

**Replace Cables & Cableways - install, commission - BJELKE-PETERSEN DAM**

Year: 2033

Current estimate: \$252k

Options analysis completed: No

The scheduled replacement of cables and cableways at Bjelke-Petersen Dam is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed.

## 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	128		138		150		133	
Materials	1		3		8		6	
Contractors	18		13		12		14	
Other	200		336		260		267	
Non-direct	251		261		291		315	
<b>Operations Total</b>	<b>598</b>	<b>103%</b>	<b>751</b>	<b>125%</b>	<b>720</b>	<b>119%</b>	<b>734</b>	<b>131%</b>
<b>Preventative</b>								
Labour	16		16		29		26	
Materials	1		1		1		1	
Contractors	0		1		15		15	
Other	0		3		0		0	
Non-direct	29		28		54		59	
<b>Preventative Total</b>	<b>46</b>	<b>41%</b>	<b>49</b>	<b>43%</b>	<b>98</b>	<b>84%</b>	<b>100</b>	<b>87%</b>
<b>Corrective</b>								
Labour	6		9		16		13	
Materials	2		8		6		6	
Contractors	1		0		2		2	
Other	0		0		0		0	
Non-direct	13		16		29		29	
<b>Corrective Total</b>	<b>22</b>	<b>43%</b>	<b>34</b>	<b>63%</b>	<b>54</b>	<b>101%</b>	<b>51</b>	<b>95%</b>
<b>Electricity</b>	<b>10</b>	<b>62%</b>	<b>28</b>	<b>159%</b>	<b>13</b>	<b>68%</b>	<b>13</b>	<b>63%</b>
<b>Total Routine Expenses</b>	<b>676</b>	<b>89%</b>	<b>861</b>	<b>109%</b>	<b>884</b>	<b>112%</b>	<b>897</b>	<b>120%</b>
<b>NON-ROUTINE EXPENSES</b>								
<b>Annuity Funded</b>								
R&E - Annuity Funded	31		70		39		34	
Corrective	33		444		20		0	
Other	5		1		0		73	
Non-direct	51		100		9		50	
<b>Total Annuity Funded Non-Routine</b>	<b>120</b>	<b>35%</b>	<b>615</b>	<b>178%</b>	<b>68</b>	<b>20%</b>	<b>157</b>	<b>45%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>796</b>		<b>1,476</b>		<b>952</b>		<b>1,054</b>	
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	0		5		0		0	
Non-direct	0		0		0		0	
<b>Total Non-Annuity Funded</b>	<b>0</b>	<b>n/a</b>	<b>5</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>TOTAL EXPENSES</b>	<b>796</b>		<b>1,482</b>		<b>952</b>		<b>1,054</b>	