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Annual Network Service Plan

Nogoa Bulk Supply

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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	166,176	118,650	118,650

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	1,883	1,963	1,963	1,738
Preventive Maintenance	264	275	276	201
Corrective Maintenance	196	202	206	180
Electricity	13	14	14	16
Total	2,356	2,454	2,459	2,135

Operations

The operations budget in 2014 is well below the QCA’s target for 2014.

Preventive Maintenance

Preventive maintenance is budgeted well below the QCA’s target for 2014.

Corrective Maintenance

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

Electricity

Electricity costs are budgeted higher than the QCA target in 2014 due to announced increases in electricity prices being much higher than the 12.5% and 7% increases allowed by the QCA in 2013 and 2014. This cost over-run is beyond SunWater’s control and is likely to trigger a within-period cost pass-through application to the QCA.

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.

Flood Damage

There has been significant flood damage incurred to the assets in this service contract. While the cost of the outstanding repairs is not known accurately, it is estimated that repairs will cost in the range of \$180k to \$350k, with the repairs to primarily occur in 2014. A proportion of these costs will be covered by insurance, however the amount to be returned is uncertain and insurance claims of this nature can take years to settle. The difference between the cost of repairs and the insurance returns will be funded from the annuity.

Renewals and Enhancements

R&E annuity expenditure is forecast to be \$641k above target for 2014 and over the full 5-year price period the estimated expenditure is \$417k over 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)
108	715	288	929	2,023	2,440

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)
454	(929)	(475)

Note: the figures in Table 5 do not include any allowance for any flood damage repairs that may be funded from the annuity, as discussed in the flood damage section above.

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)
Refurbish RB Outlet Works (Bullring) - FAIRBAIRN DAM	Modification of the Right Bank Outlet works to eliminate vibration of the structure at flows approaching the increased ROP demand.	185
Relocate water and sewer lines off saddle dam 5 - FAIRBAIRN DAM	Relocate the water and sewer pipes from within the embankment of saddle dam No. 5 to prevent dam failure should a pipe rupture occur.	97
Repair Outlet Gate - TARTRUS WEIR	Replace the outlet penstock gate which has failed and broken away from its foundation bolts resulting in an uncontrolled outflow from the storage.	77
Supplementary 5 Yearly Inspection - FAIRBAIRN DAM	An inspection of the outlet works conduits utilising a CCTV camera which was not available during the last Five Yearly Comprehensive Inspection in July 2012.	50
Test & report on SCADA design & PLC control system performance - FAIRBAIRN DAM WTP	Development of options analysis for SCADA control system renewal / replacement NB: SCADA does not meet current SW design standards.	42
Other minor works		479
Total		929

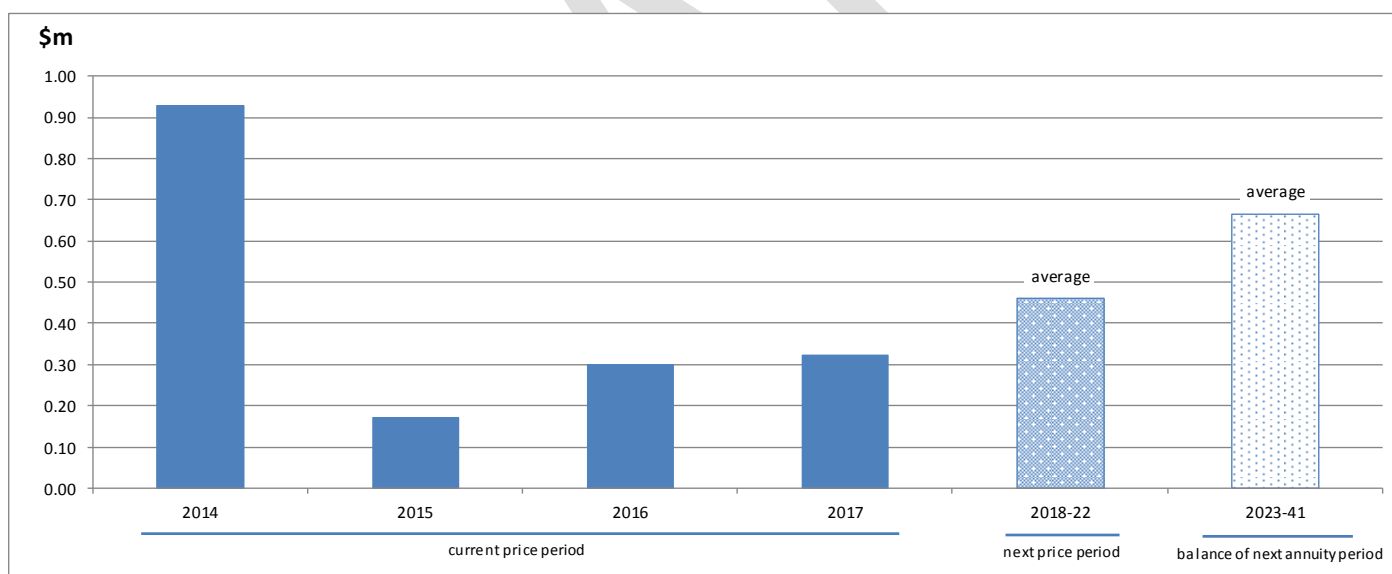
Overview of Renewals and Enhancements 2014-41

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

Refurbish RB Outlet Works Fairbairn Dam (Bullring) - Fairbairn Dam

Year: 2014

Current estimate: \$185k

Options analysis completed: Yes

Modification of the Right Bank Outlet works to eliminate vibration of the structure at flows approaching the ROP requirement of 1200ML/d.

Options considered:

Option 1 – Reconstruct the outer wall to eliminate the upward flow from the riser impacting the wall.

Option 2 - Construct a new outlet conduit with new valves from the plugged end of the existing conduit in order to by-pass the outlet works with a subsidiary flow.

Option 3 - Bore a new vertical riser shaft to reduce the flow velocity.

Option 2 was assessed as the best option and will be implemented in 2014.

Refurbish or Replace Control Equipment - Fairbairn Dam WTP

Year: 2014-16

Current estimate: \$184k

Options analysis completed: No

Complete upgrade control software & renewal of hardware in the SCADA control system for the WTP—Replacement of the SCADA control hardware, PLC and field I/O equipment—Upgrade of control software, PLC and minor replacement of field I/O equipment.

Project scope will be fully developed from the system performance analysis & testing project programmed in 2014. Options analysis to be completed following SCADA performance testing.

Material Projects 2018-22

The evenness in the spread of estimated project costs means there are no projects which exceed the materiality threshold for this service contract for the 2018-22 period.

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 Winch - Fairbairn Dam

Year: 2024

Current estimate: \$898k

Options analysis completed: No

Replace eight winches in the Right Bank Intake tower and the Left Bank Outlet at the termination of their anticipated life span.

Option 1 – Replace all winches on the basis of age.

Option 2 – Replace winches if necessary on the basis of a condition assessment.

The preferred option is option 2 because the winches may be in a good operational condition not requiring replacement. By extending the life of the winches the present value cost to customers is reduced.

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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 estimated flood damage and 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	485	440	505	383
Materials	39	61	41	31
Contractors	67	67	69	115
Other	232	329	236	407
Non-direct	1,060	1,066	1,128	802
Operations Total	1,883	1,963	1,979	1,738
Preventive				
Labour	78	78	80	52
Materials	9	9	10	9
Contractors	7	7	7	31
Other	5	5	5	6
Non-direct	165	176	174	103
Preventive Total	264	275	276	201
Corrective				
Labour	45	63	47	76
Materials	28	218	29	82
Contractors	23	46	24	103
Other	2	2	2	21
Non-direct	98	156	104	158
Corrective Total	196	485	206	440
Electricity	13	14	14	16
Total Operating Exp.	2,356	2,737	2,475	2,395
R&E Annuity Funded ⁵	108	715	288	929
Dam Safety and other	0	0	0	0
Grand Total	2,464	3,452	2,763	3,324

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.