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# Annual Network Service Plan

## Barker Barambah 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**

<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

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**

	<b>WAE</b>	<b>2013 QCA Forecast (ML)</b>	<b>2014 QCA Forecast (ML)</b>
Total	31,361	11,886	11,886

<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	580	570	601	631
Preventive Maintenance	111	119	115	112
Corrective Maintenance	52	55	53	46
Electricity	16	20	17	11
Total	759	764	786	800

**Operations**

The operations budget in 2014 is \$30k above the QCA target due mostly to insurance premiums rising significantly more than anticipated in the QCA targets.

**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 below the QCA target in 2014 due to water deliveries being below the QCA water usage forecast. However, electricity costs are higher on a \$/ML basis due to 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.

## 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 \$20k to \$40k, with 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 \$16k above target for 2014 and over the 5-year price period the estimated expenditure is \$16k 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)
38	23	169	185	345	361

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)
230	(185)	45

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.

<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>
5yr Dam Comprehensive Inspection (by 1 Dec 2013) - BJELKE-PETERSEN DAM	Carry out detailed inspections of the Dam and associated structures. Complete a detailed report on the condition and behaviour of the dam as per regulatory requirements.	90
Reform access road to Outlet building - BJELKE-PETERSEN DAM	Reform and reseal section of road to the outlet works building at Bjelke-Petersen Dam.	35
Refurbish Valve Body, Wafer, Seat and Seals - Redgate Div Pipeline Outlet Valve - REDGATE DIVERSION PIPELINE	This project is to refurbish the valve body, wafer seat and seals of the Redgate Diversion Pipeline based on condition and risk assessment. A condition 4 assessment in 2007 indicated that refurbishment was required.	23
Assess long-term maintenance strategy for Silverleaf Weir - SILVERLEAF WEIR	Carry out an assessment of the long term maintenance strategy for Silverleaf weir	20
Other minor works		17
Total		185

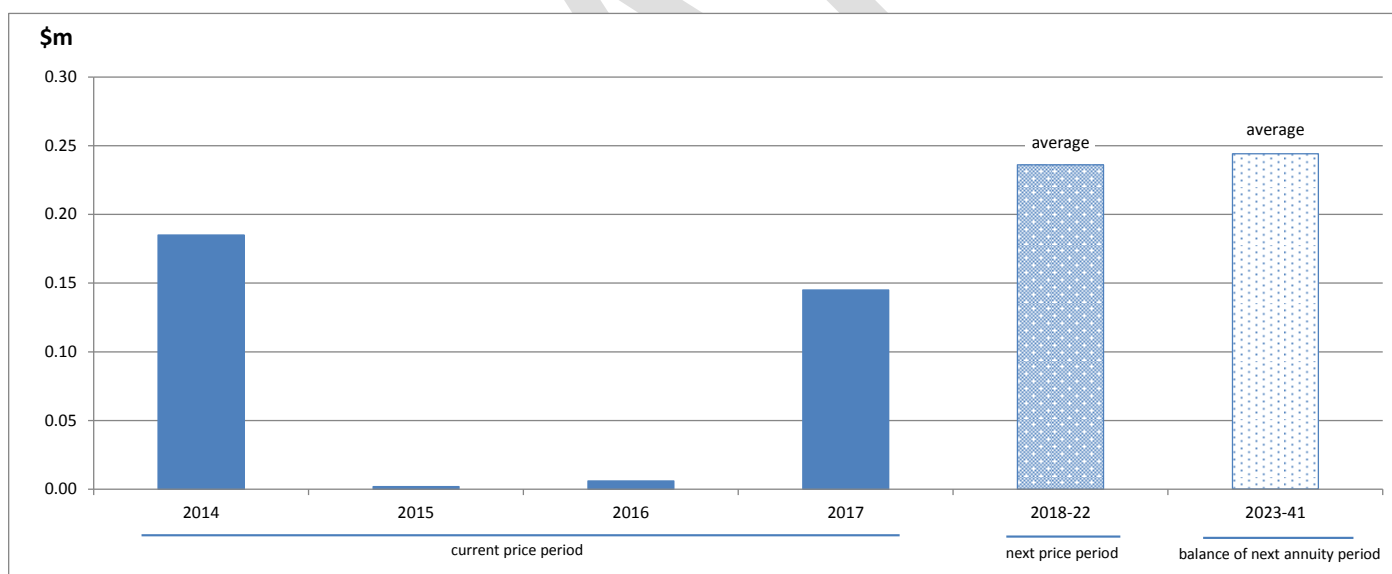
## Overview of Renewals and Enhancements 2014-41

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 - Bjelke-Petersen Dam**

Year: 2014

Current estimate: \$90k

Options analysis completed: No

Carry out detailed inspection of the Dam and associated structures. Complete a detailed report on the condition and behaviour of the dam as per regulatory requirements. Detailed planning of this project is required to ensure that all items requiring inspection/operation are captured. As this item is a regulatory requirement, options analysis will not be performed.

### **Reform access road to OLB (2008DS Rec 8.2a) - Bjelke-Petersen Dam**

Year: 2014

Current estimate: \$35k

Options analysis completed: No

The road section between the council public road and the start of the SunWater sealed section of road requires backfilling potholes and placing road base over the section and grading and profiling the road to shed water towards the drainage systems. The road is to be rolled and then an Amco spray, sealed with C170 bitumen at 2l/m<sup>2</sup> and 16mm pre coated aggregate at 75m<sup>2</sup> per m<sup>3</sup>. Refer Technical scope Hummingbird doc # 923618

### **Abrasive clean trashracks and re-coat with an approved coating (2008 Dam Safety Rec 6.3(a)) - Bjelke-Petersen Dam**

Year: 2017

Current estimate: \$40k

Options analysis completed: No

The 2008 inspection report identified that the trash rack coatings were nearing end of life and require re coating in the near future. This is a dam safety recommendation that must be implemented for SunWater to maintain its Certificate-of-Operation. Options analysis will be completed 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.

### **Manufacture and install new inlet structure from design in 2009 - Silverleaf Weir**

Year: 2018

Current estimate: \$388k

Options analysis completed: No

Manufacture and install new inlet structure as per the approved 2009 design. Options analysis will be completed closer to the implementation date.

### **Replace Cables & Cableways - design, procure - Bjelke-Petersen Dam**

Year: 2022

Current estimate: \$191k

Options analysis completed: No

Replace cables and cableways at Dam on the basis that it has reached its end of life. 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 Switchboard: Design, Procure - Bjelke-Petersen Dam**

Year: 2022

Current estimate: \$146k

Options analysis completed: No

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**

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 2023-41 period.

## 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 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	133	120	137	138
Materials	6	13	6	9
Contractors	42	42	43	23
Other	117	116	119	184
Non-direct	282	279	296	277
Operations Total	580	570	601	631
<b>Preventive</b>				
Labour	34	34	35	37
Materials	6	6	6	2
Contractors	2	2	2	2
Other	0	0	0	0
Non-direct	69	77	72	71
Preventive Total	111	119	115	112
<b>Corrective</b>				
Labour	14	14	14	16
Materials	7	7	7	23
Contractors	3	3	3	2
Other	0	0	0	2
Non-direct	28	31	29	32
Corrective Total	52	55	53	75
Electricity	16	20	17	11
<b>Total Operating Exp.</b>	<b>759</b>	<b>764</b>	<b>786</b>	<b>829</b>
R&E Annuity Funded	38	23	169	185
Dam Safety and other	0	0	0	0
<b>Grand Total</b>	<b>797</b>	<b>787</b>	<b>955</b>	<b>1,014</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.