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2016 Annual Network Service Plan

Upper Burnett 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

	2013	2014	2015	2016	2017
Conversion Factor	1.051	1.077	1.104	1.131	1.160

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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

Post: NSP Feedback
PO Box 15536 City East
Brisbane Qld 4002

Water Data

Table 2 – Water Data

	No. of Customers	Water Entitlements ML
Industrial		119
Irrigation		28,457
Urban		1,930
Other		0
SunWater		18,032
Total	160	48,538
QCA Assumed Water Usage for Irrigation		55.8%
QCA Assumed Water Usage for Total		66.0%

Table 3 – Revenue¹

	2013 SunWater Actual \$'000	2014 SunWater Actual \$'000	2015 SunWater Budget \$'000	2016 SunWater Budget \$'000
Irrigation Revenue	676	764	746	798
Industrial and Urban	727	602	617	642
Other Revenue	6	104	6	6
Total Revenue	1,409	1,470	1,369	1,445

¹ 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 Expenditure²

	2013 SunWater Actual	%of 2013 Target	2014 SunWater Actual	%of 2014 Target	2015 SunWater Budget	%of 2015 Target	2016 SunWater Budget	%of 2016 Target
	\$'000	%	\$'000	%	\$'000	%	\$'000	%
Operations (Excl. Elect.)	534	96%	728	127%	669	116%	599	104%
Preventative	97	70%	77	53%	144	99%	163	112%
Corrective	24	71%	29	81%	37	105%	70	196%
Electricity	8	109%	7	85%	10	119%	10	110%
Total Routine Expenses	663	90%	840	110%	861	112%	842	110%

The budgeted routine spend is 10% above the QCA's target for 2016 however the budget falls to 98% of target when the above-QCA increases in insurance are taken into account.

Operations

The operations budget in 2016 is 4% above the QCA target.

Preventive Maintenance

Preventive maintenance is budgeted 12% above the QCA's target for 2016.

Corrective Maintenance

Corrective maintenance is budgeted \$34K (96%) above the QCA's target for 2016. This is due to a moderate increase in expected corrective maintenance program. The routine corrective maintenance in recent years has been unusually low due to the increased activity on flood damage repairs that are non-routine.

Electricity

Electricity costs are budgeted 10% higher than the QCA target in 2016 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 35% over the first four years of the price path whereas actual increases have been around 50%. Resultant cost over-runs are beyond SunWater's control.

² 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. Overall, the 2013-17 non-routine spend will exceed the five-year QCA target. There have 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

	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 %
Annuity Funded								
R&E - Annuity Funded	22		200		402		101	
Corrective	217		1,920		0		104	
Other	0		0		0		93	
Non-direct	111		346		67		133	
Annuity Funded Total	350	31%	2,465	221%	468	42%	431	39%
Non-Annuity Funded								
R&E - Non-Annuity Funded	1		64		0		0	
Non-direct	2		41		0		0	
Total Non-Annuity Funded	3	n/a	105	n/a	0	n/a	0	n/a

The details for the five major projects planned for 2015 are provided below:

Table 6 – Non-Routine Projects 2016

Project Title	Project Scope	2016 Budget (\$'000)
FD01 (2015) Flood Damage Repairs - CLAUDE WHARTON WEIR	<p>This project is to replace of refurbish assets damaged by floods resulting from Cyclone Marcia, including:</p> <ul style="list-style-type: none"> • Left Bank / Abutment <ul style="list-style-type: none"> ○ Upstream perimeter fencing needs repair (existing fence repairable) ○ Downstream perimeter fencing need replacing (approx. 15m plus gate) ○ Most collapsible hand rails need reinstating ○ One collapsible hand rail footing torn out of concrete ○ Large amount of debris clean up (approx. 50m³) • Right Bank / Abutment <ul style="list-style-type: none"> ○ Abutment fencing needs reinstating, new mesh required (approx. 40m) ○ New double gates required (some damage pre flood) ○ Rock protection outside training wall has been damaged 	64
FD01 (2015) Flood Damage Repairs - WURUMA DAM	<p>This project is to replace of refurbish assets damaged by floods resulting from Cyclone Marcia. This includes re-furbishing the downstream levee bank that redirects the tail water through the tail water flume, reinstating the access track to the valve house and the dissipater slab has been washed out, and reinstating the capillary line to the tailwater gauging station.</p>	40
FD01 (2015) Flood Damage Repairs - JONES WEIR	<p>This project is to replace of refurbish assets damaged by floods resulting from Cyclone Marcia. This includes re-instating 40m of abutment perimeter hand railing, and reinstating the lower level access track on the left abutment, removing a large tree washed over on toe of protection works (roots have been ripped out of ground damaging the protection works on the right abutment), and reinstating or replacing safety buoys that were washed downstream.</p>	39
Replace Meter Program (3 per year) - UPPER BURNETT DISTRIBUTION	<p>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.</p>	38
Asset Revaluation - Upper Burnett - SERVICE CONTRACT	<p>It is necessary to conduct an infrastructure asset revaluation on Bulk Water assets by updating the schedule of rates, indirect cost percentage and Bill of Materials, updating replacement costs on infrastructure assets, and updating the cost of planned replacement items.</p>	32
Other works	<p>Various smaller replacement and refurbishment projects</p>	218
Total		431

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

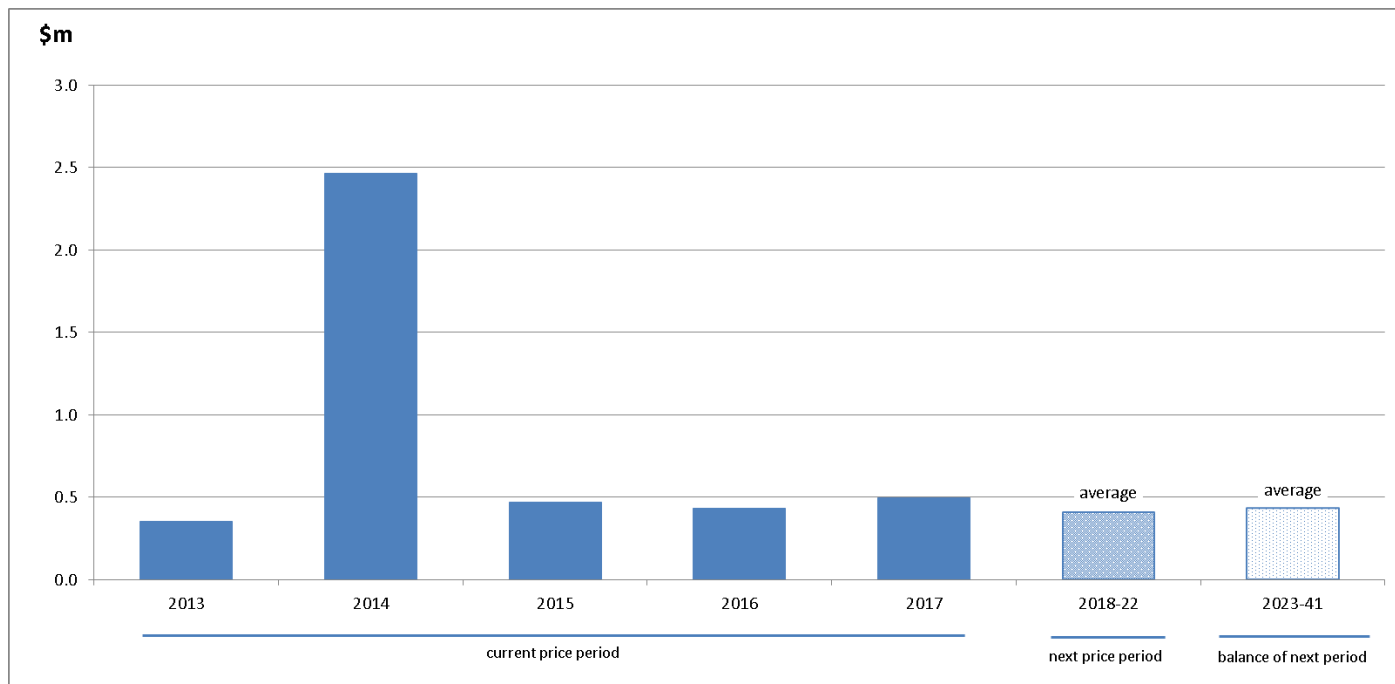
ANNUITY	2013	2014	2015*	2016
	\$'000	\$'000	\$'000	\$'000
Opening Balance	(199)	(401)	(2,724)	(3,222)
Annuity Income	163	173	175	180
Spend	(350)	(2,465)	(468)	(431)
Interest	(15)	(30)	(204)	(241)
Closing Balance	(401)	(2,724)	(3,222)	(3,714)

* 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. The expenditure in 2014 reflects flood damage 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

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.

20yr Dam Safety Review (by 1 Jun 2021) - WURUMA DAM

Year: 2021

Current estimate: \$401k

Options analysis completed: No

Wuruma 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.

Review of Comprehensive Risk Assessment - WURUMA DAM

Year: 2022

Current estimate: \$194k

Options analysis completed: No

This project is to review the comprehensive risk assessment of Wuruma Dam to ensure all risks are identified and mitigating measures planned.

5yr Dam Comprehensive Inspection - WURUMA DAM

Year: 2022

Current estimate: \$169k

Options analysis completed: No

SunWater policy is to conduct annual and 5 yearly inspections on our dam assets to ensure that the asset will be able to perform its designed function. The estimate to carry out the works is a built up figure using our works order system and recognised the time and rate of engineers and also the remoteness of the site. No options analysis is required.

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.

Control Equipment Upgrade - Supply, Install, Commission PLC/SCADA - CLAUDE WHARTON WEIR

Year: 2030

Current estimate: \$258k

Options analysis completed: No

The scheduled upgrade of control equipment at Claude Wharton Weir is based on the standard asset life, but is subject to condition and risk assessments and an options analysis in 2028 before it can proceed.

Replace Control Equipment - CLAUDE WHARTON WEIR

Year: 2033

Current estimate: \$320k

Options analysis completed: No

The scheduled replacement and upgrade of the control equipment on the fishlock at Claude Wharton Weir is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed.

Replace Screen - CLAUDE WHARTON WEIR

Year: 2040

Current estimate: \$383k

Options analysis completed: No

The scheduled replacement and upgrade of a trash screen at Claude Wharton Weir is based on the standard asset life, but is subject to condition and risk assessments and an options analysis before it can proceed..

20yr Dam Safety Review - WURUMA DAM

Year: 2041

Current estimate: \$650k

Options analysis completed: No

See 2021 project description, above.

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 %
ROUTINE EXPENSES								
Operations								
Labour	120		137		133		107	
Materials	4		39		5		5	
Contractors	19		10		51		36	
Other	164		284		220		197	
Non-direct	226		258		259		254	
Operations Total	534	96%	728	127%	669	116%	599	104%
Preventative								
Labour	32		27		29		42	
Materials	0		1		1		1	
Contractors	2		0		57		24	
Other	0		2		1		1	
Non-direct	63		48		57		95	
Preventative Total	97	70%	77	53%	144	99%	163	112%
Corrective								
Labour	3		6		11		10	
Materials	3		10		5		5	
Contractors	13		0		0		30	
Other	0		0		0		0	
Non-direct	6		12		21		25	
Corrective Total	24	71%	29	81%	37	105%	70	196%
Electricity	8	109%	7	85%	10	119%	10	110%
Total Routine Expenses	663	90%	840	110%	861	112%	842	110%
	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 %
NON-ROUTINE EXPENSES								
Annuity Funded								
R&E - Annuity Funded	22		200		402		101	
Corrective	217		1,920		0		104	
Other	0		0		0		93	
Non-direct	111		346		67		133	
Total Annuity Funded Non-Routine	350	31%	2,465	221%	468	42%	431	39%
TOTAL REGULATED EXPENSES	1,014		3,305		1,329		1,272	
Non-Annuity Funded								
R&E - Non-Annuity Funded	1		64		0		0	
Non-direct	2		41		0		0	
Total Non-Annuity Funded	3	n/a	105	n/a	0	n/a	0	n/a
TOTAL EXPENSES	1,017		3,411		1,329		1,272	