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Annual Network Service Plan

Chinchilla Bulk Supply

April 2013

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Notes

All financial figures in this report 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 convert to nominal dollars multiply by the following factors, which are based on the QCA's assumed inflation rate of 2.5% p.a.

Table 1 – Conversion Factors for Nominal-to-Real Dollars

Year	2013	2014	2015	2016	2017
Conversion Factor	0.952	0.929	0.906	0.884	0.862

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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 operating expenditure (opex) and renewals and enhancements (R&E) expenditure. In particular, the NSPs will cover:

- current year performance for opex and R&E,
- forecast opex and R&E for the approaching year, and
- the long-term outlook for material R&E spend.

This is the first annual NSP that SunWater has produced. Given that it is being published in the first year of the new price path, and the 2013 year is incomplete, there is no actuals data reported in the performance tables. Also, very few options analyses have been completed to date as the annual planning for renewals and enhancements discussed in this NSP was completed just prior to publishing.

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Email: nspfeedback@sunwater.com.au

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

Past¹ and Forecast Performance

The tables in the following sections show the QCA targets with planned water use and spend for the current year and future years. Budgets for future years are based on the current draft budget at the time of consultation and are therefore subject to change.

Water Usage

Table 2 - Water Usage

	WAE	2013 QCA Forecast (ML)	2014 QCA Forecast (ML)
Total	2,871	1,392	1,392

¹ As this is the first year of the 5-year price period, this NSP has the current year and following year figures only; future NSPs will also report on the past year performance against target and budget.

Table 3 – Operating Expenditure

	2013		2014	
	QCA Target (\$'000)	SunWater Budget (\$'000)	QCA Target (\$'000)	SW Draft Budget ² (\$'000)
Operations	53	54	55	62
Preventive Maintenance	12	13	13	12
Corrective Maintenance	9	9	9	8
Electricity	0	0	0	0
Total	74	76	77	82

Operations

The operations budget in 2014 is \$7k above the QCA’s target for 2014 due mostly to insurance premiums rising significantly more than anticipated in the QCA target for insurance.

Preventive Maintenance

Preventive maintenance is budgeted in line with the QCA’s target for 2014.

Corrective Maintenance

Corrective maintenance is budgeted in line with the QCA’s target for 2014.

Electricity

There are no electricity expenses budgeted for this service contract for 2014.

² SunWater draft budget figures as at the time of consultation. Budget figures for the following financial year are not locked down until late in the financial year prior.

Renewals and Enhancements

No R&E annuity expenditure forecast for 2014. Over the full 5-year price period the estimated expenditure is estimated at \$9k above the QCA target.

Table 4 – R&E Expenditure (excl. dam safety & other)

2013		2014		5 year price period (2013-17)	
QCA Target (\$'000)	SunWater Budget (\$'000)	QCA Target (\$'000)	SW Draft Budget (\$'000)	QCA Target (\$'000)	SunWater Estimate ³ (\$'000)
-	48	-	-	88	97

The renewals annuity income has been set by the QCA until the end of the current price path in 2017. SunWater will aim to limit the R&E expenditure to the QCA's targets over the current price path in order to manage the annuity balance to reasonable levels. The impact of the draft budget R&E spend on the annuity balance for 2014 is shown in the following table.

Table 5 – Annuity Balance 2014

2014 Annuity Income (\$'000)	2014 Draft Budget Annuity Spend (\$'000)	Estimated Impact on Annuity Balance (\$'000)
4	-	4

³ Actual figures will replace budget figures in the forecast as each year of the price period is completed. R&E forecasts and estimates are subject to change as planning is refined throughout the price period.

The details for the major projects planned for 2014 are provided below:

Table 6 – R&E Projects 2014

Project Title	Project Scope	2014 Draft Budget (\$'000)
No R&E projects planned for 2014		0
Total		0

DRAFT

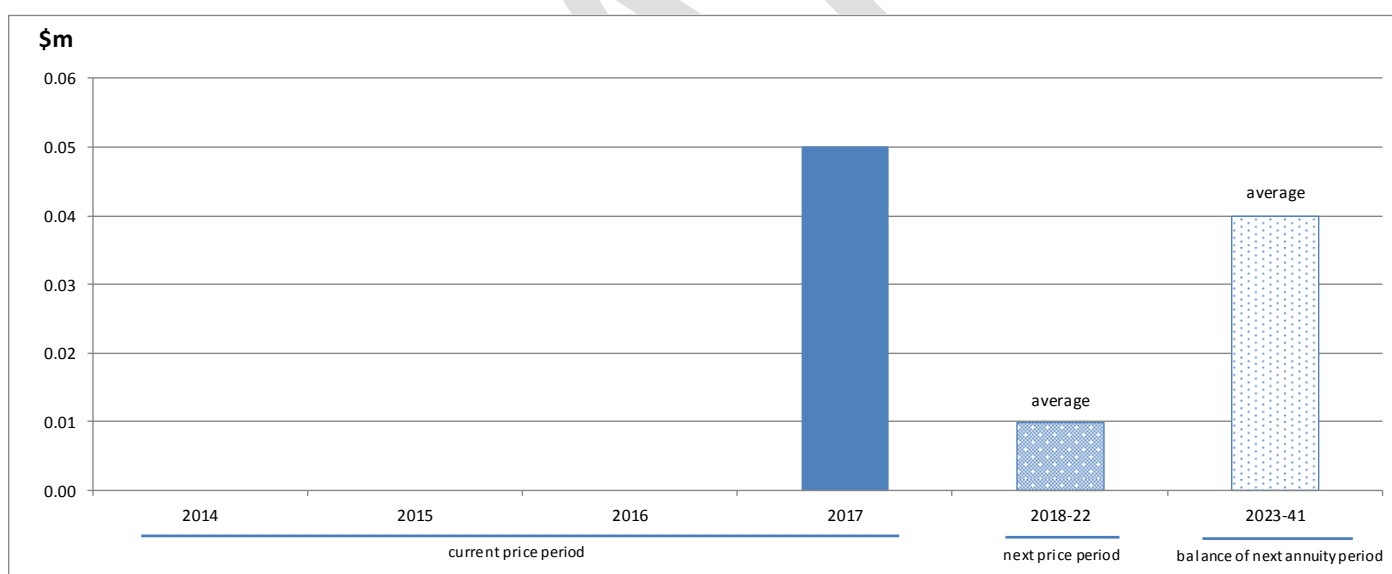
Overview of Renewals and Enhancements 2014-41

SW 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 R&E program, the most recent of which was completed in February 2013. Items requiring immediate maintenance or replacement will be included in the budget for the following year, which was covered in the previous section.

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 R&E. Having an annuity funding arrangement acknowledges that a long-term view of R&E spend is required to ensure adequate funding and to address issues such as inter-generational equity.

The annuity that is calculated over a 20-year planning period; given that the next pricing period ends in 2022, the estimated R&E spend out until 2041 will affect the next pricing review. The estimated R&E expenditure out to 2041 is shown in the chart following.

Figure 1 –R&E Annuity Expenditure 2014-41



All material R&E 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 more detailed options analyses being completed for the 5-year pricing periods than 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 2014-17

5yr Dam Comprehensive Inspection - Chinchilla Weir

Year: 2017

Current estimate: \$39k

Options analysis completed: No

Chinchilla Weir is classed as a major weir with annual inspections and a comprehensive inspection every 5 years. These inspections are undertaken under SunWater policy, therefore, no options analysis will be completed.

This inspection has allowed for internal inspection of the conduit using a dive team to perform the inspection to give certainty on asset condition and to identify any faults or defects which can be planned for repair rather than have unknown sudden failures. Additionally the trashracks can be inspected and so can the seating arrangements for a proposed future bulkhead gate.

This inspection is required under the Act therefore no options analysis is required.

Repair concrete and fill voids on left bank retaining wall - Chinchilla Weir

Year: 2017

Current estimate: \$10k

Options analysis completed: No

It is known that there are voids under the 150mm thick concrete face slabs at Chinchilla Weir. Some of these have been patched and it is hoped that others will be repaired as part of a 2013 project by contractors.

While it is always hopeful that no more voids will appear in the concrete, experience at the site suggests that a number of patches will need to be repaired following the comprehensive inspection

Option 1 – Allow for repair works

Option 2 – Don't allow for repair works, which ignores past experience at the site

The preferred option is option 1 because it is highly unlikely that no repairs will be needed. Options will be further assessed closer to the implementation date.

Material Projects 2018-22

Projects in the R&E plan for 2018-22 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer.

Construct Bulkhead Gate as recommended in study 2008 - Chinchilla Weir

Year: 2018

Current estimate: \$24k

Options analysis completed: No

There is no way to isolate the conduit at Chinchilla Weir. This was recognised in 2007 and a design for a bulkhead gate was prepared and drawings produced, however the gate was never built.

If the hydraulic regulating valves have a problem, then we can currently isolate the valve by using the guard valve. If the guard valve fails however, we have no way of fixing other than by manufacturing and fitting a bulkhead gate. The guard valves are 40 years old.

Option 1 – Check the drawings and manufacture a bulkhead gate

Option 2 – Check the drawings and don't build a gate until we have a problem with the guard valves

Option 3 – Do nothing. This may be an option based on the condition report from the 2017, 5-yearly comprehensive inspection.

5yr Dam Comprehensive Inspection - Chinchilla Weir

Year: 2022

Current estimate: \$41k

Options analysis completed: No

Refer to 2017, 5-yearly comprehensive inspection. This inspection is required under the Act therefore no options analysis is required.

Material Projects 2023-41

Projects in the R&E plan for 2023-41 should be viewed as indicative at this stage and will be refined as the next pricing review draws closer.

Replace Butterfly Valve (Replaces existing Gate Valve) - Chinchilla Weir

Year: 2030

Current estimate: \$98k

Options analysis completed: No

Options analysis will be completed closer to the implementation of this project. Much will depend on the condition of the valves and the anticipated usage of the valves as projected at the time of replacement. Analysis completed prior to the next pricing review will confirm that the optimal estimates for the value and timing of this project.

Replace 840 GATE VALVE - Chinchilla Weir

Year: 2040

Current estimate: \$348k

Options analysis completed: No

Options analysis will be completed closer to the implementation of this project. Much will depend on the condition of the valves and the anticipated usage of the valves as projected at the time of replacement. Analysis completed prior to the next pricing review will confirm that the optimal estimates for the value and timing of this project,

Appendix – Operating Expenditure by Expense Type

Table 7 below shows the operating expenditure for the service contract categorised by expenditure type. Operating expenditure below includes any other non-routine work funded by the annuity.

Table 7 – Expenditure for Activity by Type⁴

	2013		2014	
	QCA Target (\$'000)	SunWater Budget (\$'000)	QCA Target (\$'000)	SW Draft Budget (\$'000)
Operations				
Labour	11	10	11	13
Materials	2	2	2	3
Contractors	5	5	5	2
Other	11	14	12	17
Non-direct	24	23	25	27
Operations Total	53	54	55	62
Preventive				
Labour	4	4	4	4
Materials	0	0	0	0
Contractors	0	0	0	0
Other	0	0	0	0
Non-direct	8	9	9	8
Preventive Total	12	13	13	12
Corrective				
Labour	3	3	3	3
Materials	1	0	1	0
Contractors	0	0	0	0
Other	0	0	0	0
Non-direct	5	6	5	5
Corrective Total	9	9	9	8
Electricity	0	0	0	0
Total Operating Exp.	74	76	77	82
R&E Annuity Funded ⁵	0	48	0	0
Dam Safety and other	0	0	0	0
Grand Total	74	124	77	82

⁴ Nominal dollar figures can be converted to real dollars (\$2011) by dividing by the conversion factors in Table 1.

⁵ R&E and Dam Safety are built up from the same expenditure types shown for opex, including non-directs.