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# 2015 Annual Network Service Plan

## Lower Mary 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

	No. of Customers	Water Entitlements ML
Industrial		70
Irrigation		19,327
Urban		120
Other		0
SunWater		10,892
<b>Total</b>	<b>171</b>	<b>30,409</b>
QCA Assumed Water Usage for Irrigation		34.5%
QCA Assumed Water Usage for Total		33.0%

**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*	127	162	209
Irrigation CSO	29	14	0
Industrial and Urban*	(110)	27	56
Other Revenue	4	5	5
<b>Total Revenue</b>	<b>50</b>	<b>207</b>	<b>269</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 small CSO shown above in 2013 and 2014 is related to Tinana Barrage and Teddington Weir. Prices reach the QCA's lower-bound in 2015 so the CSO is no longer received from then onwards.

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.)	197	97%	177	84%	218	104%
Preventative	8	10%	66	86%	76	99%
Corrective	4	34%	15	115%	10	78%
Electricity	0	n/a	0	n/a	0	n/a
<b>Total Routine Expenses</b>	<b>209</b>	<b>73%</b>	<b>258</b>	<b>86%</b>	<b>304</b>	<b>101%</b>

The budget routine spend is 1% above the QCA's target for 2015 however the budget falls to 97% of target when the above-QCA increases in insurance are taken into account.

### Operations

The operations budget in 2015 is 4% 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

Preventive maintenance is budgeted in line with the QCA's target for 2015. SunWater has restructured its bulk water business during 2013/14. As a consequence the bulk water business will not undertake a number of maintenance tasks such as electrical and mechanical servicing with internal resources. These services will be sourced from specialist private sector organisations.

### Corrective Maintenance

Significant corrective maintenance will also be undertaken by specialist contractors, as described above. In the case of corrective maintenance, reductions in internal labour and I&OH are only partly offset by an increase in contract services, so corrective maintenance is budgeted to be below the QCA's target.

### Electricity

No electricity costs planned for this service contract in 2015.

<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. The 2014 budget included a project for applying a concrete skin over the existing rock protection at Tinana Barrage; however this project has been deferred until 2018 following a recent options analysis. There corrective works in 2013 make it likely that the 2013-17 spend for non-routine works will exceed the five-year QCA target.

**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	9		60		9	
Corrective	18		0		174	
Other	0		0		0	
Non-direct	11		22		25	
<b>Annuity Funded Total</b>	<b>38</b>	<b>80%</b>	<b>82</b>	<b>173%</b>	<b>208</b>	<b>437%</b>
<b>Non-Annuity Funded</b>						
R&E - Non-Annuity Funded	0		0		0	
Non-direct	0		0		0	
<b>Total Non-Annuity Funded</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 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>
FD01 (2013) Reinstate upstream rock protection at Mary River Barrage	Reinstatement of the undermined & damaged concrete slab downstream of the left bank, reinstatement of rock fill in void immediately downstream of the weir, reinstatement of rock over the upstream Zone 1 clay, and reinstatement of the failed concrete scour protection slab upstream on the left bank	186
5yr Dam Comprehensive Inspection (2015 calendar year) - MARY BARRAGE	Conduct a thorough civil and mechanical engineering assessment of the weir.	10
5yr Dam Comprehensive Inspection (2015 calendar year) - TINANA BARRAGE	Conduct a thorough civil and mechanical engineering assessment of the weir.	10
Other works		2
Total		208

### **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**

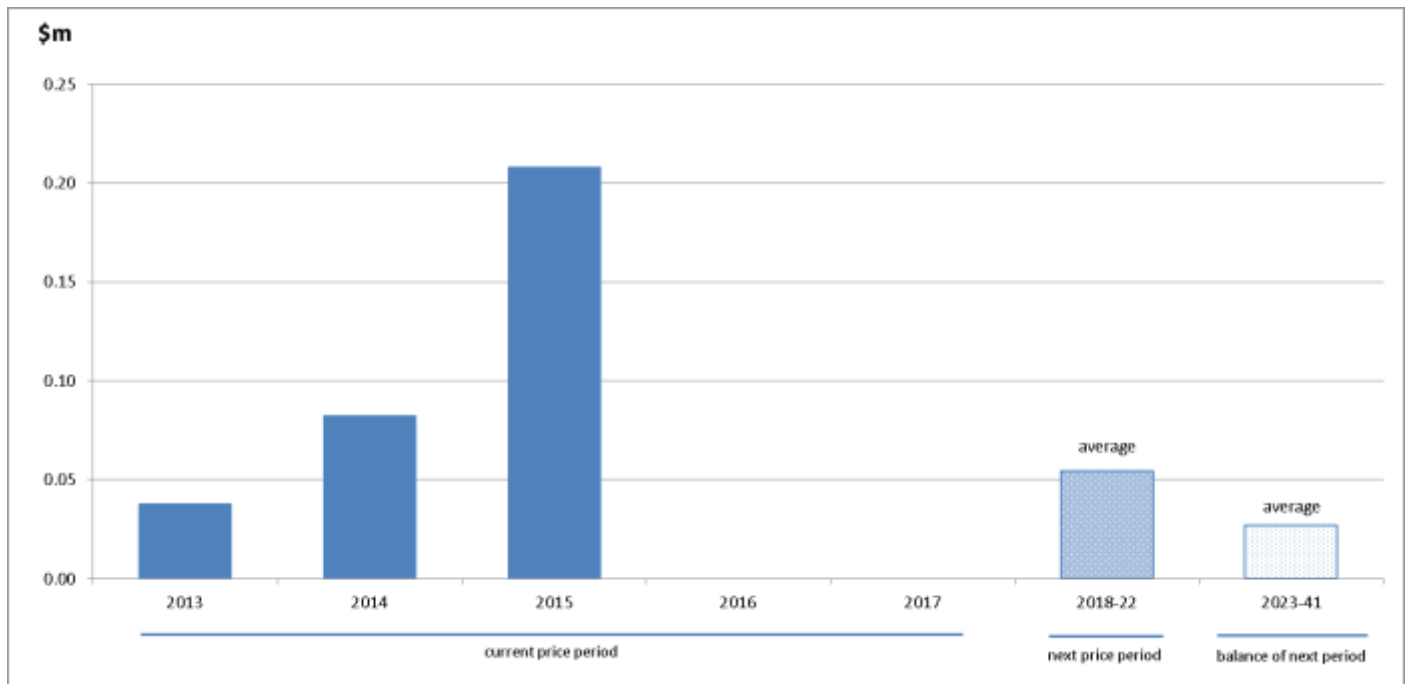
	<b>2013</b>	<b>2014*</b>	<b>2015*</b>	<b>2016</b>	<b>2017</b>
	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	(1,210)	(1,229)	(1,293)		
<b>Annuity Income</b>	110	110	110	110	109
<b>Spend</b>	(38)	(82)	(208)		
<b>Interest</b>	(91)	(92)	(97)		
<b>Closing Balance</b>	(1,229)	(1,293)	(1,488)		

\* 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

### **Reinstate upstream rock protection at Mary River Barrage - MARY BARRAGE**

Year: 2015

Current estimate: \$186k

Options analysis completed: No

The project includes reinstatement of the undermined & damaged concrete slab downstream of the left bank, reinstatement of rock filled void immediately downstream of the weir, reinstatement of rock over the upstream clay, and reinstatement of the failed concrete scour protection slab upstream on the left bank of the barrage.

## 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.

### **Apply a concrete skin over the existing rock protection on left bank downstream area of barrage. - TINANA BARRAGE**

Year: 2018

Current estimate: \$90k

Options analysis completed: Yes

A recently completed options analysis has determined that this project should not proceed as planned in 2014. The recommendation is to continue to monitor the subsidence of the slab for additional movement. Project has been deferred to 2018 financial year and the need for this work will be regularly reviewed.

### **Refurbish downstream left abutment to prevent further erosion (2012 condition assessment) - MARY BARRAGE**

Year: 2019

Current estimate: \$94k

Options analysis completed: No

Floods in the river during the past three years have successively caused scouring in an area approximately 200m downstream of the barrage. At this stage, the estimate is based on placing rocks in the scoured areas downstream of the left abutment at Mary Barrage. An options analysis will likely be required closer to implementation.

## 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 BUOYS (4 OFF), SAFETY BUOYAGE SYSTEMS - MARY BARRAGE**

Year: 2024

Current estimate: \$29k

Options analysis completed: No

A buoy line was installed at the barrage for safety reasons. The buoy line has a nominal life of 15 years; however subsequent inspections will determine the actual replacement timing. From a SunWater risk perspective the buoy line requires replacement when it deteriorates. Replacement options analysis will be completed closer to the implementation.

### **Replace Fencing, Gates & Grids - MARY BARRAGE**

Year: 2040

Current estimate: \$136k

Options analysis completed: No

This project is to replace damage fencing, gates and grids at the barrage for public and WHS risk mitigation. A full condition assessment of the fences, gates and grids and an options analysis will likely be required prior to the replacement to refine the scope of works.

## 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	41		50		42	
Materials	0		4		2	
Contractors	0		4		63	
Other	76		22		28	
Non-direct	80		97		83	
<b>Operations Total</b>	<b>197</b>	<b>97%</b>	<b>177</b>	<b>84%</b>	<b>218</b>	<b>104%</b>
<b>Preventative</b>						
Labour	2		22		8	
Materials	1		0		0	
Contractors	0		1		50	
Other	0		0		0	
Non-direct	4		43		17	
<b>Preventative Total</b>	<b>8</b>	<b>10%</b>	<b>66</b>	<b>86%</b>	<b>76</b>	<b>99%</b>
<b>Corrective</b>						
Labour	1		3		1	
Materials	0		6		0	
Contractors	0		0		8	
Other	0		0		0	
Non-direct	3		6		2	
<b>Corrective Total</b>	<b>4</b>	<b>34%</b>	<b>15</b>	<b>115%</b>	<b>10</b>	<b>78%</b>
<b>Electricity</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>
<b>Total Routine Expenses</b>	<b>209</b>	<b>73%</b>	<b>258</b>	<b>86%</b>	<b>304</b>	<b>101%</b>
<b>NON-ROUTINE EXPENSES</b>						
<b>Annuity Funded</b>						
R&E - Annuity Funded	9		60		9	
Corrective	18		0		174	
Other	0		0		0	
Non-direct	11		22		25	
<b>Total Annuity Funded Non-Routine</b>	<b>38</b>	<b>80%</b>	<b>82</b>	<b>173%</b>	<b>208</b>	<b>437%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>246</b>		<b>341</b>		<b>512</b>	
<b>Non-Annuity Funded</b>						
R&E - Non-Annuity Funded	0		0		0	
Non-direct	0		0		0	
<b>Total Non-Annuity Funded</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>246</b>		<b>341</b>		<b>512</b>	