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2016/17 Annual Network Service Plan

St George Distribution

July 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. These annual NSPs will focus on both routine expenditure (opex) and non-routine expenditure. In particular, the NSPs will cover:

- past performance for routine opex and non-routine expenditure,
- forecast opex and non-routine for the approaching year, and
- the long-term outlook for material non-routine spend.

This NSP compares SunWater's actuals for 2013, 2014 and 2015, budget for 2016 and budget for 2017 to the targets from the QCA's final report. The 2013-16 figures are provided for information only, with the focus the budget figures for 2017. The 2017 budget has been finalised following customer and shareholder consultation.

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 using one of the following addresses:

Email: nspfeedback@sunwater.com.au

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

Financial Summary

Table 1: Operating Revenue Less Spend

St George IS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000
Revenue	3	2,336	2,317	2,423	2,375	2,438
Less - Routine Expenditure	4 & 7	1,374	1,226	1,490	1,670	1,581
Less - Non-Routine Expenditure						
• Annuity Funded	5, 6 & 7	311	367	593	655	1,186
• Non Annuity Funded	5	-	-	-	-	-
Surplus (Deficit)		652	724	341	50	(329)

Table 1 is a high level summary of the budgeted financial performance of the service contract. This document provides further detail of the planned spend on routine functions and non-routine projects across the 2017 year together with an estimate of revenue expected to be generated.

Figure 1: Breakdown of Irrigation Scheme Costs – 2017 Budget

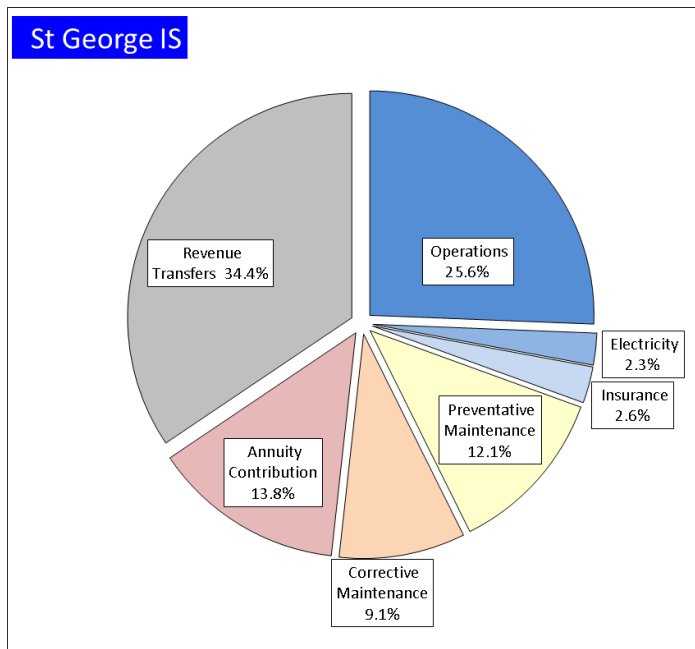


Figure 1 shows a high level summary of scheme costs and provides an indication of where revenue from irrigation water charges is applied. The item “Annuity Contribution” refers to the component of irrigation water charges that is applied toward the renewals annuity each year. The item “Revenue Transfers”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

Table 2: Water Data

	No. of Customers	Water Entitlements
		ML
2. Irrigation		50,805
5. SunWater		9,701
Service Contract Total	63	60,506

QCA Assumed Water Usage

93.4%

The 2017 budget is compiled taking onto account the QCA water use assumptions outlined above.

Revenue

Table 3: Revenue

St George IS	2013	2014	2015	2016	2017
	Actual	Actual	Actual	Forecast	Budget
	\$000	\$000	\$000	\$000	\$000
Irrigation	2,607	2,671	2,891	2,977	3,160
Industrial	18	-	-	-	-
Urban	-	0	-	-	-
Irrigation CSO	497	401	305	203	96
Revenue Transfers	(998)	(966)	(1,005)	(1,026)	(1,051)
Drainage	203	210	217	220	232
Other	8	0	(0)	1	1
Insurance Proceeds - Flood	-	-	15	-	-
Revenue Total	2,336	2,317	2,423	2,375	2,438

Note: Following feedback from customers, SunWater has unbundled bulk water charges from distribution system charges. This means that total revenue figures in past Performance Reports and NSPs may 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. The revenue transfer above does not include the bulk water costs of SunWater's channel distribution system losses.

Routine Expenditure

Table 4: Routine Operating Expenditure

St George IS	2013			2014			2015			2016			2017			2013 to 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 Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	% of target	SW Forecast \$000	QCA Target \$000	Variance \$000	% of target
Operations	708	826	119	698	849	151	841	868	27	889	874	(15)	783	867	84	90	3,918	4,284	366	91
Electricity	73	53	(21)	71	56	(15)	96	60	(36)	65	65	0	70	70	(0)	101	375	303	(72)	124
Insurance	73	48	(25)	97	49	(48)	74	50	(24)	76	51	(25)	80	52	(29)	156	400	249	(151)	160
Operations Total	854	927	74	866	954	88	1,011	978	(33)	1,030	990	(40)	933	988	55	94	4,693	4,837	144	97
Preventative Maintenance	457	344	(113)	279	354	76	263	363	100	379	368	(11)	370	368	(2)	101	1,747	1,797	49	97
Corrective Maintenance	63	247	184	82	254	172	216	260	44	261	262	1	278	260	(17)	107	900	1,283	383	70
Routine Total	1,374	1,518	144	1,226	1,562	336	1,490	1,601	111	1,670	1,620	(51)	1,581	1,616	35	98	7,340	7,916	576	93

The budget routine spend is within the QCA's target for 2017.

Appendix 2 includes an organisation chart showing the labour resources based in St George and utilised in the scheme.

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;
- Managing public relations associated with the scheme; and
- Managing enquiries from adjoining landholders, and in some cases developers, that require input and negotiations with SunWater's property and legal sections to resolve issues.

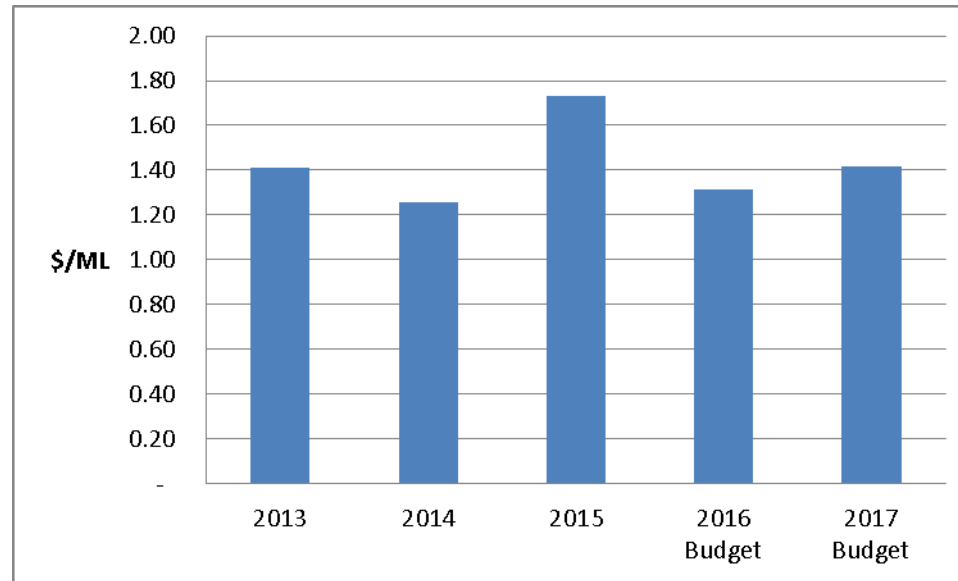
¹ Activities listed will not apply to all service contracts.

The operations budget in 2017 is within the QCA target

Electricity costs are budgeted on target in 2017. Indications are that after several years of above-QCA price increases, the transitional electricity tariffs will not escalate significantly in 2016/17. This will relieve the price pressure on SunWater and our customers. In addition, SunWater has performed annual electricity reviews on many of its sites and moved sites to lower-priced tariffs where cost savings were apparent. This has served to further reduce the impact of previous electricity cost increases.

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 the variation in volumes lifted by high cost and low cost pumpstations and annual variation in the gravity deliveries.

Figure 2: Electricity Cost per ML Delivered



Preventive Maintenance

Preventive maintenance is maintaining the ongoing operational performance and service capacity of physical assets to the required 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 includes²:

- 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 and other land managed by SunWater.

Preventive maintenance is budgeted to remain within the QCA targeted range.

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
 - Pipe breaks
 - Repair air valves, scour valves, etc.;

² Activities listed will not apply to all service contracts.

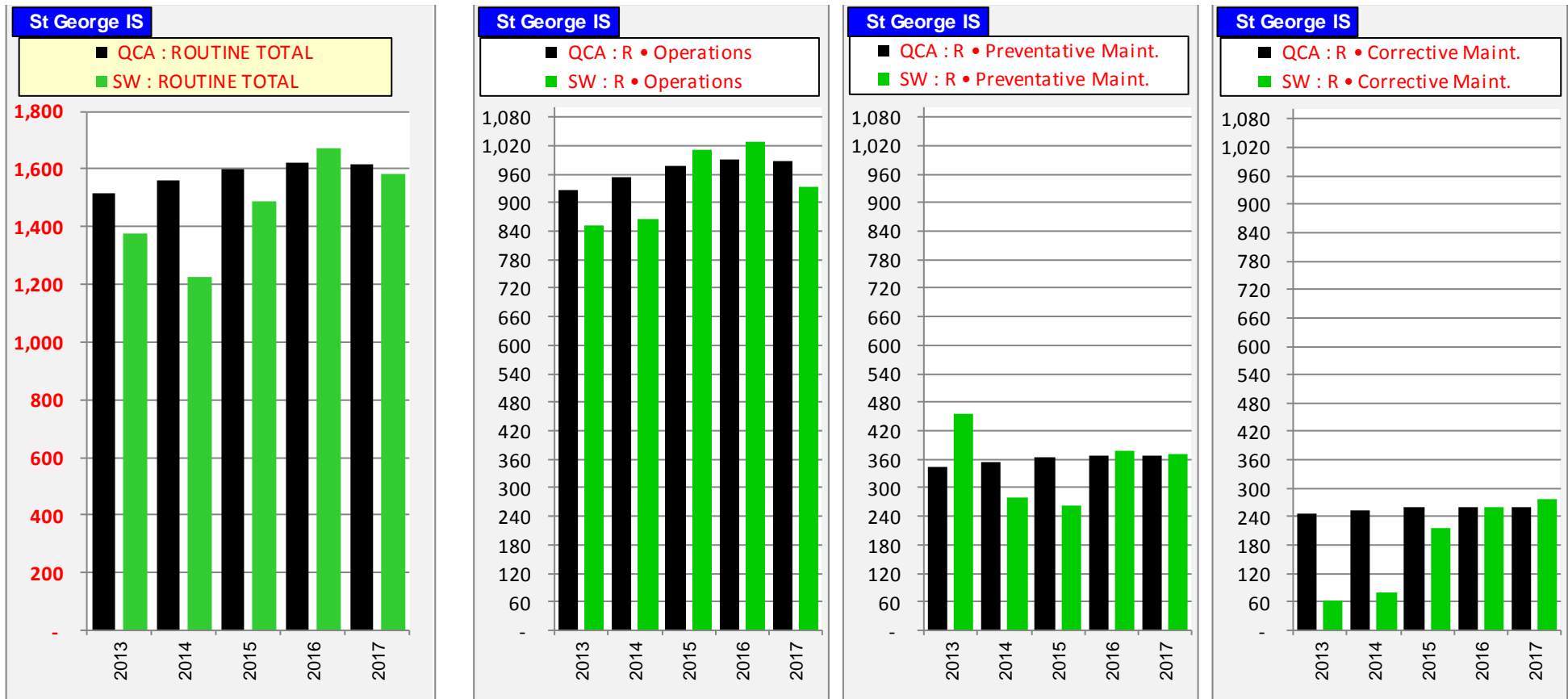
- Erosion control and repair of rock protection works; and
 - Repair concrete structures.
- Scheme Roads
 - Repair pot holes;
 - Grade roads; and
 - Repair, replace and paint guide posts and signs.
- Pump stations
 - Repair pumps and motors;
 - De-silt intake structures;
 - Repair concrete structure; 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 is budgeted above the QCA's target for 2017. SunWater will continue to refine budgets with the aim of bringing the overall expenditure into line with target, noting that the 5 year projection is under the QCA 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.

Figure 3: 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 2016; 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 indicative program of works from the 2010-11 year. While this was the best estimate of expected work at the time, in some cases, the QCA's funding allowance for renewals work across the price path 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, reducing upward pressure on water charges.

Non-Routine Budget

The budget non-routine spend for 2017 is shown in the table below, along with the actual spend for 2013, 2014, 2015 and the budget spend for 2016.

Table 5: Non-Routine Expenditure

St George IS	2013			2014			2015			2016			2017			2013 to 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 Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	% of target	SW Forecast \$000	QCA Target \$000	Variance \$000	% of target
Annuity Funded																				
Operations	-	-	-	16	-	(16)	-	-	-	-	-	-	-	-	-	-	16	-	(16)	-
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	6	-	(6)	192	-	(192)	190	-	(190)	-	-	-	-	-	-	-	387	-	(387)	-
R&E	305	2,005	1,701	160	35	(125)	403	92	(311)	655	214	(442)	1,186	294	(892)	404	2,709	2,640	(70)	103
Non-routine Total	311	2,005	1,695	367	35	(333)	593	92	(501)	655	214	(442)	1,186	294	(892)	404	3,113	2,640	(473)	118
Non Annuity Funded	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

The details for the five major projects planned for 2017 are provided below:

Table 6: Non-Routine Projects 2017

Project Title	Project Scope	2017 Budget (\$'000)
Replace Access Crossing – THURAGGI DIVERSION CHANNEL	Replace Access Bridge AC09 (Buckinbah Weir) with modern equivalent and reinstate load rating. Project costs include design, construction, project management, legal and handover.	780
Install signage & handover bridge (Wippell) - THURAGGI DIVERSION CHANNEL	Access Bridge AC08. This project is to install signage and negotiate a handover of the bridge asset with the landholder who uses it. Cost includes legal, management and handover costs.	119
Repair Access Crossing - ST GEORGE IRRIGATION	Repair Access Crossing AC06. Project includes rectifying the headwall deflections and movement as identified in condition assessment of 2009.	42
Repair access Crossing - ST GEORGE IRRIGATION	Repair Access Crossing Channel B1, rectify headwall deflections and movement, identified in condition assessment of 2009.	40
Replace various Failed Meters - ST GEORGE MAIN CHANNEL	A program of customer meter replacements to bring into line with Australian Standard - 4747 NMI M10-1 compliance. This will include using Electromagnetic and Ultrasonic Meters.	153
Other works	There are another 6 non-routine projects ranging from \$2,000 to \$11,000 for 2017. Further detail will be tabled at the IAC meeting.	52
Total		1,186

Annuity Balance

The estimated 2016 and 2017 annuity balances are shown below; the annuity contribution shown has been set by the QCA. SunWater aims to limit the annuity spend to the QCA's targets over the 5-year price path in order to manage the annuity balance to reasonable levels.

The impacts of budgeted non-routine spend on the annuity balance for 2017 is shown in the following table.

Table 7: Annuity Balance

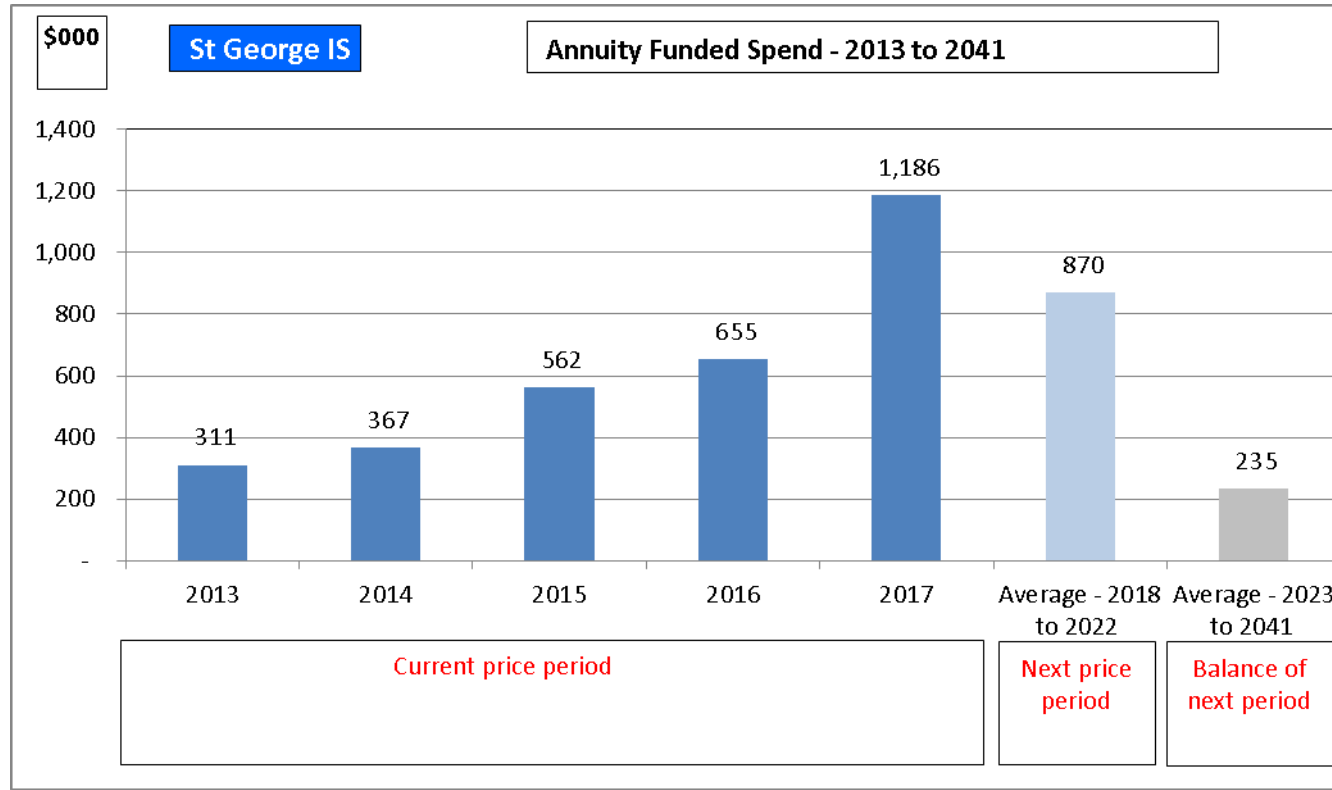
St George IS		2013	2014	2015	2016	2017	2013 to 2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000	Forecast \$000
Annuity							
Opening Balance		(1,506)	(1,528)	(1,605)	(1,881)	(2,253)	(1,506)
Net Spend	See below	(311)	(367)	(562)	(655)	(1,186)	(3,082)
Annuity Contribution		402	405	407	424	422	2,060
Interest		(113)	(114)	(120)	(141)	(169)	(657)
SunWater - Closing Balance		(1,528)	(1,605)	(1,881)	(2,253)	(3,186)	(3,186)
QCA - Closing Balance		(3,461)	(3,351)	(3,287)	(3,323)	(3,443)	(3,443)
Difference		1,933	1,745	1,406	1,070	257	257
Net Spend Analysis							
Spend	5 & 7	(311)	(367)	(593)	(655)	(1,186)	(3,113)
Insurance Proceeds Receipts							
• Prior Year		-	-	15	-	-	15
• Current Year		-	-	15	-	-	15
Net Spend		(311)	(367)	(562)	(655)	(1,186)	(3,082)

* All 2016 and 2017 figures are subject to change once actual spend is known.

Overview of Annuity Funded Non-Routine Projects 2013-41

The renewals annuity is calculated over a 20-year planning period; given that the following pricing period ends in 2022, the estimated renewals spend out until 2041 will affect the next pricing review. The estimated renewals expenditure out to 2041 is shown in the chart following.

Figure 4: Annuity Expenditure 2013-41



All material renewals 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 detailed options analyses being completed within the current and following 5-year pricing periods and high-level options analyses 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 variations, some items will no longer require options analysis in future years and new items may join the list.

Material Projects 2017-18

Replace Access Crossing – THURAGGI DIVERSION CHANNEL

Year: 2017

Current estimate: \$780k

Options analysis completed: YES

Replace Access Bridge AC09 at Buckinbah Weir with modern equivalent and reinstate load rating. Project costs include construction, project management, legal and handover.

Install signage & handover bridge (Wippell) – THURAGGI DIVERSION CHANNEL

Year: 2017

Current estimate: \$119k

Options analysis completed: No

Access Bridge AC08. This project is to undertake a handover of the bridge asset with the landholder who uses it. Project costs includes legal, management and handover.

Material Projects 2019-23

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.

Material Projects 2024-41

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.

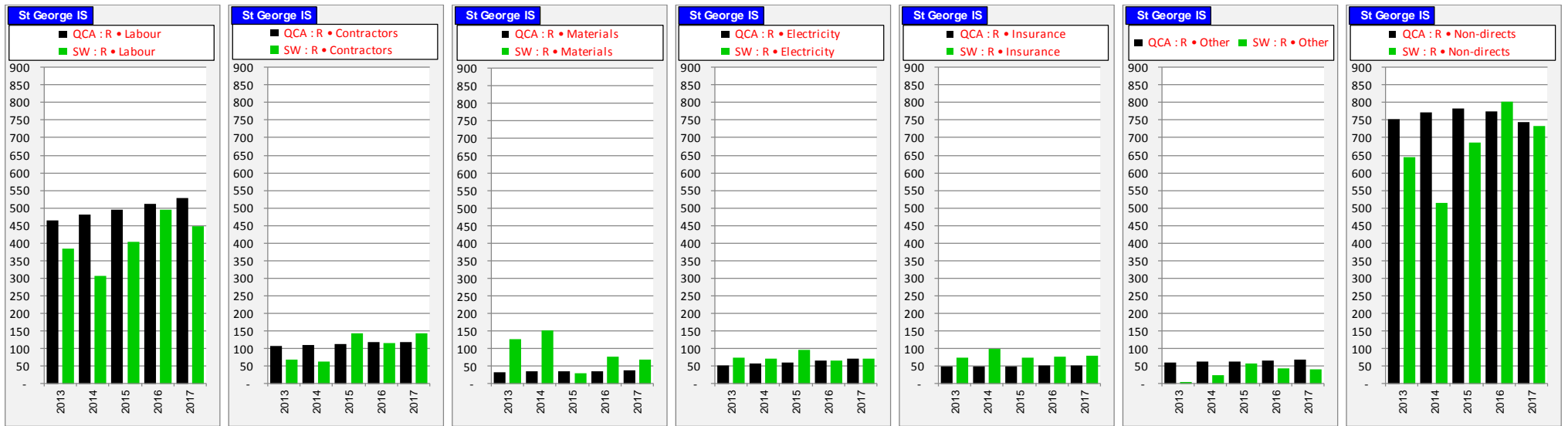
Appendix 1: Total Expenditure by Expense Type

Table 8: Expenditure for Activity by Type

St George IS	2013			2014			2015			2016			2017			2013 to 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 Forecast \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	SW Forecast \$000	QCA Target \$000	Variance \$000
Revenue	2,336			2,317			2,423			2,375			2,438			11,890		
Routine Spend																		
Operations																		
Labour	228	290	61	201	299	98	304	309	5	308	319	11	268	329	61	1,308	1,545	237
Contractors	2	4	2	32	4	(28)	5	4	(1)	4	5	1	8	5	(3)	51	22	(30)
Materials	92	19	(72)	104	20	(84)	3	21	18	60	21	(39)	50	22	(28)	309	104	(206)
Electricity	73	53	(21)	71	56	(15)	96	60	(36)	65	65	0	70	70	(0)	375	303	(72)
Insurance	73	48	(25)	97	49	(48)	74	50	(24)	76	51	(25)	80	52	(29)	400	249	(151)
Other	4	39	35	19	41	22	19	42	23	19	43	24	19	44	25	80	209	129
Non-directs	382	474	92	341	485	144	510	492	(18)	499	487	(12)	438	468	30	2,169	2,405	236
	854	927	74	866	954	88	1,011	978	(33)	1,030	990	(40)	933	988	55	4,693	4,837	144
Preventative Maintenance																		
Labour	136	91	(45)	82	94	12	59	97	38	108	100	(8)	105	104	(1)	490	486	(4)
Contractors	65	89	24	25	92	67	63	95	32	64	98	34	59	100	41	276	474	198
Materials	26	6	(20)	31	6	(24)	15	7	(8)	12	7	(5)	15	7	(8)	99	33	(66)
Other	0	10	10	4	11	6	21	11	(10)	18	11	(7)	18	11	(7)	61	54	(7)
Non-directs	230	147	(83)	136	151	15	105	153	48	177	151	(26)	173	146	(27)	821	749	(72)
	457	344	(113)	279	354	76	263	363	100	379	368	(11)	370	368	(2)	1,747	1,797	49
Corrective Maintenance																		
Labour	20	84	64	23	87	64	40	90	50	78	92	14	74	95	21	234	448	214
Contractors	1	13	12	6	14	8	74	14	(60)	46	15	(31)	75	15	(60)	202	71	(131)
Materials	9	7	(1)	15	7	(8)	13	8	(5)	5	8	3	3	8	5	44	38	(6)
Other	0	10	10	0	11	11	18	11	(7)	5	11	6	3	11	8	26	54	28
Non-directs	33	132	99	38	136	98	72	138	66	127	136	8	123	130	8	393	671	278
	63	247	184	82	254	172	216	260	44	261	262	1	278	260	(17)	900	1,283	383
Routine - total	1,374	1,518	144	1,226	1,562	336	1,490	1,601	111	1,670	1,620	(51)	1,581	1,616	35	7,340	7,916	576
Non-Routine Spend																		
Labour	35	258	223	39	6	(33)	57	12	(45)	34	38	4	31	41	10	196	356	160
Contractors	157	846	688	217	7	(210)	390	12	(377)	298	41	(257)	159	44	(115)	1,222	950	(272)
Materials	9	768	759	3	7	4	36	36	(0)	242	41	(200)	780	94	(686)	1,070	945	(124)
Other	39	37	(2)	37	4	(34)	(7)	7	14	-	23	23	113	40	(73)	182	111	(72)
Non-directs	70	96	26	72	12	(60)	117	25	(92)	81	70	(11)	103	74	(28)	443	278	(165)
Non-Routine - Total	311	2,005	1,695	367	35	(333)	593	92	(501)	655	214	(442)	1,186	294	(892)	3,113	2,640	(473)
Total Regulated Spend	1,685	3,523	1,839	1,593	1,597	4	2,083	1,693	(390)	2,326	1,833	(493)	2,767	1,910	(857)	10,453	10,556	103
Non Annuity Funded Spend																		
Surplus (Deficit)	652			724			341			50			(329)			1,436		

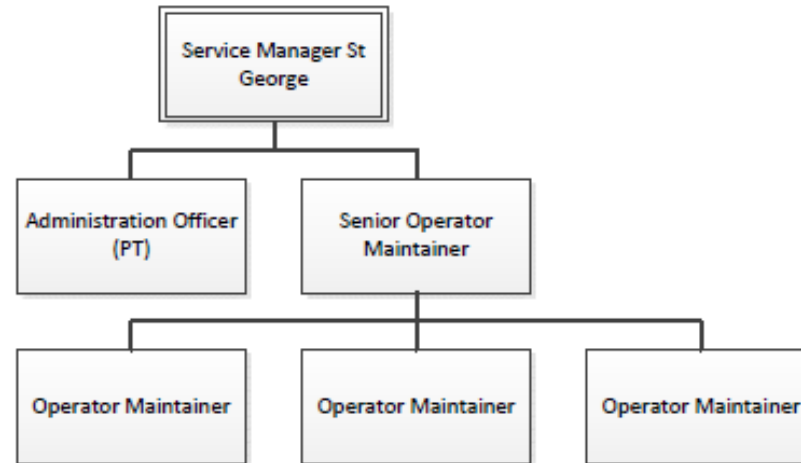
The charts below graphically report routine costs by expense type compared to the QCA target.

Figure 5: Routine Expenditure by Expense Type (\$'000)



Appendix 2: Organisational Chart of Local Resources

The chart below outlines the human resources engaged locally in providing services in the channel distribution system.



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 prices were presented in real dollars (\$2011). To convert the QCA reported real dollars to nominal dollars multiply by the conversion factors listed below. The conversion factors 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 9: 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	1.1397

Disclaimer

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