

**SunWater Limited**  
Level 10, 179 Turbot Street  
PO Box 15536 City East  
Brisbane Queensland 4002  
[www.sunwater.com.au](http://www.sunwater.com.au)  
ACN 131 034 985



# 2015 Annual Network Service Plan

## Nogoa 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

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 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**

	<b>No. of Customers</b>	<b>Water Entitlements ML</b>
Industrial		29,390
Irrigation		160,121
Urban		8,536
Other		522
SunWater		32,053
<b>Total</b>	<b>380</b>	<b>230,622</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 Budget \$'000</b>	<b>2015 SunWater Budget \$'000</b>
Irrigation Revenue*	987	922	953
Irrigation CSO	6	2	0
Industrial and Urban*	2,216	2,719	2,405
Other Revenue	16	4	4
<b>Total Revenue</b>	<b>3,225</b>	<b>3,647</b>	<b>3,362</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.

The budget revenue for 2014 has been updated from the draft NSP to be consistent with SunWater's final 2013/14 SCI submission.

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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.)	1,762	94%	1,738	89%	2,243	114%
Preventative	244	92%	200	73%	272	99%
Corrective	204	104%	180	88%	144	70%
Electricity	12	91%	16	113%	16	104%
<b>Total Routine Expenses</b>	<b>2,222</b>	<b>94%</b>	<b>2,135</b>	<b>87%</b>	<b>2,675</b>	<b>109%</b>

The budget routine spend is 9% above the QCA's target for 2015 however the budget falls to 97% of target when the above-QCA increases in insurance and electricity are taken into account.

### Operations

The operations budget in 2015 is 14% 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 99% of the QCA target when the insurance over-run is taken into account.

### Preventive Maintenance

SunWater has restructured its bulk water business during 2013/14. As a consequence the bulk water business will undertake a number of maintenance tasks, such as electrical and mechanical servicing, utilising specialist private sector organisations. The budget for preventive maintenance is 99% of target, but includes a reduction in internal labour that is offset by an increase in contract services. The costs of the contract services are yet to be confirmed via the market.

### Corrective Maintenance

Corrective maintenance is budgeted well below the QCA's target for 2015. Significant corrective maintenance will also be undertaken by specialist contractors, as described above. In this case, the cost allowed for contractors is less than the reduction in internal labour costs. The costs of the contract services are yet to be confirmed via the market.

### Electricity

Electricity costs are budgeted 4% higher than the QCA target in 2015 due to 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 30% over the first three years of the price path whereas actual increases have been around 50%. Resultant cost over-runs are beyond SunWater's control.

<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, 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.

**Table 5 – Non-Routine Expenditure**

	<b>2013 SunWater Actual</b>	<b>% of 2013-17 Target</b>	<b>2014 SunWater Budget</b>	<b>% of 2013-17 Target</b>	<b>2015 SunWater Budget</b>	<b>% of 2013-17 Target</b>
	\$'000	%	\$'000	%	\$'000	%
<b>Annuity Funded</b>						
R&E - Annuity Funded	561		593		894	
Corrective	62		1,227		51	
Other	30		0		0	
Non-direct	432		467		279	
<b>Annuity Funded Total</b>	<b>1,085</b>	<b>53%</b>	<b>2,287</b>	<b>112%</b>	<b>1,224</b>	<b>60%</b>
<b>Non-Annuity Funded</b>						
R&E - Non-Annuity Funded	36		0		0	
Non-direct	64		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>

The details for the five major 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>
Investigate and refurbish areas of drummy concrete - FAIRBAIRN DAM	To prevent further movement and settlement of dissipater blocks, SunWater will develop the method to renew or improve the structural integrity of the drains (e.g. replacement with new UPVC pipes or re-lining the existing clay pipes). Remove concrete over voids, repair drainage pipes, fill the remaining voids and reinstate concrete slabs as per report #1150369.	248
Decommissioning of Rubber Bag Bedford Weir - refer to HB#1513712 - BEDFORD WEIR	Due to serious public safety incident the Bedford Weir pneumatic Fabridams were deflated and will now be decommissioned.	202
Fairbairn Dam Sewage System - FAIRBAIRN DAM WASTE WATER	Develop Strategy and Implementation to prevent overtopping of wastewater treatment ponds and pollution of natural water ways during wet seasons.	112
Reconstruct RB Outlet Works (Bullring) - FAIRBAIRN DAM	Modification of the Right Bank Outlet works to eliminate vibration of the structure at flows approaching the increased ROP demand (1200ML/day). The RBO vibrates dramatically and excessive turbulence is created within the structure when releases exceed 880ML/d. It is believed that the vibration could seriously damage the structural integrity of the RBO, limiting the operating range of the dam and leaving SunWater unable to meet the ROP requirements. When comparing other options, it is expected that, due to the high cost of the construction of a new outlet, the modification of the outer wall will be much more cost effective when compared to expected outcomes. This project was originally	102



	planned for 2014.	
Repair Outlet Gate - TARTRUS WEIR	The scope is to replace the outlet penstock gate which has failed and broken away from its foundation bolts resulting in an uncontrolled outflow from the storage. The Tartrus weir gate project was originally planned for 2014. The weir is spilling approx 200ml/day and it is unknown when the weir will stop over-topping. It is therefore assumed that the project won't get done this year.	41
Other works		519
Total		1,224

## 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>	(853)	(1,559)	(3,509)		
<b>Annuity Income</b>	443	454	455	468	470
<b>Spend</b>	(1,085)	(2,287)	(1,224)		
<b>Interest</b>	(64)	(117)	(263)		
<b>Closing Balance</b>	(1,559)	(3,509)	(4,540)		

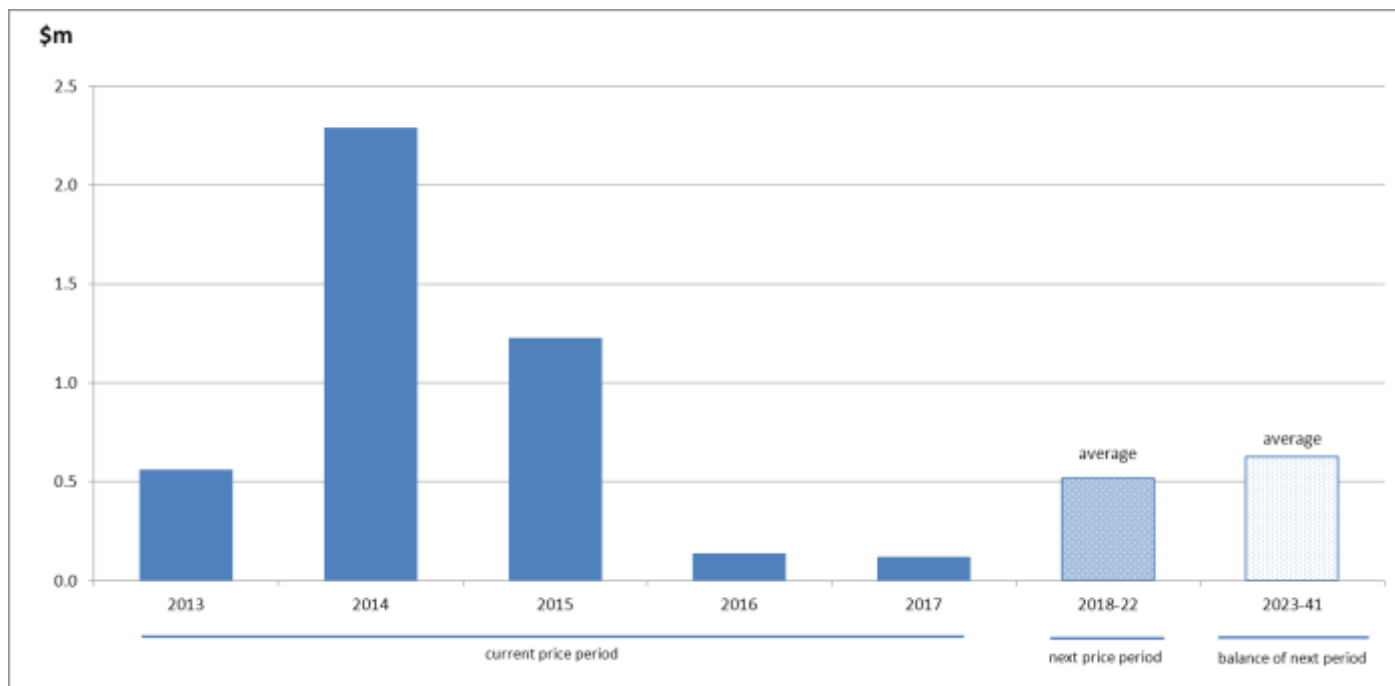
\* All 2014 and 2015 figures are subject to change once actual spend is known.

An error was made in the draft NSP where the 2013 spend was incorrectly shown as \$559k when it should have been \$1,085k. The balances have changed accordingly.

## 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. The expenditure in 2014 now includes the flood damage repairs that were flagged in last year's NSP.

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

### Refurbish RB Outlet Works (Bullring) – FAIRBAIRN DAM

Year: 2020

Current estimate: \$292k

Options analysis completed: No

The Fitzroy Basin ROP requires a total river release of 1,500ML/day. Consequently, additional capacity needs to be provided to achieve this requirement. This resulted in the design and installation of the Left Bank Siphon (LBS) which now provides over 300ML/day at the ROP dam level of 199m. This implies that the RBO must be able to supply the additional 1,200ML/day river release. The RBO vibrates dramatically and excessive turbulence is created within the structure when releases exceed 880ML/d. The vibration and turbulence is believed to be the main contributing factor to leaks having appeared on its southern side. It is believed that the vibration could seriously damage the structural integrity of the RBO, limiting the operating range of the dam and leaving SunWater unable to meet the ROP requirements. The focus of future work is to be targeted at resolving the vibration and structural integrity issues during high flow.

## **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	350		383		211	
Materials	64		31		33	
Contractors	176		115		873	
Other	440		407		601	
Non-direct	733		802		525	
<b>Operations Total</b>	<b>1,762</b>	<b>94%</b>	<b>1,738</b>	<b>89%</b>	<b>2,243</b>	<b>114%</b>
<b>Preventative</b>						
Labour	75		52		60	
Materials	2		9		1	
Contractors	20		31		90	
Other	3		6		4	
Non-direct	143		102		116	
<b>Preventative Total</b>	<b>244</b>	<b>92%</b>	<b>200</b>	<b>73%</b>	<b>272</b>	<b>99%</b>
<b>Corrective</b>						
Labour	50		39		45	
Materials	20		19		12	
Contractors	28		25		4	
Other	6		18		0	
Non-direct	100		79		83	
<b>Corrective Total</b>	<b>204</b>	<b>104%</b>	<b>180</b>	<b>88%</b>	<b>144</b>	<b>70%</b>
<b>Electricity</b>	<b>12</b>	<b>91%</b>	<b>16</b>	<b>113%</b>	<b>16</b>	<b>104%</b>
<b>Total Routine Expenses</b>	<b>2,222</b>	<b>94%</b>	<b>2,135</b>	<b>87%</b>	<b>2,675</b>	<b>109%</b>
<b>NON-ROUTINE EXPENSES</b>						
<b>Annuity Funded</b>						
R&E - Annuity Funded	561		593		894	
Corrective	62		1,227		51	
Other	30		0		0	
Non-direct	432		467		279	
<b>Total Annuity Funded Non-Routine</b>	<b>1,085</b>	<b>53%</b>	<b>2,287</b>	<b>112%</b>	<b>1,224</b>	<b>60%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>3,307</b>		<b>4,422</b>		<b>3,899</b>	
<b>Non-Annuity Funded</b>						
R&E - Non-Annuity Funded	36		0		0	
Non-direct	64		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>TOTAL EXPENSES</b>	<b>3,407</b>		<b>4,422</b>		<b>3,899</b>	