

# Background paper QCA review of irrigation prices

Expenditure update
Changed regulatory period

September 2011



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### 1 Introduction

In January 2011, SunWater submitted its Network Service Plans (NSPs) to the Queensland Competition Authority (QCA). These NSPs presented SunWater's proposed expenditure over the regulatory period 2011/12 to 2015/16.

In June 2011, the QCA Ministers issued an amended referral notice to the QCA that required it to recommend irrigation prices for the 2012/13 to 2016/17 period.

SunWater does not propose to amend the NSPs as lodged to the QCA, as this change in period does not materially impact upon its proposals. However, some new information has arisen, some of which were previously foreshadowed in those NSPs and/or to the QCA.

This paper sets out these proposed changes, which are limited to the following:

- updating insurance premium costs, over the new regulatory period, and setting out forecasts for the 2016/17 year (Section 2); and
- updates to the unders and overs balances in SunWater's revenue capped schemes to 1 July 2012 (Section 3).

This paper does not discuss updates to the electricity cost forecasts, as this has been discussed in a separate paper submitted to the QCA.

SunWater acknowledges that the opening Annuity Restoration Reserve (ARR) balance at 1 July 2012 and the renewals annuity will need to be recalculated, and proposes that this be done following the QCA's draft report based on more current information, and in accordance with the QCA's recommendations about matters affecting the ARR (e.g. unbundling the previous balances).

In addition, information relating to a number of additional major renewals projects is coming to light that will affect the scheme based annuities. These include:

- replacement of inflatable dams on four weirs;
- remediation works to the Palm Tree Creek value in the Pioneer River WSS:
- completion of the Marian weir outlets works upgrade in the Pioneer River WSS;
- St George pumpstation replacement, and
- Final estimates of flood damage repairs.

SunWater will submit expenditure forecasts and supporting information on these projects as soon as reports are completed, however this will not be prior to the deadline for the QCA's draft report.



# 2 Operating cost updates

Since January 2011, a number of cost changes have eventuated that were previously foreshadowed to the QCA, namely insurance premiums and electricity costs. Electricity costs have been addressed in a separate paper to the QCA, and hence this section focuses on changes to insurance costs

An additional year of operating expenditure also needs to be set to reflect the change in period. These matters are discussed below.

All costs are expressed in \$2011, consistent with the terms applied in the NSP.

### 2.1 Insurance premiums

SunWater had indicated that it expected insurance costs to increase significantly for 2011/12 in response to the flood events of 2010/11. These increases are now known, with SunWater having recently concluded its procurement program for insurance for the 2011/12 year.

SunWater has also corrected some anomalies discovered in the allocation of insurance costs, including:

- the inclusion of premiums for project insurance into the NSP operating costs –
  this error was the cause of the anomaly for Eton identified by Deloitte in their
  review of administration costs. These project insurance costs have now been
  removed from the insurance cost forecasts as they will be recovered as part of
  the actual costs of renewals and other projects as they occur; and
- adjustments to the asset values applied in the Lower Mary scheme for apportioning insurance costs - some of the Lower Mary bulk water asset value was incorrectly assigned to the distribution system. This meant that bulk water insurance costs were understated by approximately \$2k in the previous figures.

In aggregate terms, the insurance costs allocated to the NSPs have increased from \$2.973M to \$3.204M. The actual changes for each water supply scheme and distribution system are set out in the table following. In general, the costs have increased by around 10%, although; increases are less in those schemes that previously included a project insurance component (now removed). In some cases, the project insurance was significant (i.e. Bowen Broken, Eton and Mareeba bulk water) and its removal has resulted in a net decrease in the insurance premium.



Table 1 - Updated insurance costs (\$2011).

Service Contract		NSP	Revised	Revised	Change
ABB - Burdekin Water Supply	Bulk	271,650	303,245	295,848	109%
ABP - Proserpine Water Supply	Bulk	80,895	90,355	88,151	109%
BBB - Bundaberg Water Supply	Bulk	90.294	100.856	98,396	109%
BBL - Lower Mary Water Supply	Bulk	7.325	9.660	90,390	129%
BBR - Barker Barambah Water Supply	Bulk	75,185	83,972	81,924	109%
BBU - Upper Burnett Water Supply	Bulk	61,408	68,513	66,842	109%
BBY - Boyne Water Supply	Bulk	50,626	56,468	55,090	109%
IBH - Chinchilla Weir Water Supply	Bulk	5,837	6,503	6,345	109%
IBM - Maranoa Water Supply	Bulk	5,160	5,747	5,607	109%
IBN - Cunnamulla Weir Water Supply	Bulk	2,191	2,457	2,397	109%
IBS - St George Water Supply	Bulk	37,707	42,129	41,102	109%
IBT - Macintyre Brook Water Supply	Bulk	66,414	73,364	71,575	108%
IBU - Upper Condamine Water Supply	Bulk	63,922	71,205	69,468	109%
KBB - Bowen Broken Water Supply	Bulk	49,981	49,141	47,942	96%
KBE - Eton Water Supply	Bulk	112,592	80,316	78,357	70%
KBP - Pioneer Water Supply	Bulk	89,619	93,639	91,355	102%
LBC - Callide Water Supply	Bulk	129,872	144,538	141,013	109%
LBD - Dawson Water Supply	Bulk	44,693	49,841	48,626	109%
LBF - Lower Fitzroy Water Supply	Bulk	11,518	12,850	12,537	109%
LBN - Nogoa Water Supply	Bulk	182,556	203,742	198,773	109%
LBT - Three Moon Water Supply	Bulk	34,708	38,732	37,787	109%
MBM - Mareeba Water Supply	Bulk	106,812	85,874	83,779	78%
AIE - Burdekin Irrigation Distribution	Dist	344,365	398,714	388,989	113%
BIC - Lower Mary Irrigation Distribution	Dist	40,920	44,538	43,452	106%
BIG - Bundaberg Irrigation Distribution	Dist	474,697	553,977	540,466	114%
IIS - St George Irrigation Distribution	Dist	44,433	49,580	48,371	109%
KIA - Eton Irrigation Distribution	Dist	119,275	138,274	134,902	113%
LIT - Dawson Irrigation Distribution	Dist	21,371	23,633	23,056	108%
LIW - Emerald Irrigation distribution	Dist	92,357	107,224	104,609	113%
MIM - Mareeba Irrigation Distribution	Dist	254,197	295,035	287,839	113%
Total		2,972,579	3,284,123	3,204,022	108%

Insurance premiums shown above are the 2011/12 actual values deflated by 2.5% to show these costs on a \$2011 basis. SunWater's forecast of insurance is that premiums will not increase in real terms over the price path (i.e. at CPI only), despite the rate of increase experienced for the 2011/12 year being well above CPI.



### 2.2 Price path extension year

The tables below set out the proposed operating expenditure for 2016/17 (in \$'000 2011). These costs have been derived from the following assumptions, consistent with those used for the preceding years:

- Materials and contractors increase by 4%;
- Electricity costs increase by CPI only, however SunWater has prepared a submission on electricity costs that presents an alternative forecasting methodology allowing for the estimated increases in electricity prices due to the BRCI increases, including the impact of carbon pricing; and
- No increase in real terms for other costs (i.e. they increase at the rate of inflation).

The 2017 forecast costs presented below are extracted from the same model used to produce the NSPs. The data in this model has not been altered since the NSPs were produced in January 2010 and therefore the cost forecasts shown below do not include the proposed changes in forecast electricity and insurance costs and will need to be adjusted for these changes before the data can be used to calculate prices.

### Table 2 - 2016/17 Bulk Water Operating Expenditure (\$2011)

Operating costs for the first seven bulk water service contracts:

Expenditure by Activity
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Cat	ltem	Barker Barambah 2017	Bowen Broken 2017	Boyne 2017	Bundaberg 2017	Burdekin 2017	Callide 2017	Chinchilla 2017
(Real dollar	rs, \$'000)							
Expenditur	е							
e >	Operations	509	487	257	672	2430	586	51
₹ ₹	Electricity (outdated forecast*)	19	102	0	8	75	5	0
ct a	Preventive maintenance	107	190	92	302	345	270	12
Expenditure by Activity	Corrective maintenance	50	214	24	121	218	35	8
	Revenue offsets	-19	-12	-15	-24	-95	-9	-4
Operating (	Costs*	666	981	358	1080	2974	887	66

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electric

#### **Expenditure by Type**

Cat		Barker Barambah	Bowen Broken	Boyne	Bundaberg	Burdekin	Callide	Chinchilla	
	Item	2017	2017	2017	2017	2017	2017	2017	
(Real dollar	rs, \$'000)								
Expenditur	e								
	Labour	181	208	100	296	832	222	18	
ģ	Electricity (outdated forecast*)	19	102	0	8	75	5	0	
e ne	Materials	19	45	15	42	118	14	2	
ndituı Type	Contractors	11	152	6	52	65	15	5	
- g	Other	110	86	64	145	329	194	11	
Expenditure Type	Indirects & Overhead	343	400	189	560	1650	445	34	
	Revenue offsets	-19	-12	-15	-24	-95	-9	-4	
Total Opera	ating Costs*	666	981	358	1080	2974	887	66	

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electric

#### Revenue Offsets

Cat	Barker Barambah 2017	Bowen Broken 2017	Boyne 2017	Bundaberg 2017	Burdekin 2017	Callide 2017	Chinchilla 2017
(Real dollars, \$'000)							
Revenue Offsets							
Recreation-Commercial Operator Payments		-12			-50	0	
Rent Received		0	-1		0	0	
Land Leases	-15		-12	-12	-45	-5	-2
Other Charges & Fees	-4		-2	-12	0	-4	-2
Flood Mitigation							
Access charge							
Total Revenue Offsets	-19	-12	-15	-24	-95	-9	-4



# Operating costs for the next seven bulk water service contracts:

### **Expenditure by Activity**

Cat	Item	Cunnamulla 2017	Dawson 2017	Eton 2017	Lower Fitzroy 2017	Lower Mary 2017	Macintyre 2017	Maranoa 2017
(Real dollar	rs, \$'000)							
Expenditure	e							
e >	Operations	39	610	549	144	196	677	23
ĬĒ Ē	Electricity (outdated forecast*)	0	41	172	1	0	1	0
enditure Activity	Preventive maintenance	6	190	429	89	73	182	7
Expenditur by Activity	Corrective maintenance	8	87	300	44	13	36	1
	Revenue offsets	-2	-5	-2	0	-2	-11	0
Operating (	Costs*	51	923	1448	278	280	885	31

<sup>\*</sup> There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electric

#### **Expenditure by Type**

Cat		Cunnamulla	Dawson	Eton	Lower Fitzroy	Lower Mary	Macintyre	Maranoa
	Item	2017	2017	2017	2017	2017	2017	2017
(Real dollar	rs, \$'000)							
Expenditur	e							
	Labour	14	271	291	84	89	262	8
, p	Electricity (outdated forecast*)	0	41	172	1	0	1	0
e nre	Materials	4	25	95	12	9	15	1
ditur	Contractors	5	11	168	11	2	19	0
- Je	Other	3	72	137	15	14	82	7
Expenditure Type	Indirects & Overhead	27	508	588	156	167	517	15
	Revenue offsets	-2	-5	-2	0	-2	-11	0
Total Opera	ating Costs*	51	923	1448	278	280	885	31

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electric

#### **Revenue Offsets**

Cat	Cunnamulla	Dawson	Eton	Lower Fitzroy	Lower Mary	Macintyre	Maranoa
	2017	2017	2017	2017	2017	2017	2017
(Real dollars, \$'000)							
Revenue Offsets							
Recreation-Commercial Operator Payments							
Rent Received						0	
Land Leases		-1	-1			-9	
Other Charges & Fees	-2	-4	-1	(	) -2	-2	
Flood Mitigation							
Access charge							
Total Revenue Offsets	-2	-5	-2		0 -2	-11	0



# Operating costs for the remaining eight bulk water service contracts:

### **Expenditure by Activity**

Cat	ltem	Mareeba 2017	Nogoa 2017	Pioneer 2017	Proserpine 2017	St George 2017	Three Moon Creek 2017	Upper Burnett 2017	Upper Condamine 2017
(Real dollar	rs, \$'000)								
Expenditur	е								
e >	Operations	772	1782	496	622	616	224	520	667
<u>₹</u>	Electricity (outdated forecast*)	4	12	3	4	7	9	7	55
\d 9	Preventive maintenance	187	254	225	141	216	85	134	169
Expenditure by Activity	Corrective maintenance	24	193	184	52	133	13	33	72
<u> </u>	Revenue offsets	-78	-54	-10	-169	-12	-2	-8	-6
Operating (	Costs*	908	2185	898	650	961	329	687	957

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electricity prices.

#### **Expenditure by Type**

Cat		Mareeba	Nogoa	Pioneer	Proserpine	St George	Three Moon Creek	Upper Burnett	Upper Condamine
	Item	2017	2017	2017	2017	2017	2017	2017	2017
(Real dolla	rs, \$'000)								
Expenditur	e								
	Labour	256	611	230	169	266	92	195	252
ģ	Electricity (outdated forecast*)	4	12	3	4	7	9	7	55
e di	Materials	14	80	49	66	88	4	13	35
	Contractors	19	101	57	102	23	4	16	30
Expenditure Type	Other	184	224	109	133	62	50	96	90
X	Indirects & Overhead	510	1212	460	345	527	173	368	500
	Revenue offsets	-78	-54	-10	-169	-12	-2	-8	-6
Total Opera	ating Costs*	908	2185	898	650	961	329	687	957

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electricity prices.

#### Revenue Offsets

Cat	Mareeba 2017	Nogoa 2017	Pioneer 2017	Proserpine 2017	St George	Three Moon Creek 2017	Upper Burnett 2017	Upper Condamine 2017
(Real dollars, \$'000)	2011	2011		2011	2011	2011		
Revenue Offsets								
Recreation-Commercial Operator Payments								
Rent Received		0			0	0	-1	0
Land Leases	-2	-50	-10	-1	-10	-2	-5	-4
Other Charges & Fees	-2	-4		-1	-2	0	-2	-2
Flood Mitigation				-167				
Access charge	-74							
Total Revenue Offsets	-78	-54	-10	-169	-12	-2	-8	-6



**Table 3 - 2016/17 Distribution Operating Expenditure (\$2011)** 

**Expenditure by Activity** 

Cat (Real dollar		Bundaberg 2017	Burdekin 2017	Dawson 2017	Eton 2017	Lower Mary 2017	Mareeba 2017	Nogoa 2017	St George 2017
Expenditure by Activity	Operations	2216	4134	532	683	237	1723	825	825
	Electricity (outdated forecast*)	2300	3276	119	230	142	252	95	42
	Preventive maintenance	1712	3318	394	626	243	488	623	340
	Corrective maintenance	988	1458	206	444	149	1459	288	240
	Revenue offsets	-151	-630	-53	-4	-13	-556	-395	-202
Operating Costs*		7066	11556	1198	1978	759	3366	1437	1244

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electricity prices.

**Expenditure by Type** 

Cat		Bundaberg	Burdekin	Dawson	Eton	Lower Mary	Mareeba	Nogoa	St George
	Item	2017	2017	2017	2017	2017	2017	2017	2017
(Real dollar	's, \$'000)								
Expenditure	e								
	Labour	1469	2317	392	471	205	1105	471	467
, pà	Electricity (outdated forecast*)	2300	3276	119	230	142	252	95	42
Expenditure Type	Materials	599	1113	77	249	58	545	207	93
ditur	Contractors	156	1091	63	203	16	54	253	112
ē –	Other	518	903	27	125	50	330	101	49
X	Indirects & Overhead	2174	3486	572	705	301	1635	704	684
	Revenue offsets	-151	-630	-53	-4	-13	-556	-395	-202
Total Operating Costs*		7066	11556	1198	1978	759	3366	1437	1244

<sup>\*</sup>There is a proposed change to electricity forecasting methodology being considered by the QCA that will reflect the estimated real increases in electricity prices.

Revenue Offsets

Cat		Bundaberg	Burdekin	Dawson	Eton	Lower Mary	Mareeba	Nogoa	St George
		2017	2017	2017	2017	2017	2017	2017	2017
(Real dollars	s, \$'000)								
Revenue Of	fsets								
Drainage Lev	vies		-601	-43				-327	-191
Drain Diversion Charge			-2	-5				-50	-10
Other Charges & Fees		-149	-9	-3	-	4 -11	-5	-8	-1
Land Leases		0	-18				-6	-3	
Termination fees		-1		-2		-2	-8	-7	
Access Charge							-536		
Total Revenue Offsets		-150	-630	-52	-	4 -13	-555	-394	-202

Table 4 - 2016/17 Transfer Costs from Distribution Systems to Bulk Water (for relevant schemes; \$2011)

Bulk Water Cost Transfers

	Bundaberg 2017	Burdekin 2017	Lower Mary 2017
(Real dollars, \$'000)			
Pumpstation & Main channel cost allocation	-120	-167	-134



# 3 Unders and overs balances - revenue cap schemes

A revenue cap applies in three bulk water schemes: Bowen Broken, Cunnamulla and Macintyre Brook. These revenue cap balances were set out in each NSP. These balances were based on the balance as at 1 July 2010, being the latest information available.

SunWater has updated this forecast, based on the actual balance at 1 July 2011 and assuming that the revenue for the 2011/12 year will equal the target revenue for the scheme. This means the only adjustment to the 1 July 2011 balances will be an additional year of interest on that balance.

The table below provides a summary of the calculation.

**Table 5 – Unders and Overs Balances for Revenue Cap Schemes** 

Scheme	Actual balance at 1 July 2011	Assumed variance from revenue target	Interest rate	Interest	Projected balance
Bowen Broken	-27,668	0	9.64%	2,667	-30,336
Cunnamulla Weir	10,540	0	9.64%	1,016	11,556
Macintyre Brook	-65,433	0	9.64%	6,308	71,741

Note: interest is applied in accordance with the approach documented for the current price paths i.e. the Commonwealth Bank Corporate Overdraft Reference Rate – monthly charging cycle less 1%. This rate is set on 1 July each year. Refer to p16 of SunWater Irrigation Price Paths - Final Report.



### 4 Conclusions

SunWater is required to provide operating expenditure forecasts for the additional year of the regulatory period and this data is provided in the above tables. SunWater has drawn the additional year of forecast data from the same model as the earlier NSP forecasts and presented these in the same format as shown in the NSPs. Some forecasts costs, namely insurance and electricity, have been reforecast based on more up to date information however these reforecasts have not been included in the NSP tables and once agreed, will need to be brought into the data sets presented above before they are used for calculating revenue requirements.