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2016/17 Annual Network Service Plan

Dawson 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

Dawson IS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000
Revenue	3	1,124	1,501	1,839	1,563	1,581
Less - Routine Expenditure	4 & 7	962	1,349	1,237	1,450	1,413
Less - Non-Routine Expenditure						
• Annuity Funded	5, 6 & 7	379	67	215	157	337
• Non Annuity Funded	5	-	-	-	-	-
Surplus (Deficit)		(217)	85	388	(45)	(169)

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

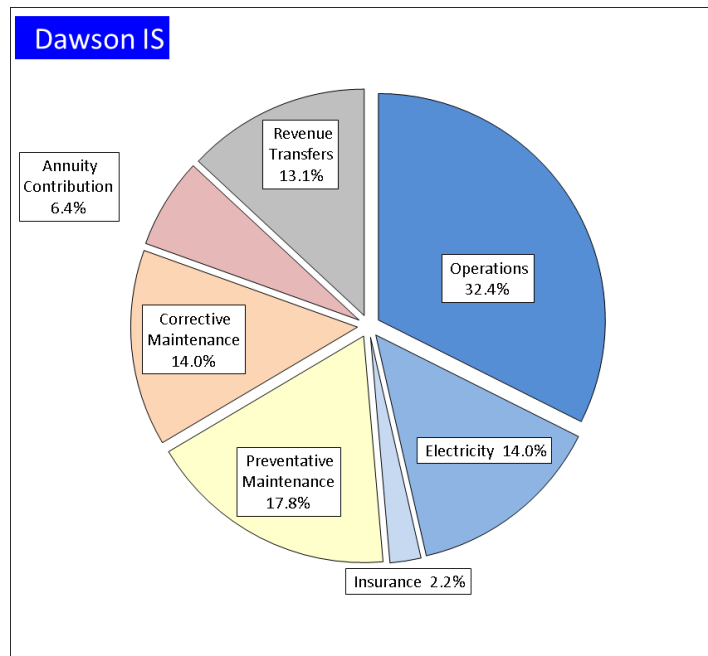


Figure 1 shows a high level summary of scheme costs and provides an indication of where revenue from irrigation water charges is applied. The item “Annuity Contribution” refers to the component of irrigation water charges that is applied toward the renewals annuity each year. The item “Revenue Transfers”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

Table 2: Water Data

	No. of Customers	Water Entitlements
		ML
1. Industrial		0
2. Irrigation		15,950
5. SunWater		4,005
Service Contract Total	47	19,957

QCA Assumed Water Usage

73.5%

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

Revenue

Table 3: Revenue

Dawson IS	2013	2014	2015	2016	2017
	Actual	Actual	Actual	Forecast	Budget
	\$000	\$000	\$000	\$000	\$000
Irrigation	874	1,228	1,215	1,312	1,379
Industrial	-	-	0	-	-
Urban	0	0	1	1	1
Irrigation CSO	462	447	425	401	376
Revenue Transfers	(259)	(220)	(216)	(224)	(229)
Drainage	44	46	47	47	52
Other	2	-	0	2	2
Insurance Proceeds - Flood	-	-	366	23	-
Revenue Total	1,124	1,501	1,839	1,563	1,581

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

Dawson 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	321	530	208	583	548	(35)	588	557	(31)	550	558	9	569	552	(17)	103	2,611	2,745	134	95
Electricity	125	157	31	190	168	(23)	164	179	15	234	194	(41)	246	207	(39)	119	960	904	(56)	106
Insurance	34	23	(11)	46	23	(22)	36	24	(12)	37	24	(12)	39	25	(14)	158	191	119	(72)	161
Operations Total	480	709	229	819	739	(80)	788	760	(28)	821	776	(44)	853	784	(70)	109	3,762	3,768	7	100
Preventative Maintenance	404	387	(17)	404	398	(6)	320	408	88	412	412	(0)	313	410	97	76	1,853	2,015	162	92
Corrective Maintenance	77	204	127	126	210	85	129	215	87	218	217	(1)	246	216	(30)	114	796	1,063	267	75
Routine Total	962	1,300	339	1,349	1,347	(2)	1,237	1,383	147	1,450	1,405	(45)	1,413	1,410	(3)	100	6,410	6,846	436	94

The total budget routine spend for 2017 is in line with the QCA target.

Appendix 2 includes an organisation chart showing the labour resources based in Theodore 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.

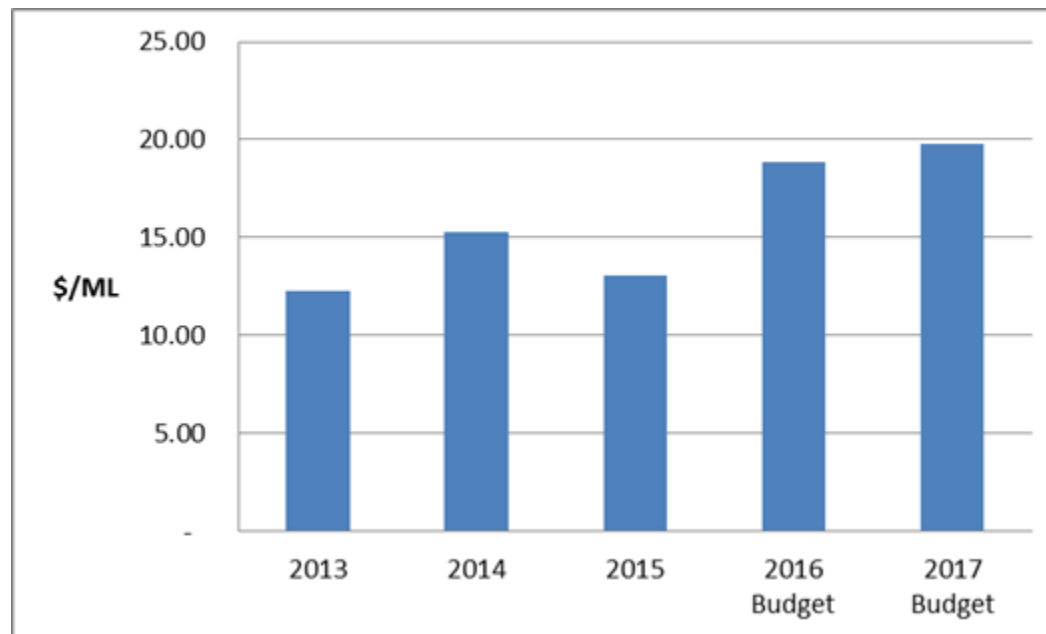
¹ Activities listed will not apply to all service contracts.

The operations budget in 2017 is 9% above the QCA target, however this is largely due to the increases in insurance costs and electricity being higher than allowed for by the QCA. Increased premiums followed flood events that have occurred in the past few years in Queensland. The budget for operations drops to 102% of the QCA target when the electricity and insurance over-runs are taken into account.

Electricity costs are budgeted 19% higher than the QCA target in 2017. The 2017 budget includes a 5% escalation of electricity prices, however indications are that after several years of above-QCA price increases, the transitional electricity tariffs will not escalate by 5% in 2016/17. This will relieve the price pressure on SunWater and our customers but prices remain above the level allowed by the QCA. 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.

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 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 (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 below the QCA target because of efficiencies achieved in the use of local contractors for weed control (slashing channels and drains) and utilising local contractors for electrical and mechanical preventative maintenance inspections.

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

² Activities listed will not apply to all service contracts.

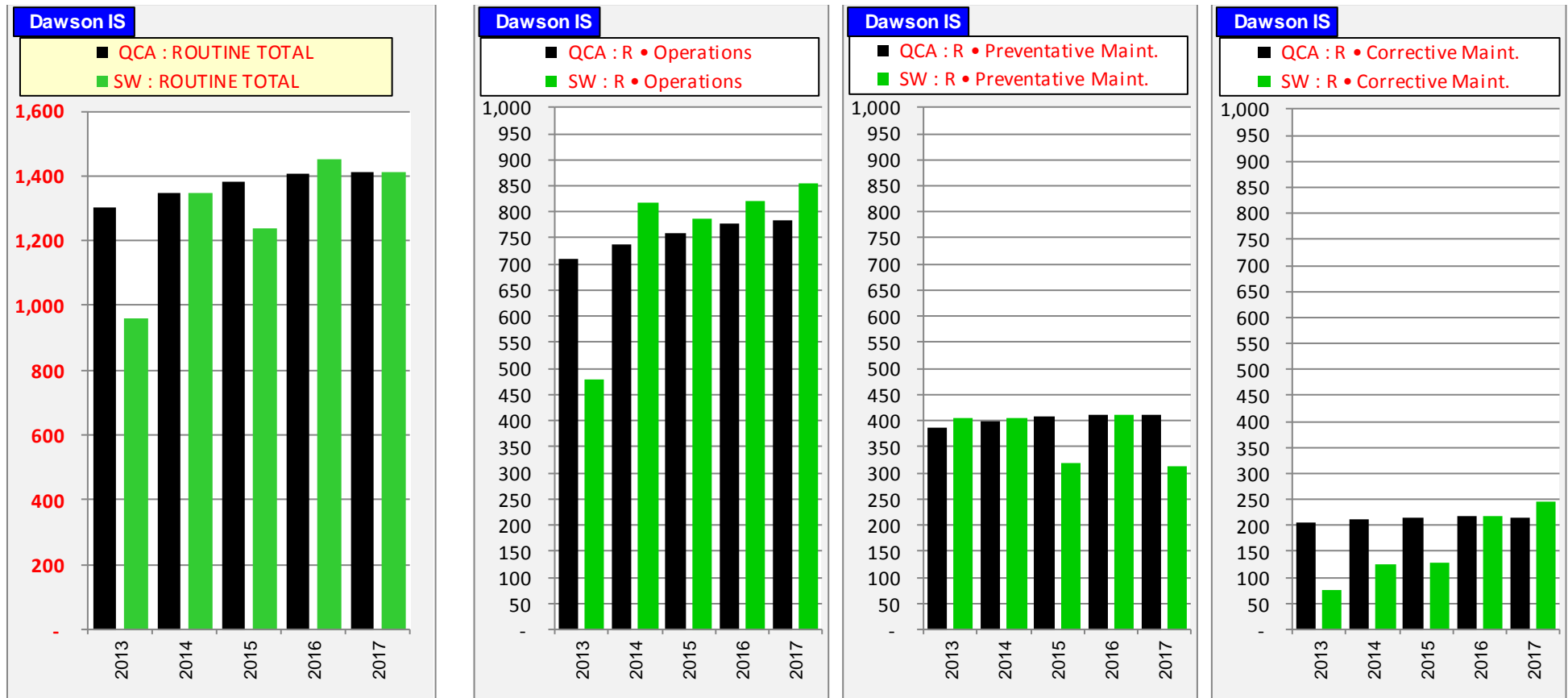
- Repair regulator gates, control valves, etc.
- Drains
 - De-silting drains;
 - Erosion control and repair of rock protection works;
 - Repair fencing; and
 - Repair concrete structures.
- Pipelines
 - Pipe breaks
 - Repair air valves, scour valves, etc.;
 - Erosion control and repair of rock protection works; and
 - Repair concrete structures.
- Scheme Roads
 - Repair pot holes;
 - 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.

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

Dawson 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	43	-	(43)	0	-	(0)	-	-	-	-	-	-	-	-	-	-	43	-	(43)	-
R&E	336	65	(271)	67	374	307	215	215	(0)	157	106	(51)	337	120	(217)	281	1,113	880	(233)	126
Non-routine Total	379	65	(314)	67	374	307	215	215	(0)	157	106	(51)	337	120	(217)	281	1,156	880	(276)	131
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)
Construct Siphon & Support Structure –Theodore Channel D SIO1	Replace failing existing syphon & support structure with new steel support structure and new larger concrete pipes	170
Refurbish Pump and Motor.- THEODORE PUMPSTATION	Refurbish Pump Unit and Electric Motor Unit 3 based on standard refurbishment period and condition.	59
Replace Gate Control Equipment - THEODORE IRRIGATION	Theodore Channel A & B Gate Controls Project - Replace existing unsupported gate control hardware and software with modern equivalent at two sites.	48
Replace Gate Control Equipment - GIBBER GUNYAH IRRIGATION	Gibber Gonyah Main Channel Gate Control Project - Replace existing unsupported gate control hardware and software with modern equivalent.	23
Replace Mild Steel Fixed Safety Screen - GIBBER GUNYAH IRRIGATION	Current safety screens are corroded and require replacement. New screens are to be designed, fabricated and installed.	9
Fabricate and Install New Safety Screen - THEODORE IRRIGATION	Current safety screens are corroded and require replacement. New screens are to be designed, fabricated and installed.	14
Fabricate and Install New Safety Screen – GIBBER GUNYAH IRRIGATION	Current safety screens are corroded and require replacement. New screens are to be designed, fabricated and installed.	14
Total		337

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

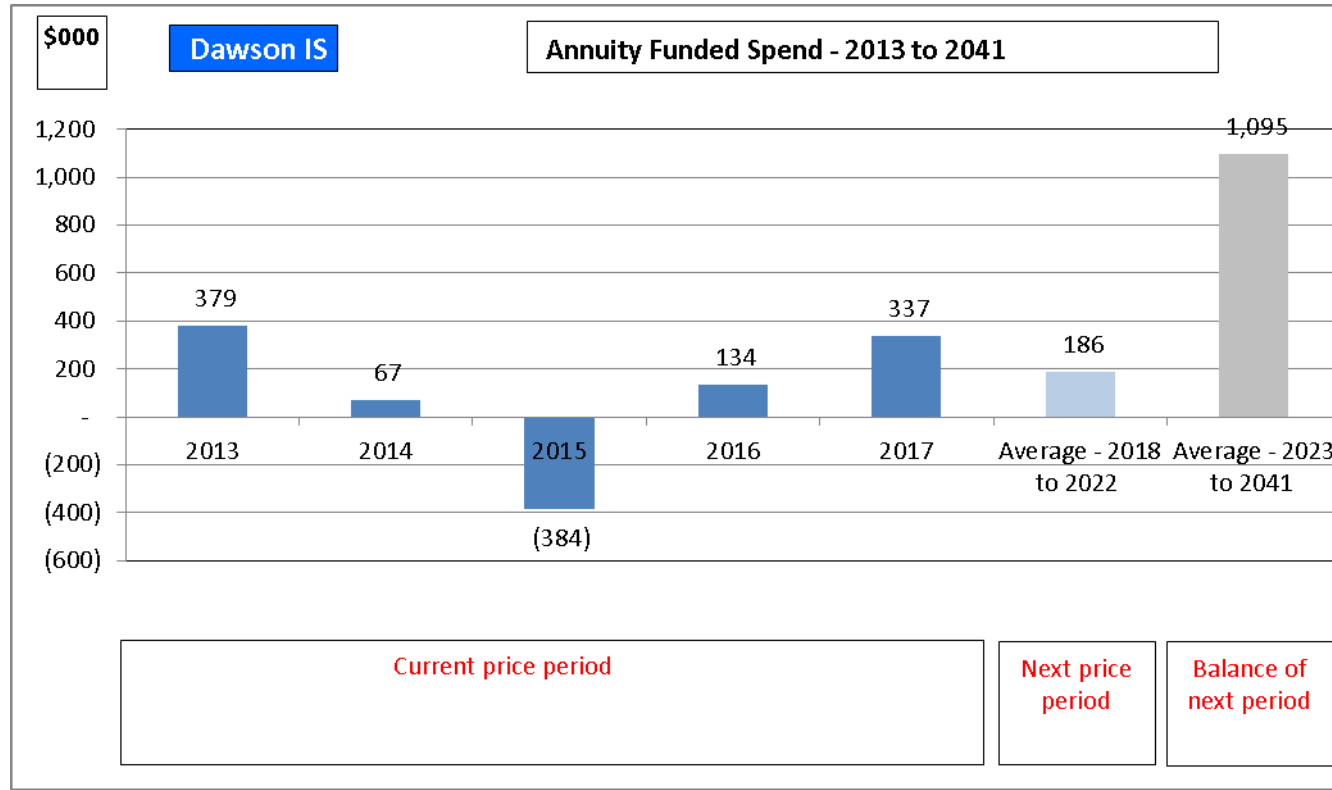
Dawson IS		2013	2014	2015	2016	2017	2013 to 2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Forecast \$000	Budget \$000	Forecast \$000
Annuity							
Opening Balance		1,337	1,108	1,206	1,787	1,897	1,337
Net Spend	See below	(379)	(67)	384	(134)	(337)	(535)
Annuity Contribution		51	82	107	110	113	463
Interest		100	83	90	134	142	549
SunWater - Closing Balance		1,108	1,206	1,787	1,897	1,814	1,814
QCA - Closing Balance		2,437	2,327	2,394	2,578	2,764	2,764
Difference		(1,329)	(1,121)	(607)	(681)	(949)	(949)
Net Spend Analysis							
Spend	5 & 7	(379)	(67)	(215)	(157)	(337)	(1,156)
Insurance Proceeds Receipts							
• Prior Year		-	-	233	-	-	233
• Current Year		-	-	366	23	-	389
Net Spend		(379)	(67)	384	(134)	(337)	(535)

* 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

The evenness in the spread of estimated project costs and/or spend that has already occurred over 2013-16 means there are no projects which exceed the materiality threshold for this service contract for the 2017-18 period.

Material Projects 2019-23

The evenness in the spread of estimated project costs and/or spend that has already occurred over 2013-16 means there are no projects which exceed the materiality threshold for this service contract for the 2019-23 period.

Material Projects 2024-41

The evenness in the spread of estimated project costs and/or spend that has already occurred over 2013-16 means there are no projects which exceed the materiality threshold for this service contract for the 2024-41 period.

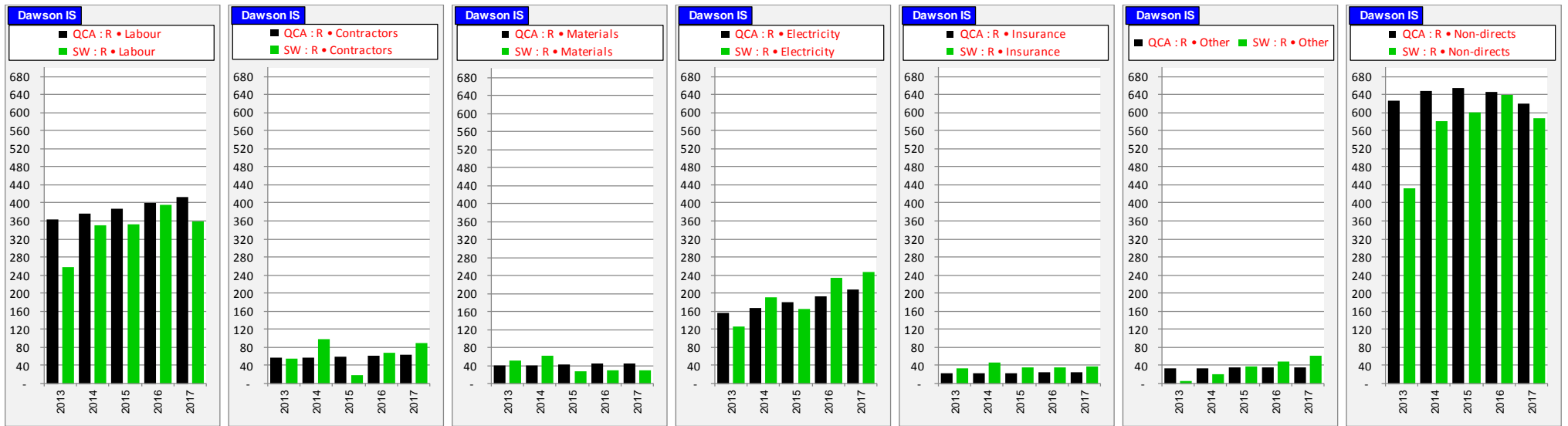
Appendix 1: Total Expenditure by Expense Type

Table 8: Expenditure for Activity by Type

Dawson 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	1,124			1,501			1,839			1,563			1,581			7,608		
Routine Spend																		
Operations																		
Labour	115	191	76	213	197	(16)	213	204	(9)	203	210	7	210	217	6	955	1,019	64
Contractors	1	-	(1)	1	-	(1)	2	-	(2)	1	-	(1)	1	-	(1)	6	-	(6)
Materials	4	0	(3)	6	0	(5)	3	1	(3)	1	1	(0)	1	1	(0)	15	3	(12)
Electricity	125	157	31	190	168	(23)	164	179	15	234	194	(41)	246	207	(39)	960	904	(56)
Insurance	34	23	(11)	46	23	(22)	36	24	(12)	37	24	(12)	39	25	(14)	191	119	(72)
Other	6	5	(1)	13	5	(7)	9	6	(3)	18	6	(12)	16	6	(10)	61	28	(33)
Non-directs	195	333	138	350	344	(6)	361	348	(14)	327	342	15	340	329	(11)	1,573	1,696	122
	480	709	229	819	739	(80)	788	760	(28)	821	776	(44)	853	784	(70)	3,762	3,768	7
Preventative Maintenance																		
Labour	122	109	(13)	106	113	6	102	116	15	121	120	(2)	80	124	44	531	581	50
Contractors	50	54	4	81	55	(26)	14	57	43	56	59	3	56	60	4	258	285	27
Materials	31	25	(6)	35	25	(9)	14	26	12	20	27	7	20	27	7	120	131	10
Other	0	13	13	4	13	9	16	14	(3)	16	14	(1)	23	15	(9)	60	69	9
Non-directs	201	186	(15)	177	191	14	173	194	21	198	192	(7)	133	185	51	883	949	65
	404	387	(17)	404	398	(6)	320	408	88	412	412	(0)	313	410	97	1,853	2,015	162
Corrective Maintenance																		
Labour	21	64	43	31	66	35	39	68	29	71	70	(0)	69	73	4	231	342	111
Contractors	3	3	(0)	16	3	(13)	2	3	1	10	3	(7)	32	3	(29)	64	15	(48)
Materials	18	15	(3)	21	15	(6)	8	16	7	8	16	8	8	17	9	63	79	15
Other	-	14	14	4	15	11	12	15	3	15	16	1	23	16	(7)	54	76	22
Non-directs	36	108	73	53	111	59	67	113	46	115	111	(3)	114	107	(7)	384	551	167
	77	204	127	126	210	85	129	215	87	218	217	(1)	246	216	(30)	796	1,063	267
Routine - total	962	1,300	339	1,349	1,347	(2)	1,237	1,383	147	1,450	1,405	(45)	1,413	1,410	(3)	6,410	6,846	436
Non-Routine Spend																		
Labour	50	11	(39)	8	60	51	8	38	29	15	19	4	18	22	4	100	150	50
Contractors	195	12	(183)	42	65	23	143	41	(102)	62	21	(41)	252	24	(228)	694	163	(531)
Materials	-	12	12	0	65	65	32	41	9	50	21	(29)	25	24	(1)	107	163	56
Other	36	7	(29)	1	36	35	9	22	13	-	11	11	-	13	13	45	89	43
Non-directs	98	23	(76)	16	148	132	23	73	50	30	35	5	43	38	(5)	210	316	106
Non-Routine - Total	379	65	(314)	67	374	307	215	215	(0)	157	106	(51)	337	120	(217)	1,156	880	(276)
Total Regulated Spend	1,341	1,366	25	1,416	1,721	305	1,452	1,598	146	1,607	1,511	(96)	1,750	1,530	(220)	7,566	7,726	159
Non Annuity Funded Spend	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surplus (Deficit)	(217)	-	-	85	-	-	388	-	-	(45)	-	-	(169)	-	-	42	-	-

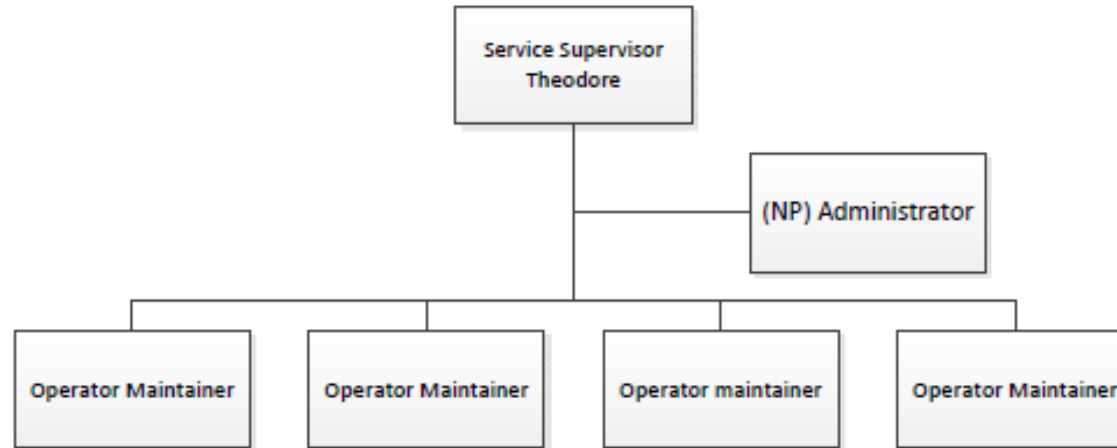
The charts below graphically report routine costs by expense type compared to the QCA target.

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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