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# 2016 Annual Network Service Plan

## Dawson 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		15,924
Urban		2
Other		0
SunWater		4,005
<b>Total</b>	<b>43</b>	<b>19,931</b>
QCA Assumed Water Usage for Irrigation		66.9%
QCA Assumed Water Usage for Total		73.5%

**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*	874	1,228	1,163	1,312
Drainage	44	46	45	47
Irrigation CSO	462	447	425	401
Industrial and Urban*	0	0	1	1
Other Revenue	2	0	2	2
<b>Total Revenue</b>	<b>1,383</b>	<b>1,721</b>	<b>1,636</b>	<b>1,764</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.)	355	64%	629	110%	600	103%	615	106%
Preventative	404	104%	404	102%	418	102%	429	104%
Corrective	77	38%	126	60%	227	105%	228	105%
Electricity	125	80%	190	114%	180	100%	234	121%
<b>Total Routine Expenses</b>	<b>962</b>	<b>74%</b>	<b>1,349</b>	<b>100%</b>	<b>1,425</b>	<b>103%</b>	<b>1,507</b>	<b>107%</b>

The budget routine spend is 7% above the QCA's target for 2016, mainly related to electricity price increases being significantly more than the QCA allowed.

### Operations

The operations budget in 2016 is 6% above the QCA target, however this is partly 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 104% of the QCA target when the insurance over-run is taken into account.

### Preventive Maintenance

Preventive maintenance is budgeted 4% above the QCA's target for 2016.

### Corrective Maintenance

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

### Electricity

Electricity costs are 21% above the QCA target in 2016. This is due to increased electricity costs beyond SunWater's control. The QCA limited estimated tariff increases to around 35% over the first four years of the price path when actual increases have been more than 50%.

<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. There have been some corrective works in this service contract; however these should be able to be accommodated within the QCA's 2013-17 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	259		51		142		127	
Corrective	22		0		0		0	
Other	0		0		0		0	
Non-direct	98		16		45		32	
<b>Annuity Funded Total</b>	<b>379</b>	<b>43%</b>	<b>67</b>	<b>8%</b>	<b>187</b>	<b>21%</b>	<b>159</b>	<b>18%</b>
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	0		0		0		0	
Non-direct	0		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>0</b>	<b>n/a</b>

The details for the four 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>
Replace Siphon & Supports (Construction) - THEODORE IRRIGATION DISTRIBUTION	The pipe support structure is of timber construction and the timber has deteriorated to the stage where failure is considered likely. An options analysis is being prepared to identify the most prudent and efficient solution but it is considered likely the support structure will require replacement with a new structure.	91
Refurbish Submersible Pump - PUN1 - GIBBER GUNYAH PUMP STATION	The pumps in the Gibber Gunyah pump station have reached an operational age where refurbishment is required to restore them to efficient operation.	35
Refurbish Non Return Valve - GIBBER GUNYAH PUMP STATION	The non-return valves in the Gibber Gunyah pump station have reached an operational age where refurbishment is required to restore them to efficient operation.	26
Investigate options for reliable operation - THEODORE IRRIGATION DISTRIBUTION	The channel control gate is nearing the end of its operational life. The electronic components are obsolete and no longer supported by manufacturers. An options study will be undertaken to identify prudent and efficient options for the replacement of the asset.	7
Other works	N/A	0
<b>Total</b>		<b>159</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**

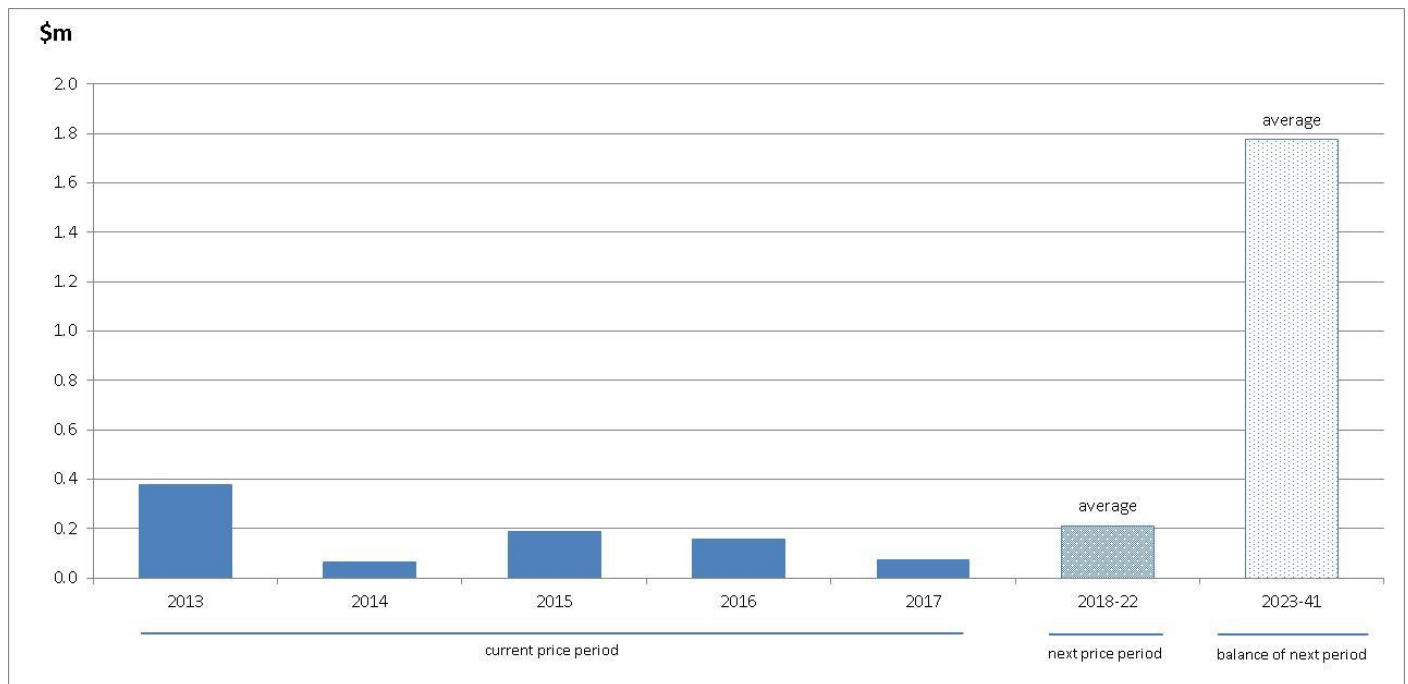
<b>ANNUITY</b>	<b>2013</b>	<b>2014</b>	<b>2015*</b>	<b>2016</b>
	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	1,337	1,108	1,206	1,216
<b>Annuity Income</b>	51	82	107	110
<b>Spend</b>	(379)	(67)	(187)	(159)
<b>Interest</b>	100	83	90	91
<b>Closing Balance</b>	1,108	1,206	1,216	1,259

\* 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

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.

## Design & Costing for Replacement Pump Stations – THEODORE IRRIGATION DISTRIBUTION

Year: 2019

Current estimate: \$258k

Options analysis completed: No

Both the Theodore and Gibber Gunyah Pump Stations are due for replacement. An options study to investigate alternatives for replacement, upgrade or combining the stations is currently underway. This project is to implement the recommendations of the options analysis. The project works are planned for 2021-24 (see below). The preparation of documents, drawings, specifications and the final cost estimate is scheduled for 2019.

This aged pump station has reached the end of its effective life with issues surrounding its structural integrity, continued reliability, and WH&S. External consultants have been engaged to conduct an options study to identify the optimum solution. Their recommendation is to replace the existing pump station with a line-shaft turbine pump station adjacent to the current location. The estimated cost has been nominally included in the annuity profile pending a thorough review of the recently completed options analysis, and a detailed design yet to be prepared/commissioned closer to actual replacement date. The cost estimate is for a replacement pump station of suitable capacity that will permit the decommissioning of the Fork Pump Station.

### **Replace Pumpwell Building - THEODORE PUMP STATION**

Year: 2021

Current estimate: \$153k

Options analysis completed: No

See related project description above.

## **Material Projects 2023-41**

Projects in 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 pump station as per options analysis recommendations - THEODORE PUMP STATION**

Year: 2023

Current Estimate: \$6.61m

Options analysis completed: Yes

This aged pump station has reached the end of its effective life with issues surrounding its structural integrity, continued reliability, and WH&S. External consultants have been engaged to conduct an options study to identify the optimum solution. Their recommendation is to replace the existing pump station with a line-shaft turbine pump station adjacent to the current location. The estimated cost has been nominally included in the annuity profile pending a thorough review of the recently completed options analysis, and a detailed design yet to be prepared/commissioned closer to actual replacement date. The cost estimate is for a replacement pump station of suitable capacity that will permit the decommissioning of the Fork Pump Station.

### **Replace pump station as per options analysis - GIBBER GUNYAH PUMP STATION**

Year: 2024

Current Estimate: \$10.55m

Options analysis completed: Yes

This aged pump station has reached the end of its effective life with issues surrounding its structural integrity, continued reliability, and WH&S. External consultants have been engaged to conduct an options study to identify the optimum solution. Their recommendation is to replace the existing pump station with a lineshaft turbine pump station adjacent to the current location. The estimated cost has been nominally included in the annuity profile pending a thorough review of the recently completed options analysis, and a detailed design yet to be prepared/commissioned closer to actual replacement date.

## **Replace Pipe (750D Rc) - THEODORE IRRIGATION DISTRIBUTION**

Year: 2041

Current Estimate: \$1.82m

Options analysis completed: No

The scheduled replacement of the 1,400m pipeline Lateral A in Theodore is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed. The pipeline will reach the end of its serviceable life in 2041.

## 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	115		213		189		203	
Materials	4		6		2		2	
Contractors	1		1		1		1	
Other	40		59		85		54	
Non-direct	195		350		323		355	
<b>Operations Total</b>	<b>355</b>	<b>64%</b>	<b>629</b>	<b>110%</b>	<b>600</b>	<b>103%</b>	<b>615</b>	<b>106%</b>
<b>Preventative</b>								
Labour	122		106		120		121	
Materials	31		35		33		33	
Contractors	50		81		56		56	
Other	0		4		3		3	
Non-direct	201		177		206		216	
<b>Preventative Total</b>	<b>404</b>	<b>104%</b>	<b>404</b>	<b>102%</b>	<b>418</b>	<b>102%</b>	<b>429</b>	<b>104%</b>
<b>Corrective</b>								
Labour	21		31		71		71	
Materials	18		21		23		21	
Contractors	3		16		10		10	
Other	0		4		2		2	
Non-direct	36		53		121		125	
<b>Corrective Total</b>	<b>77</b>	<b>38%</b>	<b>126</b>	<b>60%</b>	<b>227</b>	<b>105%</b>	<b>228</b>	<b>105%</b>
<b>Electricity</b>	<b>125</b>	<b>80%</b>	<b>190</b>	<b>114%</b>	<b>180</b>	<b>100%</b>	<b>234</b>	<b>121%</b>
<b>Total Routine Expenses</b>	<b>962</b>	<b>74%</b>	<b>1,349</b>	<b>100%</b>	<b>1,425</b>	<b>103%</b>	<b>1,507</b>	<b>107%</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	259		51		142		127	
Corrective	22		0		0		0	
Other	0		0		0		0	
Non-direct	98		16		45		32	
<b>Total Annuity Funded Non-Routine</b>	<b>379</b>	<b>43%</b>	<b>67</b>	<b>8%</b>	<b>187</b>	<b>21%</b>	<b>159</b>	<b>18%</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>1,341</b>		<b>1,416</b>		<b>1,612</b>		<b>1,665</b>	
<b>Non-Annuity Funded</b>								
R&E - Non-Annuity Funded	0		0		0		0	
Non-direct	0		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>0</b>	<b>n/a</b>
<b>TOTAL EXPENSES</b>	<b>1,341</b>		<b>1,416</b>		<b>1,612</b>		<b>1,665</b>	