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# Annual Network Service Plan

## Lower Fitzroy Bulk Supply

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
Flood Damage .....	6
Renewals and Enhancements .....	6
Overview of Renewals and Enhancements 2014-41 .....	8
Material Projects 2014-17 .....	9
Replace Control Equipment - Eden Bann Weir .....	9
5yr Dam Comprehensive Inspection - Eden Bann Weir .....	9
Material Projects 2018-22 .....	9
Refurbish Metalwork - mesh covers & refurbish 300mm bypass & filling valve - Eden Bann Weir .....	9
Refurbish screens - Eden Bann Weir .....	9
5yr Dam Comprehensive Inspection - Eden Bann Weir .....	10
Material Projects 2023-41 .....	10
Replace Hydraulic System - Eden Bann Weir .....	10
Replace Cables - Eden Bann Weir .....	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**

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

## 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 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](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	3,101	84	84

<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	151	140	158	138
Preventive Maintenance	90	94	94	80
Corrective Maintenance	45	46	46	53
Electricity	1	2	1	2
Total	287	282	299	273

**Operations**

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

**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 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.

## Flood Damage

There has been significant flood damage incurred in the past few years 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 \$60k to \$110k, with the repairs to primarily occur to Eden Bann Weir 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 \$11k above target for 2014 and over the full 5-year price period the estimated expenditure is estimated at \$7k 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 <sup>3</sup> (\$'000)
22	2	25	36	106	182

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)
9	(36)	(27)

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

<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.

**Table 6 – R&E Projects 2014**

<b>Project Title</b>	<b>Project Scope</b>	<b>2014 Draft Budget (\$'000)</b>
Replace Control Equipment - Scoping, Option Analysis, Design - EDEN BANN WEIR	The control computer at Eden Bann Weir is already obsolete and sourcing spare parts will be a problem in future. The scope of this project is to do option analysis to come up with the most suitable upgrading option, produce a scope of work, prepare the design and start the procurement process.	36
Other minor works		0
Total		36

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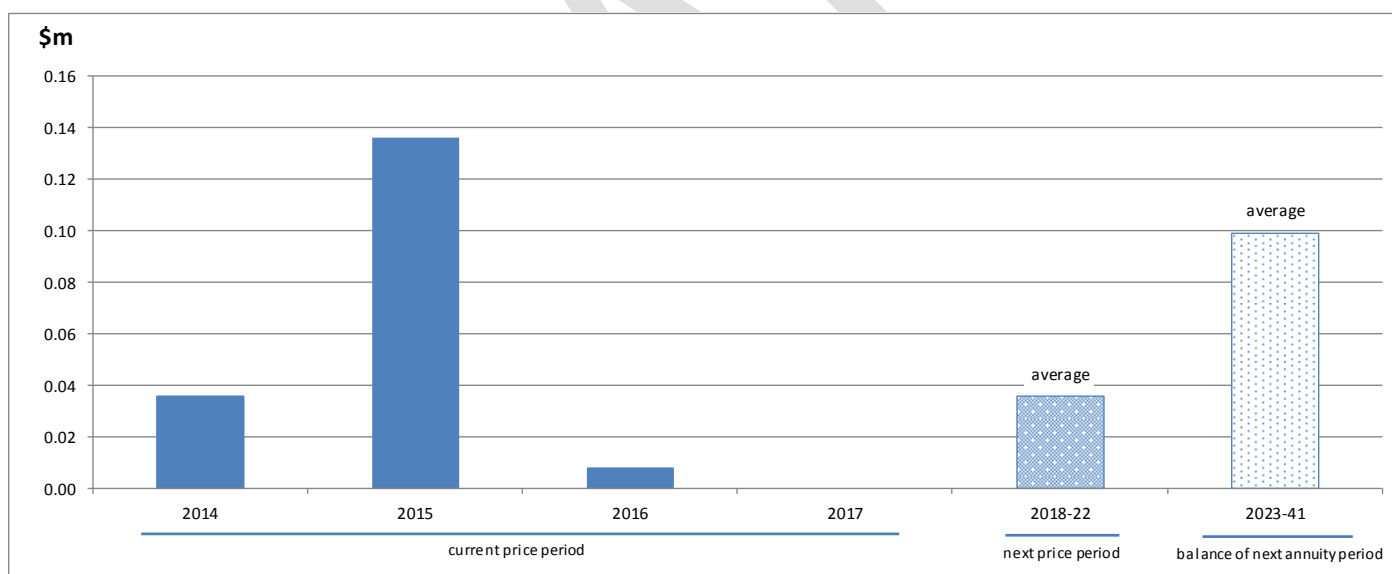
## Overview of Renewals and Enhancements 2014-41

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

### Replace Control Equipment - Eden Bann Weir

Year: 2014-15

Current estimate: \$148k

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 at this stage 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.

### 5yr Dam Comprehensive Inspection - Eden Bann Weir

Year: 2015

Current estimate: \$20k

Options analysis completed: No

Eden Bann Weir is categorised as major weir and SunWater have programs to do comprehensive inspection for major weirs to ensure their safety. Therefore, no options analysis will be completed.

## 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.

### Refurbish Metalwork - mesh covers & refurbish 300mm bypass & filling valve - Eden Bann Weir

Year: 2019

Current estimate: \$49k

Options analysis completed: No

An option analysis will be carried out prior to the job based on time based replacement/renewal strategy. The condition of the metalworks will be updated before carrying out the option analysis.

### Refurbish screens - Eden Bann Weir

Year: 2020

Current estimate: \$35k

Options analysis completed: No

An option analysis will be carried out prior to the replacement of the screens based on time based replacement/renewal strategy. The condition of the screens will be updated before carrying out the option analysis.

## **5yr Dam Comprehensive Inspection - Eden Bann Weir**

Year: 2020

Current estimate: \$23k

Options analysis completed: No

Eden Bann Weir is categorised as major weir and SunWater have programs to do comprehensive inspection for major weirs to ensure their safety. Therefore, no options analysis will be completed.

## **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 Hydraulic System - Eden Bann Weir**

Year: 2023

Current estimate: \$350k

Options analysis completed: No

An option analysis will be carried out prior to the replacement of hydraulic system based on time based replacement/renewal strategy. The condition of the hydraulic system will be updated before carrying out the option analysis.

### **Replace Cables - Eden Bann Weir**

Year: 2031

Current estimate: \$221k

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 cables and cableways based on time based replacement/renewal strategy. The condition of the cables and cableways will be updated before carrying out the option analysis. 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 – 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 Type<sup>4</sup>**

	2013		2014	
	QCA Target (\$'000)	SunWater Budget (\$'000)	QCA Target (\$'000)	SW Draft Budget (\$'000)
<b>Operations</b>				
Labour	42	37	50	36
Materials	0	3	11	4
Contractors	1	1	7	2
Other	15	15	15	26
Non-direct	93	84	109	70
Operations Total	151	140	192	138
<b>Preventive</b>				
Labour	26	26	27	25
Materials	3	3	4	3
Contractors	5	5	5	3
Other	0	0	0	0
Non-direct	56	60	58	49
Preventive Total	90	94	94	80
<b>Corrective</b>				
Labour	11	11	11	23
Materials	7	6	7	40
Contractors	4	4	4	25
Other	0	0	0	2
Non-direct	23	25	24	48
Corrective Total	45	46	46	138
Electricity	1	2	1	2
<b>Total Operating Exp.</b>	<b>287</b>	<b>282</b>	<b>333</b>	<b>358</b>
R&E Annuity Funded <sup>5</sup>	22	2	25	36
Dam Safety and other	0	0	0	0
<b>Grand Total</b>	<b>309</b>	<b>284</b>	<b>358</b>	<b>394</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.