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2014 Annual Performance Report

Burdekin Distribution

October 2014

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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 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

	2013	2014	2015	2016	2017
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 annual Performance Reports such as this report to show how SunWater has 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

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

Water Usage

Table 2 – 2014 Water Usage

	No. of Customers	Water Entitlements ML	Available Water ML	Available Water %	Water deliveries ML	Water deliveries % of entitlement	Water deliveries % of available
Industrial		550	550	100%	566	103%	103%
Irrigation		318,894	400,000	125%	269,157	84%	67%
Urban		10,000	10,549	105%	869	9%	8%
Other		8	8	100%	0	0%	0%
SunWater		206,737	206,737	100%	173,757	84%	84%
Total	312	536,189	617,844	115%	444,349	83%	72%

QCA Assumed Water Usage for Irrigation 77.6%

QCA Assumed Water Usage for Total 76.3%

Table 3 – Revenue

	2013	2014	2015
	SunWater	SunWater	SunWater
	Actual	Actual	Budget
	\$'000	\$'000	\$'000
Irrigation Revenue*	11,378	14,091	15,685
Drainage	638	660	638
Irrigation CSO	3,645	3,015	2,412
Industrial and Urban*	602	635	621
Other Revenue	12	99	9
Total Revenue	16,275	18,501	19,364

* Bulk water charges have not been unbundled from Distribution charges therefore a portion of the Distribution revenue is attributable to the Bulk service contract.

Routine Expenditure

Table 4 – Routine Operating Expenditure

	2013 SunWater Actual	% of 2013 Target	2014 SunWater Actual	% of 2014 Target	2015 SunWater Budget	% of 2015 Target
	\$'000	%	\$'000	%	\$'000	%
Operations (Excl. Elect.)	4,431	101%	4,718	105%	5,094	111%
Preventative	2,724	82%	3,007	88%	3,435	98%
Corrective	3,054	207%	2,322	153%	2,134	137%
Electricity	4,299	94%	5,809	119%	5,809	111%
Total Routine Expenses	14,508	105%	15,856	111%	16,472	111%

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 of¹:

- Scheduling and delivering water, including processing water orders, releasing water, operating pump stations, regulation and monitoring of channel flows and monitoring of customer deliveries;
- Emergency responses for channel overflows and other emergency events;
- Meter reading;
- Administration of water accounts, billing, and receipting payments;
- Customer management, including enquiries, 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 infrastructure and unauthorised access and trespass; and
- Managing public relations associated with the scheme.

The operations expenditure in 2014 was \$208k, or 5%, above the QCA target. The major exceptions and highlights with operation activities for the year included:

- Labour costs \$124k higher than budget due to greater than average irrigation demand, increased surveillance and weed management costs; and
- Insurance costs \$344k above the QCA target.

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 includes¹:

- 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 equipment), channels (regulator gates, civil works, signs, structures, etc.), drains (civil works, structures etc.), pipelines

¹ Activities listed will not apply to all service contracts.

(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; and
 - Spraying and other activities to control operational and noxious weeds within channel and drainage reserves.

Preventive maintenance for 2014 was \$402k below the QCA's target. The major exceptions and highlights with preventive maintenance activities for the year included:

- Higher than expected corrective maintenance meant that less preventive maintenance was performed than originally forecast;
- Some emergency mechanical weed control performed as corrective to ensure continued supply during a high demand period; and
- Some preventative activities not able to be undertaken due to the higher asset utilisation attributed to a higher than average water demand year.

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 emergency²:

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

² Activities listed will not apply to all service contracts.

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

Corrective maintenance was \$807k above the QCA's target for 2014. The major exceptions and highlights with corrective maintenance activities for the year included:

- Generally higher internal labour costs associated with aquatic weed control over the extended peak irrigation period;
- Higher levels of contractor engagement and plant hire associated with weed management activities;
- Engagement of divers to inspect and remove debris from all BHWSS pump station intakes;
- A higher number of WHS related corrective repairs from SunWater's closer scrutiny of workplace hazards;
- Greater emphasis on customer and bulk water meter repairs and maintenance, materials and replacement parts;
- Extensive concrete lining repairs through Millaroo Main Channel in particular; and
- Concrete regulating structural repairs throughout the 'Old Area' Main Channels resulting from the extended peak irrigation periods.

Electricity

Electricity costs were \$927k above the QCA target in 2014 primarily due to much higher water deliveries in this service contract and also because electricity price increases have been much higher than the increases allowed for by the QCA. All BHWSS scheme deliveries are pumped and electricity will remain directly linked to water demands. Electricity costs will therefore vary from year-to-year and in 2014 represents around 36% of total routine costs. SunWater continues to review tariffs each year to identify the best tariffs for the expected future operations.

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 2014; 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.

At this stage, it is expected that the renewals spend for 2013-17 will exceed the QCA's five-year target. This variance is primarily due to the inclusion of the Variable Speed Drive project at Tom Fenwick pump stations, which will only proceed if there is an overwhelmingly positive business case which has the support of customers.

Table 5 – Non-Routine Expenditure

	2013 SunWater Actual	% of 2013-17 Target	2014 SunWater Actual	% of 2013-17 Target	2015 SunWater Budget	% of 2013-17 Target
	\$'000	%	\$'000	%	\$'000	%
Annuity Funded						
R&E - Annuity Funded	1,216		802		2,607	
Corrective	0		0		0	
Other	0		4		0	
Non-direct	351		363		378	
Annuity Funded Total	1,568	22%	1,169	16%	2,985	41%
Non-Annuity Funded						
R&E - Non-Annuity Funded	194		104		0	
Non-direct	63		40		0	
Total Non-Annuity Funded	257	n/a	144	n/a	0	n/a

R&E – Annuity Funded

The annuity funded R&E direct spend was \$802k. Projects undertaken included:

- Replace Gate/Electrical Ctrl Equipment - Burdekin - Haughton — \$156k³ was spent in 2014. This project is part of a continuing programme of regulator gate, radio and RTU replacements. The existing fleet of radios & RTUs are at the end of their serviceable life and the existing models are no longer available. The new equipment will upgrade regulator gate SCADA communications to ensure forward compatibility with recently installed repeaters, manufacturer support of the hardware and improved channel regulation and reliability.
- Replace Control System including PLC & Install Remote Vibration Monitoring Equipment - Tom Fenwick Pump Station 1, 2 & 3 — \$395k was spent in 2014 to upgrade the Vibration Monitoring Equipment at Tom Fenwick pump station 1 to provide continuous real time monitoring of SPM (Shock Pulse Measurement Bearing Condition) and Vibration data within the pumps and motors. There were no previous warning signals, only switches which tripped at predetermined thresholds. The options analysis for the replacement of the control system recommended upgraded vibration monitoring.
- Replace Safety Screens & Guides - Haughton Section — \$89k was spent in 2014 to replace safety screens along Haughton Main Channel. The screens were replaced due to poor condition (screen corrosion) and WHS issues. Each of the screens had reached the end of their serviceable life. Engineering design and drawings were completed in 2013.
- Construct Public Safety Fencing - Clare — \$79k was spent in 2014 to install the public safety fencing required as per SunWater Policy PM04. An audit of compliance in 2012 identified new sites and existing sites requiring modification to comply with the policy.
- Replace Radios Barratta System — \$52k was spent in 2014. This project is part of a continuing programme of regulator gate radio & RTU replacements. The existing fleet of radios & RTUs are at the end of their serviceable life and the existing models are no longer available. The new equipment will upgrade regulator gate SCADA communications to ensure forward compatibility with recently installed repeaters, manufacturer support of the hardware and improved channel regulation and reliability.
- REFURBISH PUN2 PUMP - DALBEG PUMP STATION B — \$47k was spent in 2014 to restore the submersible pump motor to service, improve reliability and improve safety. The pump was damaged during a flood event in 2013 and, following disassembly, it was determined that the motor required refurbishment.
- Options Study: Replace SCADA + Control System - Burdekin Dist (P&P Project) — \$40k was spent in 2014 to conduct a detailed options analysis and cost estimate for reinstatement of the required functionality and replacement of PLC and SCADA control systems at Burdekin Distribution Pump Stations. A consultant was engaged to consider existing and future operational demand and compliance with SunWater and Australian Standards. SunWater reviewed the reports and completed a detailed options analysis.
- Refurbish PUN2 Pump - Clare Pump Station — \$32k was spent in 2014 to refurbish the pump unit to extend the operating life, increase reliability, and restore it to near optimal operating efficiency and performance. Refurbishment of the pump was recommended after mechanical seal failure was identified during routine servicing and inspection.
- Refurbish Pump & Motor - PUN1 - Millaroo Pump Station A — \$31k was spent in 2014 to refurbish the electric motor and pump to extend the operating life, increase reliability, and restore it to near optimal operating efficiency and performance. The pump and motor were assessed to be in poor condition in 2010 and this refurbishment aligns with Whole of Life maintenance intervals.
- Replace SCADA & PLC- Dalbeg A Pump Station — \$20k was spent in 2014 to upgrade the existing obsolete PLC. The majority of the work was completed in 2013 FY however the project carried over into 2014. During commissioning on-going reliability issues were resolved and as-built drawings developed for the on-going maintenance and operation of the system.

Corrective Maintenance

There was no expenditure categorised as “Corrective Maintenance” in 2014.

³ Individual project expenditures include non-directs.

Other

There was no expenditure categorised as “Annuity-funded Other” in 2014.

R&E – Non Annuity

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

- Metered Offtake at 12650m EMC - Design and Drafting Services Stage I - Construction Stage 2 — \$132k was spent in 2014 to design and construct a new metered offtake. This project was customer funded.

Annuity Balance

The 2014 annuity balance is shown below.

Table 6 – Annuity Balance

	2013	2014	2015*	2016	2017
	\$'000	\$'000	\$'000	\$'000	\$'000
Opening Balance	(5,918)	(5,440)	(4,285)		
Annuity Income	2,489	2,731	2,829	2,960	3,084
Spend	(1,568)	(1,169)	(2,985)		
Interest	(443)	(407)	(321)		
Closing Balance	(5,440)	(4,285)	(4,763)		

* 2015 figures are subject to change once actual spend is known.

Appendix – Total Expenditure by Expense Type

Table 7 – Expenditure for Activity by Type

	2013 SunWater Actual \$'000	% of 2013 Target %	2014 SunWater Actual \$'000	% of 2014 Target %	2015 SunWater Budget \$'000	% of 2015 Target %
ROUTINE EXPENSES						
Operations						
Labour	1,192		1,173		1,163	
Materials	52		167		86	
Contractors	0		1		13	
Other	1,174		1,401		1,781	
Non-direct	2,014		1,977		2,051	
Operations Total	4,431	101%	4,718	105%	5,094	111%
Preventative						
Labour	513		511		667	
Materials	694		756		680	
Contractors	612		829		886	
Other	2		4		0	
Non-direct	903		906		1,202	
Preventative Total	2,724	82%	3,007	88%	3,435	98%
Corrective						
Labour	565		544		556	
Materials	762		452		409	
Contractors	713		394		200	
Other	11		12		3	
Non-direct	1,004		920		966	
Corrective Total	3,054	207%	2,322	153%	2,134	137%
Electricity	4,299	94%	5,809	119%	5,809	111%
Total Routine Expenses	14,508	105%	15,856	111%	16,472	111%
NON-ROUTINE EXPENSES						
Annuity Funded						
R&E - Annuity Funded	1,216		802		2,607	
Corrective	0		0		0	
Other	0		4		0	
Non-direct	351		363		378	
Total Annuity Funded Non-Routine	1,568	22%	1,169	16%	2,985	41%
TOTAL REGULATED EXPENSES	16,076		17,025		19,457	
Non-Annuity Funded						
R&E - Non-Annuity Funded	194		104		0	
Non-direct	63		40		0	
Total Non-Annuity Funded	257	n/a	144	n/a	0	n/a
TOTAL EXPENSES	16,333		17,169		19,457	