

**SunWater Limited**  
Level 10, 179 Turbot Street  
PO Box 15536 City East  
Brisbane Queensland 4002  
[www.sunwater.com.au](http://www.sunwater.com.au)  
ACN 131 034 985



# Annual Network Service Plan

## Emerald Distribution

April 2013

## Table of Contents

Introduction .....	4
Past and Forecast Performance .....	4
Water Usage .....	4
Operating Expenditure .....	5
Operations .....	5
Preventive Maintenance .....	5
Corrective Maintenance .....	5
Electricity .....	5
Renewals and Enhancements .....	6
Overview of Renewals and Enhancements 2014-41.....	8
Material Projects 2014-17 .....	9
Replacement/refurbishment of switchyard assets - Selma Pump Station .....	9
Supply, Install, Commission for PLC and SCADA system - Selma Pump Station.....	9
Replace Cable and Cableway - Selma Pump Station .....	9
Material Projects 2018-22 .....	9
Material Projects 2023-41 .....	10
Replace Concrete Lining Selma Main Channel - Selma Irrigation Distribution .....	10
Appendix – Operating Expenditure by Expense Type .....	11

**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**

<b>Year</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Conversion Factor</b>	0.952	0.929	0.906	0.884	0.862

**Disclaimer**

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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.

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 at the following addresses:

Email: [nspfeedback@sunwater.com.au](mailto:nspfeedback@sunwater.com.au)

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

## Past<sup>1</sup> 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	87,317	62,606	62,606

<sup>1</sup> 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 <sup>2</sup> (\$'000)
Operations	876	925	900	881
Preventive Maintenance	611	639	629	658
Corrective Maintenance	286	303	294	287
Electricity	64	131	68	151
Total	1,837	1,998	1,891	1,977

**Operations**

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

**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**

Electricity costs are budgeted higher than the QCA target in 2014 due to Fairbairn dam’s water level dropping to the point where the Selma pumpstation is required earlier than anticipated by the QCA when setting their targets. In addition the 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.

<sup>2</sup> 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 to be \$132k above target for 2014 and over the full 5-year price period the estimated expenditure is \$71k 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 <sup>3</sup> (\$'000)
177	920	246	378	1,733	1,804

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)
647	(378)	269

<sup>3</sup> 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**

<b>Project Title</b>	<b>Project Scope</b>	<b>2014 Draft Budget (\$'000)</b>
Replacement/refurbishment of switchyard assets - SELMA PUMP STATION	This project is to replace the switchyard assets at SELMA pump station complying with current Australian Standard.	215
Documents, Drawings, Specs and Cost Estimate for PLC and SCADA system - SELMA PUMP STATION	This project is to prepare documents, drawings, specs and cost estimate for Installation and commission of PLC and SCADA system for SELMA pump station.	51
Implement recommendations of 2013 fencing audit to comply with PM04 - SYSTEM	This project involves implementing SunWater Public Fencing Policy PM.04 at sites identified and risk assessed during the 2012 Fencing Audit Project, PM.04.	28
Replace Rtu (Fairbairn Dam Right Bank Inlet Tow) - SELMA SCADA	This project is to replace Remote Terminal Unit at SELMA pump station ,Fairbairn Dam right Bank inlet tower	25
Other minor works		59
<b>Total</b>		<b>378</b>

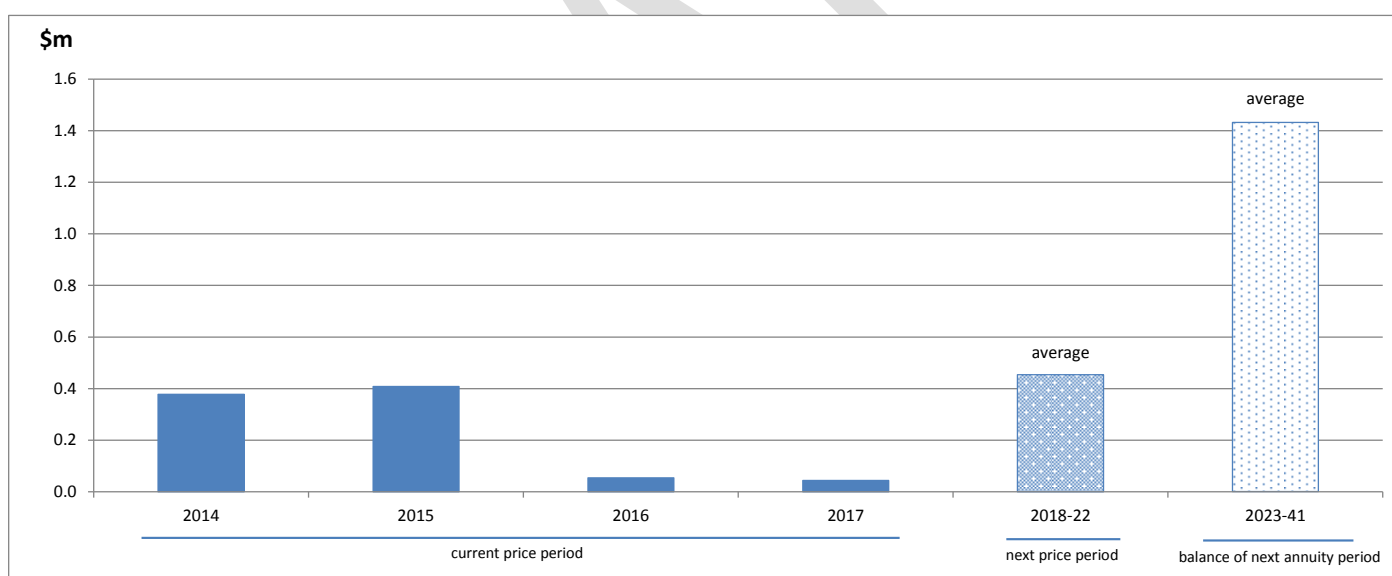
## Overview of Renewals and Enhancements 2014-41

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

### Replacement/refurbishment of switchyard assets - Selma Pump Station

Year: 2014

Current estimate: \$215k

Options analysis completed: No

Existing isolators are unserviceable and can not be repaired. If the isolators are not replaced additional cost is required to establish safe access to high voltage conductors for maintenance work and safety risk is introduced. Options for switchgear selection were reviewed in 2012 and the most cost effective replacement selected. Doing nothing is the only alternative available and this is not an option because of the ongoing safety risks if the isolators are not replaced. Effective and accessible isolation points are required for safe work to be performed.

### Supply, Install, Commission for PLC and SCADA system - Selma Pump Station

Year: 2015

Current estimate: \$178k

Options analysis completed: No

Replacement of the PLC and SCADA system is planned as it is obsolete and no further support will be provided from the vendor.

Option 1 – Replace the computer of SCADA network

Option 2 – run it until failure.

Option 3 – Cancel the project

The preferred option is option 1 because the system has to be run manually by operator for 24/7 before the system is replaced. As spare parts and support from vendor will not be available, it will take sometime to design, procure and install a new system. An options analysis will be completed before implementation however options in this situation are limited.

### Replace Cable and Cableway - Selma Pump Station

Year: 2015

Current estimate: \$103k

Options analysis completed: No

Condition assess cables 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.

## 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 Concrete Lining Selma Main Channel - Selma Irrigation Distribution

Year: 2032

Current estimate: \$7.3m

Options analysis completed: No

This project remains in the renewal profile pending review. SunWater is undertaking a review of all channel lining refurbishment projects following the review by the QCA. This project is notionally the replacement of existing channel concrete lining (NMA-SEL-IRR-SMC-CLC2-CL01) like-for-like at replacement value. Future options analysis will review asset condition for age and refurbishment/replacement options and amend timing and costs as required. This analysis will be undertaken before the next pricing review

Options being considered include:

Option 1 – Run to fail and replace like-for-like

Option 2 – Run to fail and replace with alternate materials

Option 3 – Modified planned refurbishment and service life extension

## 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 Type<sup>4</sup>**

	2013		2014	
	QCA Target (\$'000)	SunWater Budget (\$'000)	QCA Target (\$'000)	SW Draft Budget (\$'000)
<b>Operations</b>				
Labour	281	253	290	231
Materials	16	35	17	18
Contractors	0	0	0	44
Other	109	160	111	183
Non-direct	470	477	482	405
Operations Total	876	925	900	881
<b>Preventive</b>				
Labour	111	111	115	126
Materials	134	134	138	133
Contractors	171	171	176	162
Other	2	2	2	8
Non-direct	193	221	198	229
Preventive Total	611	639	629	658
<b>Corrective</b>				
Labour	66	66	68	59
Materials	44	44	45	48
Contractors	65	65	67	62
Other	0	0	0	11
Non-direct	111	128	114	107
Corrective Total	286	303	294	287
Electricity	64	131	68	151
<b>Total Operating Exp.</b>	<b>1,837</b>	<b>1,998</b>	<b>1,891</b>	<b>1,977</b>
R&E Annuity Funded <sup>5</sup>	177	920	246	378
Dam Safety and other	0	0	0	0
<b>Grand Total</b>	<b>2,014</b>	<b>2,918</b>	<b>2,137</b>	<b>2,355</b>

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

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