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Annual Network Service Plan

Lower Mary Distribution

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	9,952	4,210	4,210

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	250	230	260	262
Preventive Maintenance	241	249	247	235
Corrective Maintenance	148	160	153	175
Electricity	147	210	157	246
Total	786	849	817	918

Operations

The operations budget in 2014 is in line with the QCA's target.

Preventive Maintenance

Preventive maintenance is budgeted \$12k below the QCA's target for 2014.

Corrective Maintenance

Corrective maintenance is budgeted \$22k above 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.

Renewals and Enhancements

R&E annuity expenditure is forecast well below the target for 2014 and also below the full 5-year price period 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)
-	45	65	19	233	151

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)
452	(19)	433

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 Discharge Valve - OWANYILLA PUMP STATION	Inspect valve internals and replace disc seal on pump #1 and pump #2 discharge valves to rectify leak.	19
Other minor works		0
Total		19

DRAFT

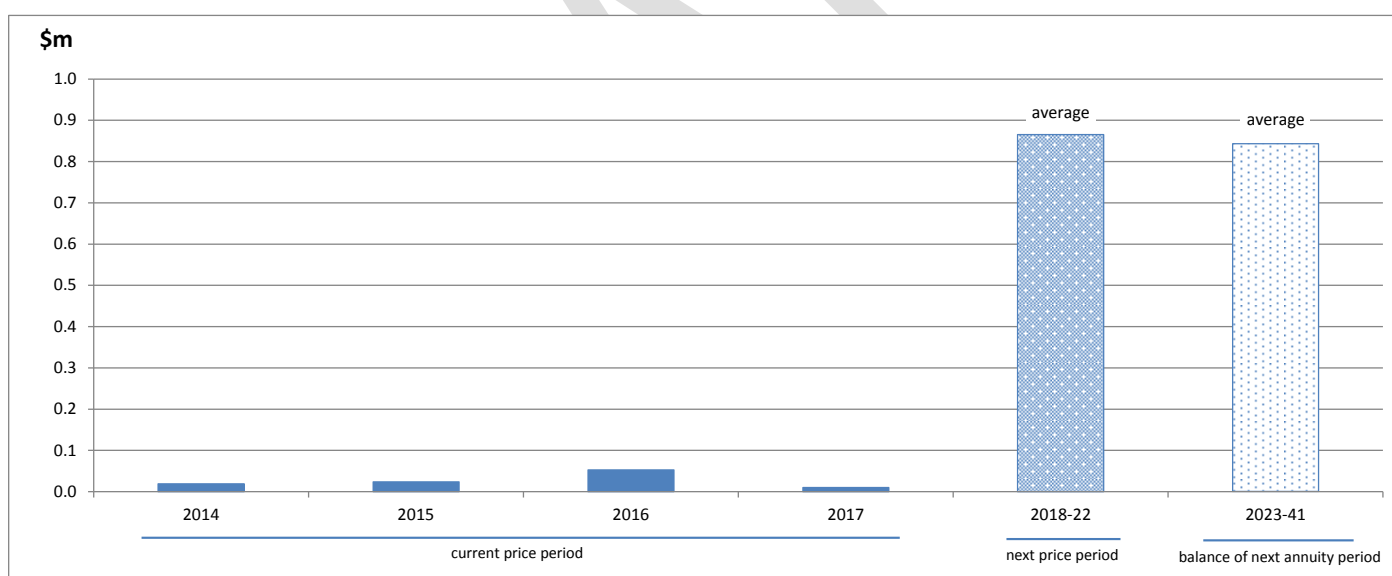
Overview of Renewals and Enhancements 2014-41

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

Refurbish Gate (seals, fixings, actuator) - Owanyilla Diversion Channel

Year: 2015

Current estimate: \$13k

Options analysis completed: No

Refurbishment of Teddington Weir Diversion Pipeline inlet structure control gate. Includes renewal of seals, bearings and actuator overhaul, as required. Planned refurbishment based on asset age and standard low risk asset refurbishment period. Options analysis will be completed prior to implementation.

Replace Flowmeter - Copenhagen Bend Pump Station

Year: 2016

Current estimate: \$35k

Options analysis completed: No

Replace Flowmeter at Copenhagen Bend Pump Station. The existing 'differential pressure type' flowmeter does not meet NWI standards and requires replacement prior to 2016. An approved meter will be installed that will meet current NWI standards and the requirements of Pump Station.

Sunwater Metering Standard AM14:

2.2 ii) All non-compliant meters on river flow control works to irrigation networks of less than 5000ML/year capacity to be replaced with compliant meters by 30 June 2016

SunWater shall only consider types, classes and models of meters that are pattern approved and comply with ATS 4747.

The preferred option is to install an Electromagnetic flowmeter as this is recommended practice for installations up to 400mm diameter. This satisfies the requirements of ATS 4747.

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.

Electrical Component Upgrade - Supply, Implement, Install, Commission - Owanyilla Pump Station

Year: 2019

Current estimate: \$511k

Options analysis completed: No

Inspection of the equipment which is classified by SunWater as 'Major' is essential; to ensure the safety of the electrical equipment, the failure of which would incur a significant cost to SunWater and possible life threatening events downstream. PLC is redundant and no longer supported. Limited spares are available to support the asset to remain in service for any longer than the short term; project could therefore be brought forward. Options analysis will be completed closer to implementation.

Replace Switchboard, High Voltage - Owanyilla Pump Station

Year: 2022

Current estimate: \$1.2m

Options analysis completed: No

Inspection of the equipment which is classified by SunWater as 'Major' is essential; to ensure the safety of the electrical equipment, the failure of which would incur a significant cost to SunWater and possible life threatening events downstream. Replace Switchboard at Dam on the basis that it has reached its end of life. Condition monitor existing switchboard and perform regular scheduled maintenance to ensure service life is maximised. Formal review of condition recommended in 2020 prior to commitment, including an options analysis at this time.

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 Cable - Walker Point Pump Station

Year: 2023

Current estimate: \$1.2m

Options analysis completed: No

Inspection of the cable which is classified by SunWater as 'Major' is essential; to ensure the safety of the cable, the failure of which would incur a significant cost to SunWater and possible life threatening events downstream. Condition assess cables through an ongoing program of electrical testing to monitor ageing and deterioration to better determine replacement timelines. An options analysis will be completed closer to implementation. 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.

Replace Common Control - Owanyilla Pump Station

Year: 2034

Current estimate: \$2.2m

Options analysis completed: No

Inspection of the common control which is classified by SunWater as 'Major' is essential to ensure the safety of the operator and equipment, the failure of which would incur a significant cost to SunWater and possible life threatening events downstream. This item represents the planned life cycle replacement of the common control system; PLC equipment has a life cycle of 15years. An options analysis will be completed closer to implementation.

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 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	73	59	75	62
Materials	0	8	1	3
Contractors	0	0	0	0
Other	50	50	51	87
Non-direct	127	113	133	110
Operations Total	250	230	260	262
Preventive				
Labour	78	78	80	79
Materials	19	19	20	10
Contractors	7	7	7	10
Other	0	0	0	1
Non-direct	137	145	140	135
Preventive Total	241	249	247	235
Corrective				
Labour	41	41	42	53
Materials	33	34	34	27
Contractors	7	7	8	3
Other	0	0	0	1
Non-direct	67	78	69	91
Corrective Total	148	160	153	175
Electricity	147	210	157	246
Total Operating Exp.	786	849	817	918
R&E Annuity Funded ⁵	0	45	65	19
Dam Safety and other	0	0	0	0
Grand Total	786	894	882	937

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.