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# 2013 Annual Performance Report

## Burdekin Distribution

October 2013

## Table of Contents

Introduction .....	4
Water Usage .....	4
Revenue .....	5
Routine Expenditure .....	6
Operations .....	6
Preventive Maintenance .....	6
Corrective Maintenance .....	7
Electricity .....	8
Non-Routine Expenditure .....	9
R&E – Annuity Funded .....	9
Corrective Maintenance .....	10
Other .....	10
R&E – Non Annuity .....	10
Annuity Balance .....	11
Appendix –Total Expenditure by Expense Type .....	12

## 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 the QCA report real dollars to nominal dollars, multiply by the following factors; these are based on the QCA's assumed inflation rate of 2.5% p.a.

**Table 1 – Conversion Factors for real \$2011 to Nominal Dollars**

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Conversion Factor	1.051	1.077	1.104	1.131	1.160

## 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. SunWater has decided to also produce this annual Performance Report to show how SunWater performed against the QCA targets for the year just completed.

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

## Water Usage

**Table 2 - Water Usage**

	<b>No. of Customers</b>	<b>Water Entitlements ML</b>	<b>Available Water ML</b>	<b>Available Water %</b>	<b>Water deliveries ML</b>	<b>Water deliveries % of entitlement</b>	<b>Water deliveries % of available</b>
Industrial		550	534	97%	532	97%	100%
Irrigation		320,288	312,680	98%	198,206	62%	63%
Urban		10,000	10,053	101%	916	9%	9%
Other		8	8	100%	1	13%	13%
SunWater		206,737	206,737	100%	108,934	53%	53%
<b>Total</b>	<b>312</b>	<b>537,583</b>	<b>530,012</b>	<b>99%</b>	<b>308,589</b>	<b>57%</b>	<b>58%</b>

QCA Assumed Water Usage for Irrigation 77.6%

QCA Assumed Water Usage for Total 76.3%

## Revenue

Revenue has been included in the distribution Performance Reports to assist the LMA process.

**Table 3 – Revenue**

	<b>2013 SunWater Actual \$'000</b>
Irrigation Revenue*	10,891
Channel Harvesting*	485
Drainage Diversion Charges	2
Irrigation CSO	3,645
Industrial and Urban*	602
Drainage Services	638
Other Revenue	12
<b>Total Revenue</b>	<b>16,275</b>

\* Bulk water charges have not been unbundled  
i.e. a portion of this revenue is attributable to  
the Bulk service contract.

## Routine Expenditure

**Table 4 – Routine Operating Expenditure**

	<b>2013 SunWater Actual</b>	<b>%of 2013 Target</b>	<b>2013-17 to date Actual</b>	<b>%of 2013-17 Target</b>	<b>2013-17 QCA Target</b>
	\$'000	%	\$'000	%	\$'000
Operations (Excl. Elect.)	4,431	101%	4,431	19%	22,786
Preventative	2,724	82%	2,724	16%	17,381
Corrective	3,054	207%	3,054	40%	7,699
Electricity	4,299	94%	4,299	16%	26,442
<b>Total Routine Expenses</b>	<b>14,508</b>	<b>105%</b>	<b>14,508</b>	<b>20%</b>	<b>74,308</b>

### Operations

Operation activities include the day-to-day costs of the administration and management of the scheme, water delivery and meeting compliance obligations. Specific activities include the direct and non-direct cost of<sup>1</sup>:

- Schedule and deliver water including processing water orders, releasing water, operating pump stations, regulation and monitoring of channel flows and monitoring of customer deliveries;
- Emergency response for channel overflows and other emergency events;
- Meter Reading;
- Administration of water accounts, billing and receipting payments;
- Customer management including enquiries and complaints and maintaining the customer service help desk ;
- Scheme management including licences and permits, rates, land management, planning and reporting;
- Insurance
- Monitoring the security of channel infrastructure and unauthorised access and trespass; and
- Manage public relations associated with the scheme.

The operations expenditure in 2013 was only \$33k, or 1%, above the QCA target. The major exceptions and highlights with operation activities for the year included:

- Insurance costs is \$153k higher than budget.
- Local Authority rates is \$33k higher than budget.

### Preventive Maintenance

Preventive maintenance is maintaining the ongoing operational performance and service capacity of physical assets to designed standard. Preventive maintenance is cyclical in nature with a typical interval of 12 months or less. Preventive maintenance activities are based on the updated work instructions developed for operating the scheme and include an estimate of the resources required to implement that scope of work. Preventive maintenance includes<sup>1</sup>:

- Condition monitoring: The inspection, testing or measurement of physical assets to report and record its condition and performance for determination of maintenance requirements. Condition monitoring is carried out on electrical, mechanical and civil assets including pump stations (pumps, electrical motors, valves, switchboards and associated

<sup>1</sup> Activities listed will not apply to all service contracts.

equipment), channels (regulator gates, civil works, signs, structures, etc.), Drains (civil works, structures etc.), pipelines (valves, air valves, scours easements etc.) and other infrastructure;

- Servicing: Planned maintenance activities normally expected to be carried out routinely on physical assets including valves, cranes, sump pumps and associated equipment; and
- Weed control: which includes the following activities:
  - Slashing channels and drains
  - Acrolein treatment of channels
  - Spraying and other activities to control operational and noxious weeds within channel and drainage reserves.

Preventive maintenance was \$588k below the QCA's target. The major exceptions and highlights with preventive maintenance activities for the year included:

- Wet weather during the first 6 months precluded regular preventive works.
- Higher than expected corrective maintenance meant that less preventive maintenance was performed than originally forecast.
- Some emergency mechanical weed control was performed as corrective to ensure continued supply during a high demand period.

## Corrective Maintenance

Corrective maintenance includes activities to correct unexpected failures or to return an asset to an acceptable level of performance or condition. While these are difficult to forecast with accuracy, history has shown that such events can be expected and need to be factored into expenditure forecasts. Forecasts include provision for labour, materials and plant hire.

The corrective maintenance forecast does not include any costs of damage arising from major unexpected events, such as floods. These costs are categorised as non-routine corrective maintenance which is discussed in the following section.

There are two types of corrective maintenance – scheduled and emergency<sup>2</sup>:

- Scheduled corrective maintenance (maintenance that can be planned and scheduled)
  - Channels
    - De-silting of channels and catch drains
    - Erosion control and repair of rock protection works
    - Repair of fencing
    - Repair of concrete structures
    - Repair regulator gates and control valves etc.
  - Drains
    - De-silting of drains
    - Erosion control and repair of rock protection works
    - Repair of fencing
    - Repair of concrete structures
  - Pipelines
    - Repair of air valves, scour valves etc.
    - Erosion control and repair of rock protection works
    - Repair of concrete structures
  - Scheme Roads
    - Repair of pot holes
    - Grade roads
    - Repair, replace and paint guide posts and signs

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<sup>2</sup> Activities listed will not apply to all service contracts.

- Pump stations
  - Repair pumps and motors
  - De-silt intake structures
  - Repair concrete structure
  - Repair control building
- Storages (balancing storages and reservoirs)
  - Repair of control gates and valves
  - Repair walls, embankments and spillways
  - Repair of concrete structures
- Meters
  - Repair bulk water meters
  - Repair customer meters
- Emergency maintenance is maintenance that has to be carried out immediately to restore normal operation or supply to customers or to meet a regulatory obligation (e.g. rectify a safety hazard). Emergency maintenance includes:
  - Repair or correction of pump station faults
  - Repair or correction of channel faults
  - Repair or correction of pipeline faults
  - Response to theft or vandalism associated with scheme assets

Corrective maintenance was \$1,582k above the QCA's target for 2013. The major exceptions and highlights with corrective maintenance activities for the year included:

- Millaroo A and Dalbeg A had catastrophic pump failures. Millaroo A had a mechanical seal failure which led to a complete pump overhaul. Dalbeg had a PLC failure which caused the pump to run dry.
- SCADA corrective works with respect to the channel regulator gates.
- Patch repairs to concrete lined channels in Clare and Millaroo during shutdowns.
- Mechanical weed removal throughout the channel system and de-silting of channels.
- Rectification of reported hazards and access points at regulator gates.

## **Electricity**

Electricity costs were \$280k below the QCA target in 2013 primarily due to reduced water deliveries which also means reduced revenue from the variable tariff to cover these costs. The higher than allowed increases in electricity prices means that the Part B charge allowance does not recover the full cost of electricity.



## Non-Routine Expenditure

SunWater 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 renewals program, the most recent of which was completed in February 2013; items requiring immediate maintenance or replacement are included in the budget for the following year.

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 renewals. Having an annuity funding arrangement acknowledges that a long-term view of renewals spend is required to ensure adequate funding and to address issues such as inter-generational equity.

The QCA targets were set against an estimated program of works from the 2010-11 year. While this was the best estimate of expected work at the time, there has been significant project churn in the three years since this estimate was made. This can mean that, in some cases, the QCA's funding allowance for renewals work does not cover the total expenditure required to maintain asset condition to the required standard. In addition, there are unexpected events, such as floods, that are not allowed for in the QCA's annuity funding allowance. Notwithstanding these points, SunWater aims to limit renewals expenditure to the QCA's targets over the 2013-17 price path in order to manage the annuity balance to reasonable levels.

**Table 5 – Non-Routine Expenditure**

	<b>2013 SunWater Actual</b>	<b>% of 2013-17 Target</b>	<b>2013-17 to date Actual</b>	<b>% of 2013-17 Target</b>	<b>2013-17 QCA Target</b>
	\$'000	%	\$'000	%	\$'000
<b>Annuity Funded</b>					
R&E - Annuity Funded	1,216		1,216		4,801
Corrective	0		0		0
Other	0		0		90
Non-direct	351		351		2,335
<b>Annuity Funded Total</b>	<b>1,568</b>	<b>22%</b>	<b>1,568</b>	<b>22%</b>	<b>7,226</b>
<b>Non-Annuity Funded</b>					
R&E - Non-Annuity Funded	194		194		n/a
Non-direct	63		63		n/a
<b>Total Non-Annuity Funded</b>	<b>257</b>		<b>257</b>		<b>n/a</b>

### R&E – Annuity Funded

The annuity funded R&E direct spend was \$1,216k. Projects undertaken included:

- Projects to refurbish pump 2 (\$362K including non-directs) and valves (\$98k including non-directs) at the Haughton Pump Station were carried over for completion from the previous year. Further internal works were required on pump and valves than allowed for in the initial scope.

- Project to Refurbish Intake 1&2 at the Haughton Pump Station carried over from previous year in conjunction with pump refurbishment (\$278k including non-direct). This work was required to ensure a positive isolation of the pump station to enable pump disassembly.
- WH&S issue highlighted that the crane at the Millaroo pump station was potentially working beyond Safe Working Limit. Upgraded crane to 5t capacity (\$40k including non-direct).
- Dalbeg A SCADA upgrades (\$63k including non-direct). Replace safety screens and guides HMC - This project was included due to asset condition: screen corrosion and WHS issues. The screens have substantial corrosion or damage and require intervention to achieve the required service life.
- Replace radios and RTU's HMC - This project is part of a continuing program of regulator gate control gear replacements. The existing fleet of radios and RTU's are at the end of their serviceable life and the units are no longer available. The risks associated with failure in service are reduced as more sites are converted and the replaced item's used as spares.
- Replacement of meter HH065R1 – The flow meter was struck by heavy plant and was upgraded in accordance with AS 4747 and SunWater Standard AM.14.
- Installation of new meter for Clare B8/1 Lot 222 - 2 Dethridge wheel meter offtakes; at the end of their service life and performing poorly due to sill heights. A new single offtake was designed and constructed in accordance with AS 4747 and SunWater Standard AM.14. The second offtake was decommissioned.
- Re-profile Barratta Main Channel 5.1K to 32.4K – The earth channel requires periodic desilting and re-profiling to remove sediment and aquatic weed growth. This helps ensure that design flow capacity is maintained in accordance with the BHWSS Service Targets. This project was not programmed for 2012/13.
- Installation of Remote Vibration Monitoring equipment – Tom Fenwick PSTN1, 2, 3 and interfacing with PLC control system. This project ensures that vibration of pumps in pump station can be monitored remotely and data can be saved for analysis. An additional alarm facility increases the safety of pump. This will reduce the risk associated with failure of pump due excessive vibration and reduce downtime and maintenance costs in long run. Project is still under progress. (Total Cost for 3 Pump station :- \$206k)

At this stage SunWater expects to contain costs over the five years of the regulatory period in line with the QCA target.

### **Corrective Maintenance**

There was no expenditure categorised as “Annuity-funded Corrective” in 2013.

### **Other**

There was no expenditure categorised as “Annuity-funded Other” in 2013.

### **R&E – Non Annuity**

The Non-annuity funded R&E direct spend included:

- Burdekin Rising Groundwater Mitigation Project – Dividend Reinvestment Program - The major field work, analysis and reporting components of the project were undertaken in the 2012/13 FY. The project was completed in April 2013 with a ‘Position paper’ report and associated geo-electric survey, pondage and water balance analysis.
- Modify BM140 Metered Offtake - Customer funded project to modify delivery line and installed new meter on Barratta Main Channel.

## Annuity Balance

The 2013 annuity balance is shown below.

**Table 6 – Annuity Balance**

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>	(5,918)	(5,440)			
<b>Annuity Income</b>	2,489	2,731	2,829	2,960	3,084
<b>Actual Spend</b>	(1,568)				
<b>Interest</b>	(443)				
<b>Closing Balance</b>	(5,440)				

## Appendix – Total Expenditure by Expense Type

Table 7 – Expenditure for Activity by Type

	2013 SunWater Actual \$'000	% of 2013 Target %	2013-17 to date Actual \$'000	% of 2013-17 Target %	2013-17 QCA Target \$'000
<b>ROUTINE EXPENSES</b>					
<b>Operations</b>					
Labour	1,192		1,192		6,766
Materials	39		39		283
Contractors	0		0		114
Other	1,187		1,187		4,870
Non-direct	2,014		2,014		10,753
<b>Operations Total</b>	<b>4,431</b>	<b>101%</b>	<b>4,431</b>	<b>19%</b>	<b>22,786</b>
<b>Preventative</b>					
Labour	513		513		3,542
Materials	673		673		3,149
Contractors	612		612		5,018
Other	23		23		0
Non-direct	903		903		5,672
<b>Preventative Total</b>	<b>2,724</b>	<b>82%</b>	<b>2,724</b>	<b>16%</b>	<b>17,381</b>
<b>Corrective</b>					
Labour	565		565		1,995
Materials	308		308		2,207
Contractors	713		713		393
Other	465		465		15
Non-direct	1,004		1,004		3,088
<b>Corrective Total</b>	<b>3,054</b>	<b>207%</b>	<b>3,054</b>	<b>40%</b>	<b>7,699</b>
<b>Electricity</b>	<b>4,299</b>	<b>94%</b>	<b>4,299</b>	<b>16%</b>	<b>26,442</b>
<b>Total Routine Expenses</b>	<b>14,508</b>	<b>105%</b>	<b>14,508</b>	<b>20%</b>	<b>74,308</b>
<b>NON-ROUTINE EXPENSES</b>					
<b>Annuity Funded</b>					
R&E - Annuity Funded	1,216		1,216		4,801
Corrective	0		0		0
Other	0		0		90
Non-direct	351		351		2,335
<b>Total Annuity Funded Non-Routine</b>	<b>1,568</b>	<b>22%</b>	<b>1,568</b>	<b>22%</b>	<b>7,226</b>
<b>TOTAL REGULATED EXPENSES</b>	<b>16,076</b>		<b>16,076</b>		<b>81,534</b>
<b>Non-Annuity Funded</b>					
R&E - Non-Annuity Funded	194		194		n/a
Non-direct	63		63		n/a
<b>Total Non-Annuity Funded</b>	<b>257</b>		<b>257</b>		<b>n/a</b>
<b>TOTAL EXPENSES</b>	<b>16,333</b>		<b>16,333</b>		<b>n/a</b>