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# 2015 Annual Performance Report

## Nogoa Bulk

October 2015

## Table of Contents

Introduction .....	3
Financial Summary .....	4
Water Usage .....	4
Revenue .....	5
Routine Expenditure .....	6
Operations .....	6
Preventive Maintenance .....	6
Corrective Maintenance .....	7
Non-Routine Expenditure .....	9
R&E – Annuity Funded .....	9
Corrective Maintenance .....	10
Other .....	10
R&E – Non Annuity .....	10
Annuity Balance .....	10
Appendix – Total Expenditure by Expense Type .....	11
Notes.....	12

## 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 has revised the format for 2015 to incorporate customer feedback and to provide more detail on items such as insurance. The new format includes a summary of the annual expenditure and annual revenue to provide a snapshot of scheme performance across the year.

In line with customer feedback 2016 forecast data is also provided and compared with QCA targets. The forecast numbers reflect a minor realignment of SunWater, which occurred after the 2016 budget was finalised, and vary from the Final 2016 NSPs published in June 2015. The variations are attributed to non-direct cost allocations.

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  
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## Financial Summary

**Table 1 – Operating Revenue Less Spend**

	Table reference	2013	2014	2015	2016
		Actual \$000	Actual \$000	Actual \$000	Forecast \$000
Operating Revenue	3	4,395	4,692	5,671	4,980
Less - Routine Expenditure	4 & 7	2,222	2,058	1,966	2,784
Less - Non-Routine Expenditure					
• Annuity Funded	5, 6 & 7	559	459	1,383	1,562
• Not Annuity Funded	5	100	-	1	-
Surplus (Deficit)	7	1,514	2,175	2,321	633

Table 1 provides an indication of the annual cash performance of the scheme. Note that the table reports total non-routine spend and does not take into account the renewals annuity. Further information is provided below in each section of this report.

## Water Usage

**Table 2 – 2015 Water Usage**

	No. of Customers	Water Entitlements	Available Water	Available Water	Water Deliveries	Water Deliveries	Water Deliveries
		ML	ML	%	ML	% of Entitlement	% of Available
Industrial		27,821	26,804		12,635		
Irrigation		160,132	186,935	117%	136,690	85%	73%
Urban		7,384	7,786		6,949		
Other		0	382		221		
SunWater		35,183	32,056		658		
Total	393	230,520	253,963	110%	157,152	68%	62%

QCA Assumed Water Usage for Irrigation 71.4%  
 QCA Assumed Water Usage for Total 83.2%

Irrigation usage across the year exceed the QCA's assumed irrigation usage of only 71.4%.

**Table 3 – Revenue**

	2013	2014	2015	2016
	Actual	Actual	Actual	Forecast
	\$000	\$000	\$000	\$000
Irrigation	987	911	923	949
Industrial	1,784	2,386	2,666	2,739
Urban	432	435	428	288
Irrigation CSO	6	2	-	-
Revenue Transfers	1,170	958	921	1,000
Drainage	-	-	-	-
Other	16	-	440	4
Insurance Proceeds - Flood	-	-	292	-
	<b>4,395</b>	<b>4,692</b>	<b>5,671</b>	<b>4,980</b>

\* Following feedback from customers, SunWater has unbundled bulk water charges from distribution system charges. This means that revenue figures in past performance reports and NSPs will not match those above.

Revenue Transfers represent the cost of bulk water supplies delivered through the distribution system(s). The revenue accrues to the distribution system before it is transferred to the Bulk Water Supply Scheme as a contribution to the cost of the bulk water service. The QCA established the transfer cost for irrigation supplies at the cost reflective bulk water tariff. Also included in the revenue transfer totals are revenue transfers from SunWater's pipelines sourcing water from the Nogoia River WSS.

## Routine Expenditure

**Table 4 – Routine Operating Expenditure**

	2013				2014				2015				2016			
	SW Actual \$000	QCA Target \$000	Variance \$000	% of target	SW Actual \$000	QCA Target \$000	Variance \$000	% of target	SW Actual \$000	QCA Target \$000	Variance \$000	% of target	SW Forecast \$000	QCA Target \$000	Variance \$000	% of target
Operations - Other	1,388	1,686	297	82	1,065	1,762	697	60	1,135	1,763	628	64	1,737	1,745	7	100
Operations - Electricity	12	13	1	91	16	14	(2)	111	15	15	1	96	16	16	1	96
Operations - Insurance	374	198	(176)	189	681	201	(480)	338	439	205	(234)	214	451	208	(242)	216
	1,774	1,897	122	94	1,762	1,977	216	89	1,589	1,983	394	80	2,204	1,969	(234)	112
Preventative Maintenance	244	264	20	92	184	276	92	67	195	275	81	71	389	273	(116)	143
Corrective Maintenance	204	197	(7)	104	113	205	92	55	183	206	23	89	191	206	15	93
Routine Total	2,222	2,357	135	94	2,058	2,458	400	84	1,966	2,464	498	80	2,784	2,448	(336)	114

### 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>:

- 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 2015 was \$394k (20%) below the QCA target. The major exceptions and highlights with operation activities for the year included:

- Insurance cost \$234k higher than target;
- Electricity costs were in line with the QCA target in 2015;
- The maintenance plan, which includes surveillance and inspection activities, was being redeveloped for this scheme. Some activities were rescheduled resulting in an underspend in the forecast budget for operations; and
- Local Authority rates \$45k 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 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,

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

- cranes, sump pumps and associated equipment; and
- Weed control – which includes the following activities:
  - Slashing channels and drains;
  - Acrolein treatment of channels;
  - Copper Sulphate treatment; and
  - Spraying and other activities to control operational and noxious weeds within channel and drainage reserves and balancing storages.

Preventive maintenance for 2015 was \$81k (29%) below the QCA's target. The major exceptions and highlights with preventive maintenance activities for the year included:

- Bedford and Tartrus Weirs not fully operational following past flood events therefore reducing preventive maintenance requirements;
- Dam and weir inspections performed;
- Dam safety surveillance;
- Weed control;
- Hoist and winch maintenance; and
- The maintenance plan for this scheme was being redeveloped this year and some activities were rescheduled resulting in an under-spend. The redeveloped plan will be implemented in the next 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 emergency<sup>2</sup>:

- 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
    - Pipe breaks;
    - Repair air valves, scour valves, etc.;
    - Erosion control and repair of rock protection works; and
    - Repair concrete structures.
  - Scheme Roads
    - Repair pot holes;

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

- Grade roads; and
  - Repair, replace and paint guide posts and signs.
- Pump stations
  - 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 \$23k (11%) below the QCA's target for 2015. The major exceptions and highlights with corrective maintenance activities for the year included:

- Repairs to crump weir at Bingeang;
- Repairs to outlet gate Right Bank Tower;
- Handrail repairs at Tartrus; and
- Occurrence of breakdowns was lower than forecast.



## 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 2015; 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 have been unexpected events, such as floods, that were not allowed for in the QCA's annuity funding allowance.

Overall, the 2013-17 non-routine spend will exceed the five-year QCA target. There has been significant corrective works in this service contract to repair flood damage; corrective works are unplanned and were not allowed for in the QCA's targets.

**Table 5 – Non-Routine Expenditure**

	2013				2014				2015				2016			
	SW Actual \$000	QCA Target \$000	Variance \$000	% of target	SW Actual \$000	QCA Target \$000	Variance \$000	% of target	SW Actual \$000	QCA Target \$000	Variance \$000	% of target	SW Forecast \$000	QCA Target \$000	Variance \$000	% of target
<b>Annuity Funded</b>																
R&E	913	108	(804)	843	179	288	109	62	1,330	482	(848)	276	1,562	258	(1,305)	606
Corrective Maintenance	91	-	(91)	-	239	-	(239)	-	22	-	(22)	-	-	-	-	-
Other	(445)	-	445	-	41	15	(26)	268	31	-	(31)	-	-	-	-	-
	559	108	(451)	517	459	303	(156)	151	1,383	482	(901)	287	1,562	258	(1,305)	606
<b>Non Annuity Funded</b>	100				-				1				-			

### R&E – Annuity Funded

The annuity funded R&E direct spend was \$1,330k. Projects undertaken included:

- Spillway Seepage Investigations – Fairbairn Dam: \$695k was spent in 2015 to undertake an extensive investigation of the spillway using Ground Penetrating Radar (GPR) and CCTV cameras to determine the extent of voids beneath the concrete spillway chute. In addition Spillway Slab Anchors were pulled out and inspected. The amount of investigation work has greatly increased due to the anchor bars being corroded in the spillway. Safety lifelines and scaffolding have been installed to support the investigation on the sloping spillway.
- Bedford Weir – Refurbish Outlet Gate: \$138k was spent to Refurbish Outlet Gate, paint and replace rubber seals, install stainless steel struts into structure. A design review identified that the outlet structure would crack if all 3 struts bracing the wall were not intact. It also identified that either divers or confined space entry was necessary to remove the gate due to brackets restraining the ram extension pieces.
- Refurbish Failed Gate at Tartrus Weir: \$169k was spent to install a new penstock gate. In January 2013, the penstock gate of Tartrus Weir was found damaged. Following a review of the current condition assessment, it was decided to replace the damaged gate with new one. Prior to replacement a new bulkhead was manufactured. The gate was installed in June 2015.

- Rectify Rock Face Stability, Fairbairn Dam Outlet Works 2 Bridge adjacent to Weemah Inlet Tower (Investigate 2013): Improve the rock face stability on the right abutment adjacent to the Weemah inlet tower - \$114k was spent in 2015 to perform extensive geotechnical survey of the slope. Instability of the slope below the Lookout and along the access road has been noted since an inspection was undertaken in 2009. Slope failures typically occurred as discrete rock falls onto the access track to the intake tower. As part of a broader Refurbishment and Enhancement Project at Fairbairn Dam to facilitate the assessment of the stability of a rock slope below SunWater’s Fairbairn Dam Lookout, a programme of geological investigations consisting of mapping and drilling was commissioned and undertaken by SunWater in April 2015. The most appropriate remedial treatment to adequately arrest slope degradation and allow the continuing serviceability of the lookout and adjacent assets will be to re-profile and bench the slope. Alternatives to slope re-profiling would include the application of face treatments such as the installation of nets, anchors and dental concrete. It is considered likely that these methods will be relatively high in cost.

### Corrective Maintenance

The annuity funded corrective maintenance spend was \$22k, and included the following activities:

- Tartus Weir Flood Damage Repairs, Erosion & Protection Works: \$22k was spent in 2015 to supply additional rock and concrete in June 2014. It was required due to insufficient allowance within the contract and to complete the works to a satisfactory level (Project was to reinstate damaged and failed rock mattress, gabion, concrete rockfill and rock protection works downstream of Tartus Weir. Engineers determined that there was a risk to the integrity of the weir if the erosion repair work was not done. Rock was dumped and re-profiled in a large scour hole downstream of the left bank. Rock mattresses were reinstated on both banks and concreted rockfill repaired on the right bank).

### Other

The ‘Annuity Funded Other’ spend in 2015 was \$31k.

### R&E – Non Annuity

The “Non Annuity” spend in 2015 was \$1k.

### Annuity Balance

The 2015 annuity balance is shown below.

**Table 6 – Annuity Balance**

		2013	2014	2015	2016
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000
<b>Annuity</b>					
Opening Balance		(853)	(1,033)	(1,115)	(1,781)
Net Spend	See below	(559)	(459)	(1,037)	(1,562)
Annuity Income		443	454	455	468
Interest		(64)	(77)	(84)	(133)
SunWater - Closing Balance		(1,033)	(1,115)	(1,781)	(3,008)
QCA - Closing Balance		(1,193)	(1,131)	(1,242)	(1,125)
Difference		159	16	(538)	(1,883)
<b>Net Spend Analysis:-</b>					
Spend	5 & 7	(559)	(459)	(1,383)	(1,562)
Insurance Proceeds Receipts					
• Prior Year		-	-	54	-
• Current Year		-	-	292	-
Net Spend		(559)	(459)	(1,037)	(1,562)

\* 2016 figures are subject to change once actual spend is known.

## Appendix – Total Expenditure by Expense Type

**Table 7 – Detailed Financial Summary  
(Including Expenditure for Activity by Type)**

	2013			2014			2015			2016		
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000
<b>Operating Revenue</b>	4,395			4,692			5,671			4,980		
<b>Routine Spend</b>												
<b>Operations</b>												
Labour	350	485	135	279	500	221	257	516	259	237	533	296
Contractors	176	67	(110)	93	69	(24)	220	71	(149)	704	73	(631)
Materials	64	27	(37)	21	28	7	30	29	(1)	21	30	9
Electricity	12	13	1	16	14	(2)	15	15	1	16	16	1
Insurance	374	198	(176)	681	201	(480)	439	205	(234)	451	208	(242)
Other	66	47	(19)	112	48	(65)	99	49	(51)	107	50	(57)
Non-directs	733	1,060	328	560	1,117	557	528	1,098	569	669	1,059	390
	1,774	1,897	122	1,762	1,977	216	1,589	1,983	394	2,204	1,969	(234)
<b>Preventative Maintenance</b>												
Labour	75	78	2	63	80	17	61	83	22	87	86	(1)
Contractors	20	7	(14)	6	7	0	9	7	(2)	81	7	(74)
Materials	2	7	5	1	7	6	0	8	7	-	8	8
Other	3	7	4	2	7	6	11	7	(4)	5	7	2
Non-directs	143	165	22	111	174	62	113	170	57	216	164	(51)
	244	264	20	184	276	92	195	275	81	389	273	(116)
<b>Corrective Maintenance</b>												
Labour	50	45	(5)	22	47	25	35	48	13	35	50	15
Contractors	28	23	(5)	25	24	(1)	54	25	(30)	53	25	(28)
Materials	20	20	0	23	21	(3)	12	21	10	7	22	15
Other	6	10	4	1	10	9	14	10	(3)	9	11	2
Non-directs	100	98	(2)	42	104	61	68	102	33	88	98	11
	204	197	(7)	113	205	92	183	206	23	191	206	15
<b>Routine - total</b>	<b>2,222</b>	<b>2,357</b>	<b>135</b>	<b>2,058</b>	<b>2,458</b>	<b>400</b>	<b>1,966</b>	<b>2,464</b>	<b>498</b>	<b>2,784</b>	<b>2,448</b>	<b>(336)</b>
<b>Non-Routine Spend</b>												
Labour	204	18	(186)	81	46	(35)	283	73	(211)	155	45	(111)
Contractors	165	20	(145)	93	61	(32)	517	89	(428)	927	44	(882)
Materials	150	20	(130)	69	47	(22)	5	78	73	8	44	36
Other	(368)	11	379	67	24	(43)	72	43	(29)	45	30	(16)
Non-directs	407	39	(368)	148	125	(24)	506	200	(306)	426	95	(332)
<b>Non-Routine - Total</b>	<b>559</b>	<b>108</b>	<b>(451)</b>	<b>459</b>	<b>303</b>	<b>(156)</b>	<b>1,383</b>	<b>482</b>	<b>(901)</b>	<b>1,562</b>	<b>258</b>	<b>(1,305)</b>
<b>Total Regulated Spend</b>	<b>2,781</b>	<b>2,465</b>	<b>(316)</b>	<b>2,517</b>	<b>2,761</b>	<b>244</b>	<b>3,350</b>	<b>2,946</b>	<b>(404)</b>	<b>4,346</b>	<b>2,706</b>	<b>(1,641)</b>
<b>Non Annuity Funded Spend</b>	100			-			1			-		
<b>Surplus (Deficit)</b>	<b>1,514</b>			<b>2,175</b>			<b>2,321</b>			<b>633</b>		

## Notes

All financial figures in this report are presented in nominal dollars.

Although the QCA set cost targets based on assumed inflation of 2.5%, 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 reported real dollars to nominal dollars, multiply by the below factors; these are based on the QCA's assumed inflation rate of 2.5% p.a. For comparison, the QCA conversion factors based on assumed inflation of 2.5% are compared with conversion factors based on actual inflation as measured by the Brisbane All Groups Consumer Price Index taken in March each year.

**Table 8 – Conversion Factors for real \$2011 to Nominal Dollars**

	2013	2014	2015	2016	2017
QCA Conversion Factor	1.0510	1.0770	1.1040	1.1310	1.1600
Accumulative March Quarter CPI	1.0494	1.0714	1.1050	1.1208	-

### Disclaimer

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