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# 2016 Annual Performance Report

## Emerald Distribution

October 2016

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## 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 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 2017 forecast data is also provided and compared with QCA targets.

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)

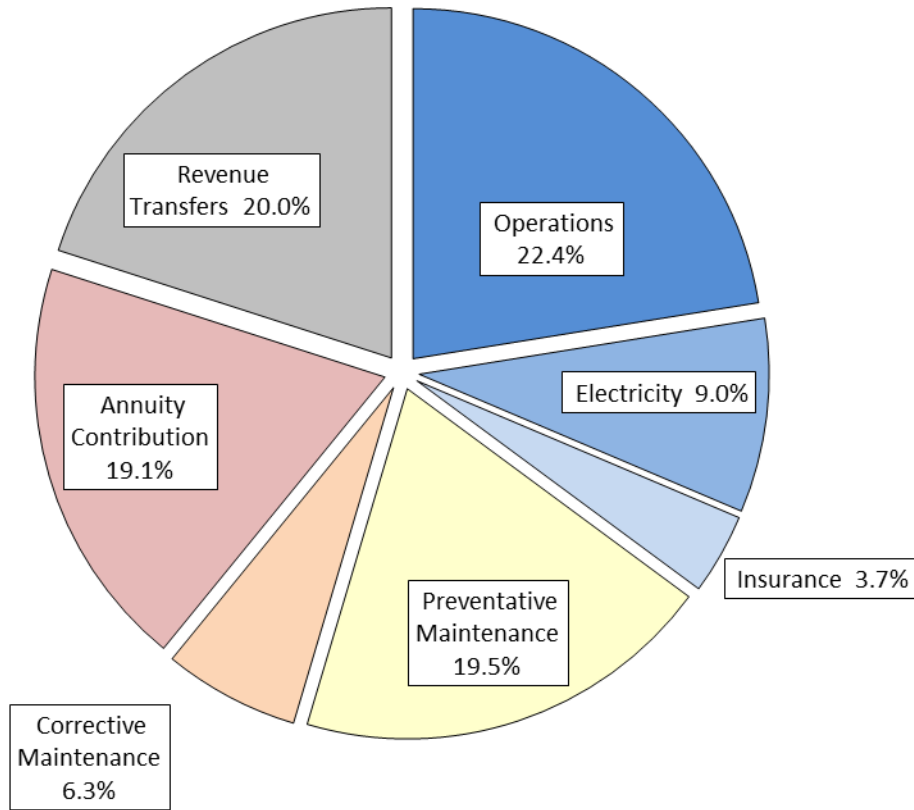
Post: NSP Feedback  
PO Box 15536 City East  
Brisbane QLD 4002

**Table 1 – Operating Revenue Less Spend**

Emerald IS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Actual \$000	Budget \$000
Revenue	3	2,406	2,884	2,913	3,139	2,814
Less - Routine Expenditure	4 & 7	1,814	2,876	2,279	2,342	2,387
Less - Non-Routine Expenditure						
• Annuity Funded	5, 6 & 7	771	165	513	563	467
• Non Annuity Funded	5	25	8	-	-	-
Surplus (Deficit)		(205)	(165)	120	234	(40)

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.

## Emerald IS



**Figure 1: Breakdown of Irrigation Scheme Costs – 2016 Actual**

Figure 1 shows a high level summary of scheme costs and provides an indication of where revenue from irrigation water charges is applied. The item “Annuity Contribution” refers to the component of irrigation water charges that is applied toward the renewals annuity each year. The item “Revenue Transfers” refers to the contribution towards the cost of the bulk water scheme.

## Water Usage

**Table 2 – 2016 Water Usage**

Customer Segment	No. of Customers	Water Entitlements (ML)	Available Water (ML)	Available Water (%)	Water Deliveries (ML)	Water Deliveries (%) Against Entitlement	Water Deliveries (%) Against Available Water
2. Irrigation		83,078	101,918	123	84,527	102	83
3. Urban		90	77	86	0	0	0
4. Other		0	0	0	0	0	0
5. SunWater		28,697	28,697	100	5,193	18	18
<b>Service Contract Total</b>	<b>184</b>	<b>111,864</b>	<b>130,692</b>	<b>117</b>	<b>89,720</b>	<b>80</b>	<b>69</b>

QCA Assumed Total Water Usage 74.9%

Total water usage was above the QCA projected total usage of water entitlements.

## Revenue

**Table 3 – Revenue**

Emerald IS	2013	2014	2015	2016	2017
	Actual \$000	Actual \$000	Actual \$000	Actual \$000	Budget \$000
Irrigation	2,754	3,202	3,228	3,475	3,240
Industrial	-	-	-	-	-
Urban	-	8	12	12	-
Irrigation CSO	233	62	-	-	-
Revenue Transfers	(962)	(768)	(740)	(770)	(819)
Drainage	346	365	379	383	383
Other	35	15	7	39	11
Insurance Proceeds - Flood	-	-	27	-	-
<b>Revenue Total</b>	<b>2,406</b>	<b>2,884</b>	<b>2,913</b>	<b>3,139</b>	<b>2,814</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.

## Routine Expenditure

**Table 4 – Routine Operating Expenditure**

Emerald IS	2013			2014			2015			2016			2017			% of target
	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 Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	
Operations	682	772	90	1,170	794	(376)	875	811	(63)	863	815	(48)	849	809	(40)	105
Electricity	36	64	27	161	68	(93)	229	140	(89)	344	151	(193)	242	162	(80)	149
Insurance	150	104	(46)	208	106	(102)	158	108	(50)	143	110	(34)	172	112	(60)	154
Operations Total	869	940	71	1,539	968	(571)	1,262	1,059	(203)	1,350	1,076	(275)	1,263	1,082	(180)	117
Preventative Maintenance	764	611	(153)	966	630	(337)	836	647	(189)	750	659	(91)	812	662	(150)	123
Corrective Maintenance	181	286	105	370	295	(75)	181	302	121	242	307	65	312	307	(5)	102
Routine Total	1,814	1,837	23	2,876	1,893	(983)	2,279	2,008	(271)	2,342	2,042	(300)	2,387	2,052	(335)	116

### 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.

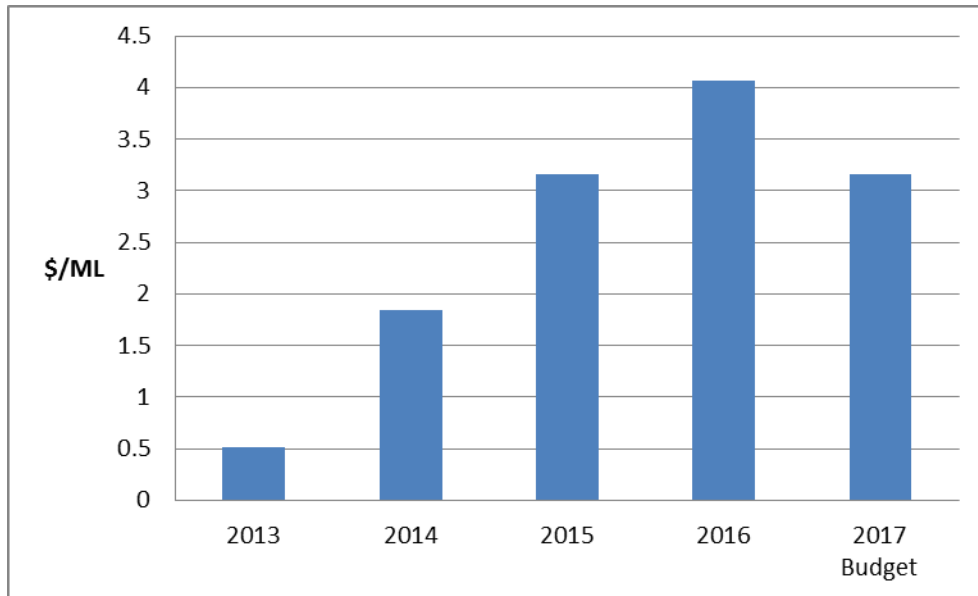
<sup>1</sup> Activities listed will not apply to all service contracts.



The operations expenditure was above the QCA target.

- Insurance costs are higher than the QCA target;
- Electricity costs were above the QCA target.

The chart below tracks pumping cost per ML delivered across the price path based on actual and forecast data. The chart reflects the escalation of electricity prices, tariff changes and variation in volumes lifted by high cost and low cost pump stations.



### 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, 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 was above the QCA's target.

### **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

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

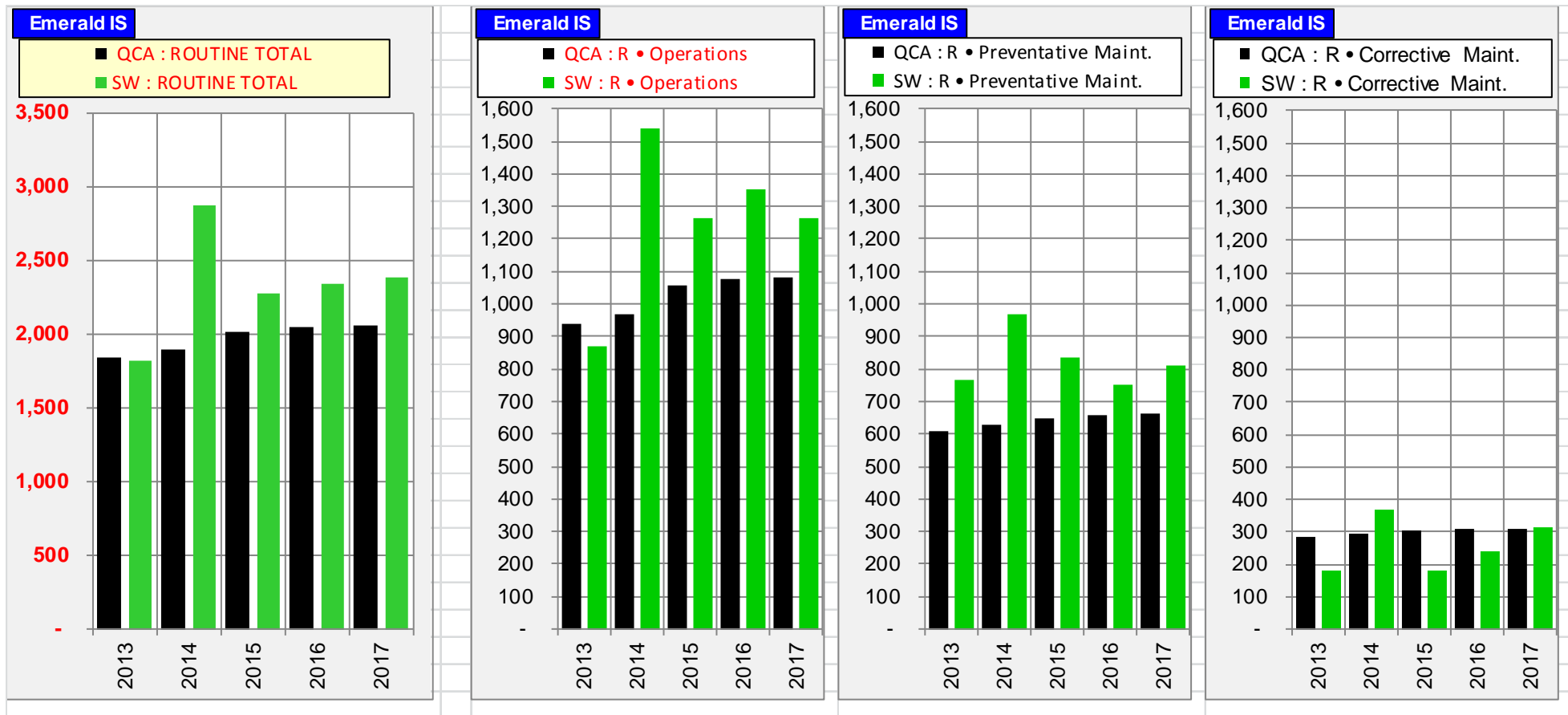
- Repair air valves, scour valves, etc.;
  - Erosion control and repair of rock protection works; and
  - Repair concrete structures.
- Scheme Roads
  - Repair pot holes;
  - Grade roads; and
  - Repair, replace and paint guide posts and signs.
- Pump stations
  - Repair pumps and motors;
  - De-silt 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 below the QCA's target.

## Routine Cost – Summary and Charts

The information in Table 4 above is re-presented in the charts below to graphically show SunWater’s performance against the QCA targets. In summary the key challenges in managing routine cost lie with reigning in input cost like electricity, Acrolein and insurance. Emergency Event Management costs are also an impact on the scheme, but have not been distributed at the scheme level.

**Figure 2: Routine Expenditure by Activity compared to QCA Target (\$'000)**



## 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.

SunWater is focusing effort on reviewing renewals profiles so that assets are maintained to the required standard with the minimum spend. This review extends to considering the key asset replacement assumptions so that the profile better reflects likely spend each year and moves away from assuming assets are replaced at end of standard life, based on their replacement costs. This is expected to reduce the renewals profile going forward and will be discussed in more detail with customers prior to the 2017 financial year.

**Table 5 – Non-Routine Expenditure**

Emerald IS	2013			2014			2015			2016			2017			% of target
	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 Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	
Annuity Funded																
Operations	-	-	-	10	-	(10)	5	8	3	7	-	(7)	-	-	-	-
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R&E	771	177	(595)	156	246	90	509	523	15	557	203	(353)	467	584	117	80
Non-routine Total	771	177	(595)	165	246	81	513	531	18	563	203	(360)	467	584	117	80
Non Annuity Funded	25			8			-			-			-			

### R&E – Annuity Funded

The annuity funded R&E Projects undertaken included:

PROJECT	SPEND 2016
11NMA37 Replace Switchyard Assets - Selma Switchyard (Substation Q) - (2011/12 Scope) (Options Analysis 2015)	396542
13NMA07 Replace Controls - Selma Pstn (2015 Scope) (2016 Supply & Install)	63019
16EME06 Replace Customer Meter - Selma System S3_2 MO 4861	35028
16EME01 Re-profile Drains - Selma System	32715
16EME07 Replace Customer Meter - Selma System S3 MO 1741	21665
16EME02 Re-profile Drains - Weemah System	7613

### Corrective Maintenance

There was no expenditure categorised as “Corrective Maintenance”.

### Other

The “Annuity-funded Other” Projects included.

PROJECT	SPEND 2016
Gregory Joint Venture- Selma P/L Easemen	6678

### R&E – Non Annuity

There was no expenditure categorised as “Non-annuity funded R&E”.

## Annuity Balance

The 2016 annuity balance is shown below.

**Table 6 – Annuity Balance**

Emerald IS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Actual \$000	Budget \$000
<b>Annuity</b>						
Opening Balance		(14)	(177)	292	554	765
Net Spend	See below	(771)	(165)	(468)	(563)	(467)
Annuity Contribution		610	647	708	734	762
Interest		(1)	(13)	22	41	57
SunWater - Closing Balance		(177)	292	554	765	1,119
QCA - Closing Balance		560	1,003	1,255	1,880	2,199
Difference		(737)	(711)	(701)	(1,114)	(1,080)
<b>Net Spend Analysis</b>						
Spend	5 & 7	(771)	(165)	(513)	(563)	(467)
Insurance Proceeds Receipts						
• Prior Year		-	-	18	-	-
• Current Year		-	-	27	-	-
Net Spend		(771)	(165)	(468)	(563)	(467)

\* 2017 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)

Emerald IS	2013			2014			2015			2016			2017		
	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 Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000
<b>Revenue</b>	<b>2,406</b>			<b>2,884</b>			<b>2,913</b>			<b>3,139</b>			<b>2,814</b>		
<b>Routine Spend</b>															
<b>Operations</b>															
Labour	253	281	28	383	290	(92)	307	300	(8)	301	309	8	307	319	12
Contractors	-	-	-	3	-	(3)	3	-	(3)	2	-	(2)	3	-	(3)
Materials	3	4	1	120	4	(116)	-	4	4	0	4	4	2	4	2
Electricity	36	64	27	161	68	(93)	229	140	(89)	344	151	(193)	242	162	(80)
Insurance	150	104	(46)	208	106	(102)	158	108	(50)	143	110	(34)	172	112	(60)
Other	5	17	12	24	18	(6)	47	18	(29)	47	19	(28)	34	19	(15)
Non-directs	421	470	49	641	482	(158)	517	489	(27)	512	483	(30)	503	467	(36)
	869	940	71	1,539	968	(571)	1,262	1,059	(203)	1,350	1,076	(275)	1,263	1,082	(180)
<b>Preventative Maintenance</b>															
Labour	129	111	(18)	168	115	(53)	164	119	(46)	146	123	(23)	160	126	(34)
Contractors	220	171	(49)	123	176	53	137	182	44	29	188	158	70	191	121
Materials	184	130	(54)	370	134	(236)	245	139	(106)	292	143	(149)	259	145	(114)
Other	(0)	6	6	6	6	(0)	5	6	1	20	6	(14)	48	6	(42)
Non-directs	232	193	(39)	300	198	(101)	285	202	(84)	263	200	(63)	275	193	(82)
	764	611	(153)	966	630	(337)	836	647	(189)	750	659	(91)	812	662	(150)
<b>Corrective Maintenance</b>															
Labour	52	66	14	42	68	26	33	71	38	49	73	24	77	75	(1)
Contractors	7	65	58	99	67	(32)	61	70	8	101	72	(30)	60	73	13
Materials	31	34	3	149	35	(114)	16	36	19	6	37	31	25	38	13
Other	0	10	10	1	10	9	11	11	(0)	5	11	6	22	11	(11)
Non-directs	91	111	20	80	114	34	60	116	56	80	114	34	128	110	(18)
	181	286	105	370	295	(75)	181	302	121	242	307	65	312	307	(5)
<b>Routine - total</b>	<b>1,814</b>	<b>1,837</b>	<b>23</b>	<b>2,876</b>	<b>1,893</b>	<b>(983)</b>	<b>2,279</b>	<b>2,008</b>	<b>(271)</b>	<b>2,342</b>	<b>2,042</b>	<b>(300)</b>	<b>2,387</b>	<b>2,052</b>	<b>(335)</b>
<b>Non-Routine Spend</b>															
Labour	67	23	(44)	30	45	15	100	117	16	56	40	(16)	65	117	52
Contractors	421	25	(396)	22	50	27	199	120	(79)	361	56	(305)	223	141	(82)
Materials	19	25	6	4	50	46	26	171	145	1	27	27	61	96	35
Other	126	14	(113)	57	27	(30)	8	59	50	34	15	(19)	-	53	53
Non-directs	138	90	(49)	52	75	23	180	65	(115)	111	65	(47)	118	177	59
<b>Non-Routine - Total</b>	<b>771</b>	<b>177</b>	<b>(595)</b>	<b>165</b>	<b>246</b>	<b>81</b>	<b>513</b>	<b>531</b>	<b>18</b>	<b>563</b>	<b>203</b>	<b>(360)</b>	<b>467</b>	<b>584</b>	<b>117</b>
<b>Total Regulated Spend</b>	<b>2,586</b>	<b>2,014</b>	<b>(572)</b>	<b>3,041</b>	<b>2,139</b>	<b>(902)</b>	<b>2,792</b>	<b>2,539</b>	<b>(253)</b>	<b>2,905</b>	<b>2,245</b>	<b>(660)</b>	<b>2,854</b>	<b>2,636</b>	<b>(218)</b>
<b>Non Annuity Funded Spend</b>	<b>25</b>			<b>8</b>			<b>-</b>			<b>-</b>			<b>-</b>		
<b>Surplus (Deficit)</b>	<b>(205)</b>			<b>(165)</b>			<b>120</b>			<b>234</b>			<b>(40)</b>		



## **Non-Direct Costs Explained**

Non-direct costs reflect SunWater's methodology for distributing indirect costs, local overheads and corporate overheads to each service contract. Wherever practicable labour and other costs are booked direct to service contracts, however, where this is not possible the costs accumulate in either indirect or overhead accounting cost pools and are then distributed to service contracts.

Indirect cost pools capture costs such as billing and customer support, irrigation pricing regulation, asset management (including dam safety, asset systems, channels and drainage) that have not been directly charged. They also include flood room operations including the IGEM emergency management program, water planning, hydrographic services, environmental support costs and GM Operations. These indirect costs are shared between SunWater's lines of business ie Bulk Water, Irrigation Distribution Systems, Industrial Pipeline and Facilities Management where appropriate. For example service contracts without a dam are not apportioned dam safety costs.

Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local admin support and other local labour not directly booked to activities within service contracts.

Corporate overhead costs are more generic than indirect cost and local overheads and are spread across all service contracts based on direct labour. They include the cost of HR and payroll, ICT, communications, legal and property, finance, internal audit, plus the costs of the CEO, GM Corporate and the SunWater Board of Directors, where these costs are not directly charged to activities within service contracts.

SunWater's methodology was reviewed and accepted by the QCA during the 2012 pricing review.

## 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	1.051	1.077	1.104	1.131	1.16
Accumulative March Quarter CPI	1.0494	1.0714	1.105	1.1208	1.1397

### Disclaimer

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