

SunWater Limited
Level 10, 179 Turbot Street
PO Box 15536 City East
Brisbane Queensland 4002
www.sunwater.com.au
ACN 131 034 985



2015 Annual Network Service Plan

Three Moon Creek Bulk

June 2014

Table of Contents

Introduction	4
Water Data.....	4
Revenue	5
Routine Expenditure	6
Operations	6
Preventive Maintenance.....	6
Corrective Maintenance	6
Electricity	6
Non-Routine Expenditure	7
2015 Non-Routine Budget	7
Annuity Balance	9
Overview of Annuity Funded Non-Routine Projects 2013-41	10
Material Projects 2015-17	10
Cania Dam Spillway Flood damage repairs - CANIA DAM.....	10
Material Projects 2018-22	11
20yr Dam Safety Review (by 1 Dec 2019) - CANIA DAM.....	11
5yr Dam Comprehensive Inspection - CANIA DAM.....	11
Material Projects 2023-41	11
Replace Cables & Cableways - install, commission - CANIA DAM.....	11
Appendix –Total Expenditure by Expense Type.....	12

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

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

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

Water Data

Table 2 – 2015 Water Usage

	No. of Customers	Water Entitlements ML
Industrial		0
Irrigation		14,124
Urban		610
Other		0
SunWater		0
Total	92	14,734
QCA Assumed Water Usage for Irrigation		40.0%
QCA Assumed Water Usage for Total		50.8%

Table 3 – Revenue¹

	2013 SunWater Actual \$'000	2014 SunWater Budget \$'000	2015 SunWater Budget \$'000
Irrigation Revenue*	311	326	317
Irrigation CSO	7	0	0
Industrial and Urban*	77	81	82
Other Revenue	0	0	0
Total Revenue	395	407	399

¹ 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 Expenditure²

	2013 SunWater Actual	% of 2013 Target	2014 SunWater Budget	% of 2014 Target	2015 SunWater Budget	% of 2015 Target
	\$'000	%	\$'000	%	\$'000	%
Operations (Excl. Elect.)	274	115%	217	87%	303	122%
Preventative	64	72%	82	88%	82	89%
Corrective	48	354%	14	99%	12	86%
Electricity	8	85%	10	100%	9	86%
Total Routine Expenses	394	113%	323	88%	406	111%

The budget routine spend is 11% above the QCA's target for 2015 however the budget falls to 96% of target when the above-QCA increases in insurance are taken into account.

Operations

The operations budget in 2015 is 22% 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 100% of the QCA target when the insurance over-run is taken into account.

Preventive Maintenance

Preventive maintenance is budgeted below the QCA's target for 2015.

Corrective Maintenance

Corrective maintenance is budgeted below the QCA's target for 2015.

Electricity

Electricity costs are budgeted at \$1k below the QCA target in 2015. This is despite the QCA limiting estimated tariff increases to around 30% over the first three years of the price path when actual increases have been around 50%. Three Moon Creek electricity costs can vary by +/- \$2k from year-to-year and in total represent around 2% of total routine costs. SunWater will continue to review tariffs each year to identify the best tariff for the expected future operations.

² 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

	2013 SunWater Actual	% of 2013-17 Target	2014 SunWater Budget	% of 2013-17 Target	2015 SunWater Budget	% of 2013-17 Target
	\$'000	%	\$'000	%	\$'000	%
Annuity Funded						
R&E - Annuity Funded	125		49		84	
Corrective	39		186		487	
Other	0		0		0	
Non-direct	46		151		153	
Annuity Funded Total	210	49%	386	89%	724	168%
Non-Annuity Funded						
R&E - Non-Annuity Funded	0		0		0	
Non-direct	0		0		0	
Total Non-Annuity Funded	0	n/a	0	n/a	0	n/a

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

Table 6 – Non-Routine Projects 2015

Project Title	Project Scope	2015 Budget (\$'000)
Cania Dam Spillway Flood damage repairs - CANIA DAM	During the January 2013 flood event, the three spillway terraces and the stilling basin at Cania Dam suffered damage as a result of the record flood passed. It has been calculated that the event achieved a 1:3,000 year ARI. A Risk Analysis had been done in 2014 FY. This job is to continue the investigation to determine the suitable method to rectify the spillway. The initial cost estimate was based on the volume of concrete to be placed in the spillway. The installation of spillway anchors was also excluded. In addition, machinery access was assumed to be from the top of the spillway. After further investigation, the most reasonable access is from the bottom of the spillway which increases the cost of building the access road.	561
5yr Dam Comprehensive Inspection (by 1 Dec 2014). - CANIA DAM	Callide Dam Five Yearly inspection is a regulatory requirement and due by 1st December 2014. The scope of this job is to inspect Cania Dam on all aspects: documentations, condition assessments and, if possible, operation test all mechanical equipment and physical inspections (including conduit inspections).	83
Refurbish bulkhead gate - Replace seals - CANIA DAM	To purchase a new seal and install it into the bulkhead gate. Bulkhead gate may have to be transported from the intake tower to contractor workshop if further refurbishment is required e.g. re-painting. This project was deferred from the 2014 program.	23

13TMC02 FD01(2013) Flood Damage Cania Mech & Elect - CANIA DAM	Replaces all switchboards and includes checking, cleaning and repairing of the hydraulic system in Cania Dam valve house and intake tower after the 2013 flood.	21
Other works		36
Total		724

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

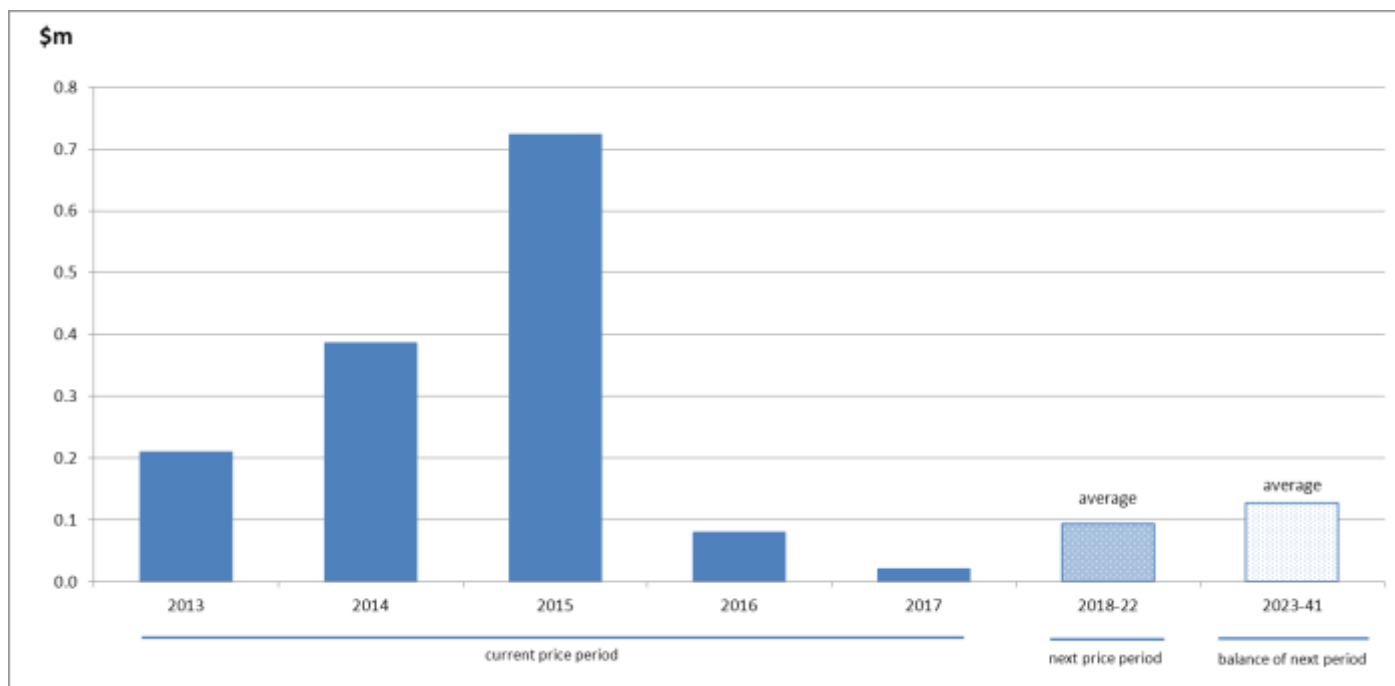
	2013	2014*	2015*	2016	2017
	\$'000	\$'000	\$'000	\$'000	\$'000
Opening Balance	(337)	(466)	(779)		
Annuity Income	107	108	109	112	114
Spend	(210)	(386)	(724)		
Interest	(25)	(35)	(58)		
Closing Balance	(466)	(779)	(1,451)		

* 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. The expenditure in 2013-15 includes the flood damage repairs discussed earlier.

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

Cania Dam Spillway Flood damage repairs - CANIA DAM

Year: 2015

Current estimate: \$561k

Options analysis completed: No

During the January 2013 flood event, the three spillway terraces and the stilling basin at Cania Dam suffered damage as a result of the record flood passed. It has been calculated that the event achieved a 1:3,000 year ARI. A Risk Analysis had been done in 2014 FY. This job is to continue the investigation, with an options analysis to be undertaken to determine the most suitable method to rectify the spillway.

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 Dec 2019) - CANIA DAM

Year: 2019-20

Current estimate: \$207k

Options analysis completed: No

Cania Dam is a category 2 referable structure and the 20 Year Dam Safety Review is required for Queensland Government Regulatory Compliance and is usually conducted in conjunction with a Five Yearly Dam Safety Inspection.

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 the following:

- A current failure impact assessment
- A detailed review of structural, hydraulic, hydrologic and geotechnical design aspects
- A review of historical operational performance
- A review of surveillance reports
- A comprehensive inspection of the dam
- A comparison of the standards used for building and upgrading the dam against current design standards.

Given this requirement is mandatory, an individual options analysis is not required.

5yr Dam Comprehensive Inspection - CANIA DAM

Year: 2020

Current estimate: \$93k

Options analysis completed: No

Callide Dam Five Yearly inspection is a regulatory requirement and due by 1st December 2019. The scope of this job is to inspect Cania Dam on all aspects: documentations, condition assessments and, if possible, operation test all mechanical equipment and physical inspections (including conduit inspections).

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 Cables & Cableways - install, commission - CANIA DAM

Year: 2025

Current estimate: \$245k

Options analysis completed: No

The estimated end of life of these assets is 2025. Cables and cableways will be condition assessed through an ongoing program of electrical testing to monitor ageing and deterioration to better determine replacement timelines. An option analysis will be carried out prior to the replacement of cable and cableways based on time based replacement/renewal strategy. Options are limited to maintaining assets in service for as long as possible and then replacing on a like for like basis or using alternative distribution methods such as overhead, if this is possible or practical.

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 %
ROUTINE EXPENSES						
Operations						
Labour	62		38		61	
Materials	1		1		0	
Contractors	3		5		2	
Other	94		93		120	
Non-direct	114		79		119	
Operations Total	274	115%	217	87%	303	122%
Preventative						
Labour	20		25		26	
Materials	0		2		0	
Contractors	7		4		6	
Other	1		2		1	
Non-direct	36		49		49	
Preventative Total	64	72%	82	88%	82	89%
Corrective						
Labour	6		4		2	
Materials	10		2		1	
Contractors	16		0		4	
Other	1		0		0	
Non-direct	15		8		4	
Corrective Total	48	354%	14	99%	12	86%
Electricity	8	85%	10	100%	9	86%
Total Routine Expenses	394	113%	323	88%	406	111%
NON-ROUTINE EXPENSES						
Annuity Funded						
R&E - Annuity Funded	125		49		84	
Corrective	39		186		487	
Other	0		0		0	
Non-direct	46		151		153	
Total Annuity Funded Non-Routine	210	49%	386	89%	724	168%
TOTAL REGULATED EXPENSES	605		709		1,130	
Non-Annuity Funded						
R&E - Non-Annuity Funded	0		0		0	
Non-direct	0		0		0	
Total Non-Annuity Funded	0	n/a	0	n/a	0	n/a
TOTAL EXPENSES	605		709		1,130	