

Water Supply Scheme (WSS) Actual Renewals Expenditures Against Forecast for 2009, 2010 and 2011 (Direct Costs)

This note presents, for each of Seqwater's Water Supply Schemes (WSS), the actual renewal expenditures for 2009, 2010 and 2011 against forecast estimates developed when the schemes were still under SunWater's jurisdiction for the 2007-11 Irrigation Price Paths. The actual and forecast expenditures are in nominal prices and include direct costs only. Indirect and overhead costs are not included for both actual and forecast data.

Methodology to take account of efficiency savings and indexation

The methodology consisted of the following steps for each of the 8 WSSs:

- 1) For each forecast renewal expenditure project the original data for the years 2009, 2010 and 2011 was selected, which were based in 2005/06 dollars;
- 2) The expenditures were reduced by the efficiency savings set in the 2007-11 Irrigation Price Paths for 2009, 2010 and 2011 respectively;
- 3) The forecasts including efficiency savings were then converted to nominal prices assuming an annual inflation rate of 4% (the forecast renewal expenditures for 2009 were converted to 2009 prices, the 2010 forecast expenditures were converted to 2010 prices and so on). The 4% inflation rate is based on the QCA's Final Report on SunWater's Irrigation Pricing 2013-17.
- 4) An attempt was then made to match the actual recorded renewal expenditures for each WSS for the years 2009, 2010 and 2011 with the forecast renewal expenditures which take account of efficiency savings & annual indexation.

Actual and Forecast Renewal Expenditures for the WSSs (including any identified matches)

Below is a series of tables setting out the actual and forecast renewal expenditures for 2009, 2010 and 2011 on a direct cost basis. For each WSS it includes:

- 1) A table presenting the actual renewal expenditures (direct costs, nominal prices);
- 2) A table presenting the forecast renewal expenditures (direct costs, nominal prices);
- 3) Where possible a table presenting any identified matches between actual and forecast expenditure items.

In many instances there will have been forecast expenditures that did not occur and expenditures that did occur but were not forecasted. There may well also be some instances of forecasts that were made and actually happened but it has not been possible to match them due to inadequate descriptions in the forecasts and/or actual expenditures.

It should be noted that there were incomplete project descriptions in the source data available to Indec. In some cases the project details were blank or incomplete and as noted above this made it difficult to match expenditure items.

As was the case with SunWater forecast renewal expenditure, discrepancies arise when comparing irrigation pricing model data (IPM, scheme data) with project level forecast data due to adjustments made to the IPM data after the project level forecasts were completed.

A discrepancy arises in Central Lockyer in 2010 in which the IPM data is \$40,881 (21%) lower than the project level data. Indec has been unable to identify the reason for this discrepancy.

1) Central Lockyer Actual and Forecast Renewals Expenditure 2009 - 2011

CENTRAL LOCKYER ACTUAL RENEWAL EXPENDITURE (DIRECT COSTS, NOMINAL PRICES)

Project Code	2009	2010	2011
Signage Project	2,037	2,474	0
Continued roll out of signage	1,525	0	1,852
Operational Maintenance Services	857	1,040	0
Infrastructure Maint - Scheduled Maint	26,716	0	32,436
Infrastructure Maint - Reactive Maint	4,855	0	5,894
Operational Maintenance Services	475	577	0
Infrastructure Maint - Scheduled Maint	1,616	0	1,962
Infrastructure Maint - Reactive Maint	256	0	311
Dam Ops - Irrigation schemes	8,003	0	9,716
Infrastructure Maint - Reactive Maint	1,286	0	1,561
Infrastructure Maint - Reactive Maint	8,945	0	10,861
Install Access Stairs Jordans Weir	4,962		
Bill Gunn Dam		6,949	
Clarendon Dam Fencing		21,000	
Lockyer Central Irrigation Renewals Stairway and handrails Glenore grove, motorvale flow meter replacement		9,482	2,184
TOTAL	61,533	41,521	66,777

CENTRAL LOCKYER FORECAST RENEWAL EXPENDITURE (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Refurbish Pwks - rip rap replacement/stabilisation	44,707	0	0
Study - Dam safety Inspection	0	34,875	0
Refurbish Channel - Repair eroision damage due to dispersive soils.	0	29,063	0
Refurbish pump. Uncertainty of frequency of inspection/maintenance - Critical asset Changed strategy based	0	0	48,380
Refurbish pump. Uncertainty of frequency of inspection/maintenance - Critical asset - Changed strategy based on pump 1 failure	0	46,501	0
Refurbish Pump: Carry out condition Assessment and Minor Services	0	0	0
Refurbish Road - access road grade, gravel	5,588	0	0
Refurbish Road - gravel @ grade. Changed cost to reflect actual costs on notification	5,141	0	0
Refurbish: control component	27,942	0	0
Refurbish: Fence Maintenance at mid-life.	0	0	60,476
Refurbish: Major maintenance of submersible pump - Critical asset. Replace pump guides if required.	0	0	24,190
Refurbish: replace critical components	0	0	12,095
Risk - security fence adjacent to new subdivisions - policy	0	46,501	0
Change Out Purchase and replace water neters-	11,177	11,625	0

Table continued on the next page.

CENTRAL LOCKYER FORECAST RENEWAL EXPENDITURE (DIRECT COSTS, NOMINAL PRICES) CONTD			
Forecast Renewal Expenditure	2009	2010	2011
Change Out Purchase and replace water neters	0	0	12,095
(regulates a low flow from the weir - critical)	0	5,813	0
Change installation date to 1994	0	0	4,853
Glenore Grove - replace when failed	8,383	0	0
Infrequently used. Underwater all the time 20 yr life ok. \$3000 replacement cost @ 20yrs.	5,588	0	0
Install 1998 - 150mm Flyght submersible - very corrosive environment - routine service @ 6mth int. C	11,335	0	0
Rarely used - replace when failed - underwater during flood - Kentville	0	3,338	0
Refurbish Pipwork - Special inside valve box - external paint	0	5,813	0
Refurbish SO - refurbish pit & metalwork, replace valve.	0	5,813	0
Refurbish valve at 1/2 life. Butterfly major overhaul Also installation of spindle to valve to operate without entering a confined space	0	16,275	0
Refurbish: Protection works / Rip Rap	0	0	12,095
Refurbish: Replace/ underpin as the building has lean oproblems. RC - life of structure - control building/block - stabilise/rebuild	0	0	18,143
Refurbish: Sand blast and paint trashrack	0	0	18,143
Repair Embankment	0	34,875	0
Replace flap gates as required. Replaced in 1997- change replacement year	0	0	0
Replacement program for meters and pipes in CELO	22,354	23,250	24,190
TOTAL	142,216	263,741	234,661

CENTRAL LOCKYER MATCHES (DIRECT COSTS, NOMINAL PRICES)

Actual Projects	Actual Renewal Expenditure			Matched Forecast Expenditure			Notes
	2009	2010	2011	2009	2010	2011	
Clarendon Dam Fencing		21,000			46,501	60,476	Forecasts "Refurbishment: Fence Maintenance at mid life" \$60,476 for 2011 and "risk - security fence adjacent to new subdivisions" \$46,501 for 2010.
Lockyer Central Irrigation Renewals Stairway and handrails Glenore grove, motorvale flow meter replacement		9,482	2,184	8,383			The forecast "Glenore Grove - replace when failed" at \$8,383 for 2009.

2) Logan Actual and Forecast Renewals Expenditure 2009 - 2011

LOGAN ACTUAL RENEWAL EXPENDITURE (DIRECT COSTS, NOMINAL PRICES)			
Actual Projects	Actual Renewal Expenditure		
Project Code	2009	2010	2011
Signage Project	4,971	5,794	0
UnPlanned Fleet Maintenance	5,630	6,562	0
Fleet - Opex	166	0	194
Continued roll out of signage	5,720	0	6,667
Infrastructure Maint - Scheduled Maint	2,255	0	2,628
Infrastructure Maint - Reactive Maint	7,674	0	8,944
Dam Ops - Irrigation schemes	490	0	571
Infrastructure Maint - Scheduled Maint	2,451	0	2,857
Infrastructure Maint - Reactive Maint	14,439	0	16,830
Maroon Dam (Borumba) Renewals Filter media, safety issue		46,806	
Maroon Dam (Borumba) Renewals Filter media, dam wall repair, DBO valvehouse electrical			55,515
TOTAL	43,796	59,162	94,207

LOGAN FORECAST RENEWAL EXPENDITURE (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Study - Dam safety Inspection	0	0	30,238
Study - Overall Risk Assessment	33,531	0	0
Refurbish Bgate - replace valves (SS) - under cover	0	0	12,095
Refurbish Pipework - patch painting of internal surfaces - pushed from 05 - oct 04 KE	22,354	0	0
Refurbish Pwks - rip rap on U/S face - reinstatement/major repairs.	0	0	24,190
Refurbish: patch paint 300 mm valve and pipework	5,588	0	0
Change Out Purchase and replaces old meters	16,765	17,438	0
Change Out Purchase and replaces old meters.- Carry over from LOG	0	0	18,143
Change out: Capital Cost for all meters in LOG	0	0	0
TOTAL	78,238	17,438	84,666

LOGAN MATCHES (DIRECT COSTS, NOMINAL PRICES)							
Actual Projects	Actual Renewal Expenditure			Matched Forecast expenditure			Notes
	2009	2010	2011	2009	2010	2011	
Maroon Dam (Borumba) Renewals Filter media, dam wall repair, DBO valvehouse electrical			55,515			36,285	The "refurbish bgate - replace valves (SS) - under cover" \$2011 - \$12,095 and " refurbish PwKs - rip rap on U/S face - reinstatement/major repairs" 2011 \$24,190

3) Lower Lockyer Actual and Forecast Renewals Expenditures 2009 - 2011

LOWER LOCKYER ACTUAL RENEWALS (DIRECT COSTS, NOMINAL PRICES)

Actual Projects	Actual Renewal Expenditure		
Project Code	2009	2010	2011
Recreation Maintenance	7,820	8,838	0
Signage Project	4,860	5,492	0
UnPlanned Fleet Maintenance	4,724	5,338	0
Fleet - Opex	5,315	0	6,006
Dam Safety & Source Operations	553	625	0
Dam Ops - Dam and Source Ops	595	0	672
Continued roll out of signage	18,912	0	21,373
Operational Maintenance Services	4,674	5,282	0
Infrastructure Maint - Scheduled Maint	3,040	0	3,436
Infrastructure Maint - Reactive Maint	11,801	0	13,336
Operational Maintenance Services	2,253	2,547	0
Infrastructure Maint - Scheduled Maint	8,796	0	9,940
Infrastructure Maint - Reactive Maint	2,870	0	3,243
Infrastructure Maint - Reactive Maint	6,572	0	7,427
Atkinson Dam Flood Renewal			157,261
Atkinson Dam Flood Renewal Flow meter, replace non return valve, contract payments		76,086	
Lockyer Lower Irrigation Renewals. Pipework and five flow meters		32,178	27,694
TOTAL	82,785	136,386	250,387

LOWER LOCKYER FORECAST RENEWAL (DIRECT, COSTS NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Study: Dam Safety Inspection	-	34,875	-
0	-	-	4,189
Changed asset list. This is 375mm outlet	-	-	24,190
Desilt channel	-	11,625	-
OK	17,331	-	3,708
Refurbish: Channel side slope erosion/piping in fill areas - stabilisation with road base - (ARMS cap. Costs (\$5.5K & \$15.9K incorrect)- work put off from 03 for Aitkinson	-	11,625	-
Refurbish: Desilt Channel	11,177	11,625	12,095
Refurbish: External Paint - Pumpwork and valves	-	11,625	-
Refurbish: Mild steel gate. - Paint and replace seals.	-	-	6,048
Refurbish: Pipework - Internally paint	-	23,250	-
Refurbishment of Fencing - Normal replacement of asset	-	-	42,333
Repair/replace fence over a 3 year period. Ipswich hoing to utilise own labour	-	17,438	18,143
Replace at 25 year intervals -upped cost to S40,000	-	23,250	-
Replace valve at 40 years	15,940	-	-
Requires replacement - uncertain requirement - refer business manager	-	1,528	-
Change Out: Purchase and replaces old meters in all Lower Lockyer	11,177	11,625	12,095
Change-out: Capital Cost for all meters in LLO	-	-	12,095
Refurbish: Purchase and replaces old meters.From 2006 in annual program at LLO level	11,177	-	12,095
Refurbishment. Blow out and clean out piezometer stand pipes. Never been carried out before	6,706	-	-
TOTAL	73,508	158,467	146,991

LOWER LOCKYER MATCHES (DIRECT COSTS, NOMINAL PRICES)

	Actual Renewal Expenditure			Matched Forecast expenditure			Notes
	2009	2010	2011	2009	2010	2011	
Atkinson Dam Flood Renewal Flow meter, replace non return valve, contract payments		76,086					"Change Out: Purchase and replaces old meters in all Lower Lockyer" (\$11,177, \$11,625,\$12,095for 2009, 2010, 2011); "capital Cost for all meters in LLO" (\$12,095 for 2011) and "Refurbishment: Purchase and replaces old meters" (\$11,177 for 2009 and \$12,095 for 2011)
Lockyer Lower Irrigation Renewals. Pipework and five flow meters		32,178	27,694	22,354	11,625	36,285	

4) Mary Valley Actual and Forecast Renewals Expenditure 2009 - 2011

MARY VALLEY ACTUAL RENEWALS (DIRECT COSTS, NOMINAL PRICES)

Project Code	Actual Renewal Expenditure		
	2009	2010	2011
Recreation Maintenance	33,885	37,773	0
Dam Maintenance	6,916	7,710	0
Signage Project	3,265	3,640	0
Residential Property Management	2,766	3,084	0
Fleet - Opex	1,266	0	1,411
Dam Safety & Source Operations	5,564	6,203	0
Dam Ops - Dam and Source Ops	3,547	0	3,954
Recreation Maintenance	108,848	0	121,338
Continued roll out of signage	7,701	0	8,585
Operational Maintenance Services	13,152	14,661	0
Infrastructure Maint - Scheduled Maint	14,526	0	16,193
Infrastructure Maint - Reactive Maint	23,711	0	26,431
Dam Ops - Dam and Source Ops	10,909	0	12,161
Infrastructure Maint - Reactive Maint	25,669	0	28,615
TOTAL	261,726	73,070	218,690

MARY VALLEY FORECAST RENEWAL (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Study - Dam safety inspection (condition assessment)	0	0	24,190
Implementation of study recommendations in 2006 re fishway on Kidd Bridge Gauging Weir	33,531	0	0
Refurbish: Implement 5 yrly weir safety recommendations	0	0	6,048
Replace as required	0	21,924	0
Routine maintenance - replace as required	0	13,257	0
Routine maintenance only	0	13,787	0
Refurbish Meter Outlets - Mary Valley Regulated Streams (Yabba Creek, Mary River, Deep Creek)	83,826	87,188	0
TOTAL	117,357	136,156	30,238

MARY VALLEY MATCHES (DIRECT COSTS, NOMINAL PRICES)							
Project Code	Actual Renewal Expenditure			Matched Forecast Expenditure			Notes
	2009	2010	2011	2009	2010	2011	
Dam Safety & Source Operations	5,564	6,203	0			24,190	Forecast - " Study -Dam safety inspection (condition assessment)"

5) Pie Creek Actual and Forecast Renewals Expenditures for 2009 - 2011

PIE CREEK ACTUAL RENEWALS (DIRECT COSTS, NOMINAL PRICES)			
	Actual Renewal Expenditure		
Project Code	2009	2010	2011
Operational Maintenance Services	14,320	16,701	0
Infrastructure Maint - Scheduled Maint	214	0	250
Infrastructure Maint - Reactive Maint	31,015	0	36,172
Pie Creek Non grid Irrigation flowmeters			9,647
TOTAL	45,549	16,701	46,070

PIE CREEK FORECAST RENEWAL (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Refurbish Motor	5,588	-	-
Refurbish pump	-	-	-
Refurbish Pump Units - incl. gland seals, etc	-	11,625	-
Refurbish switchboard	11,177	-	-
Refurbish: Pump unit 1 refurbishment / Replace depending on economics	7,278	-	-
TOTAL	24,044	11,625	-

NO MATCHES FOR PIE CREEK

6) Warill Valley Actual and Forecast Renewals Expenditure 2009 - 2011

WARILL VALLEY ACTUAL RENEWALS (DIRECT COSTS, NOMINAL PRICES)			
Actual Projects	Expenditure		
Project Code	2009	2010	2011
Signage Project	5,000	5,838	0
UnPlanned Fleet Maintenance	12,914	14,963	116
Fleet - Opex	8,206	0	9,583
Recreation Maintenance	2,775	0	3,240
Continued roll out of signage	18,818	0	21,974
Infrastructure Maint - Scheduled Maint	2,544	0	2,970
Infrastructure Maint - Reactive Maint	9,368	0	10,939
Infrastructure Maint - Reactive Maint	8,954	0	10,456
CWIP - Dam and Associated	29,990	0	0
Moogerah Dam access ladder, gate and handrail			10,283
TOTAL	98,567	20,801	69,560

WARILL VALLEY FORECAST RENEWAL (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
ARMCO - guides replaced - repainted 1998 - OK	11,177	-	-
Desilt channel	-	11,625	-
Refurbish - Full internal paint job of all pipework / main conduit	-	-	36,285
Refurbish: Access Crossings in Warrill. Rationalisation of crossings to be carried out.-push this one out from 06 - oct 04 KE	-	-	60,476
Refurbish: Desilt Channel	-	-	12,095
Refurbish: External painting	16,765	-	-
Refurbish: Pull out and sand blast	22,354	-	-
Waroolaba CK Diversion	-	12,760	-
Engane: Some not fenced, leave grids - replace - 6.5kxm2 + crossings + gates -	-	23,250	-
Enhance: Addition of a weed deflector to divert debris away from valve raqilings	-	17,438	-
Enhance: Installation of insertion meter for IROL compliance. ES study in 06 to determine cheapest solution	-	13,950	-
Enhance: Installation of insertion meter for IROL compliance. Study by ES to determine cheapest solution	13,412	-	-
Change Out: Purchase and replaces old meters.-	16,765	17,438	-
Change Out: Purchase and replaces old meters.- carry over from project on WVA	-	-	12,095
TOTAL	80,473	96,461	120,951

MATCHES WARILL VALLEY (DIRECT COSTS, NOMINAL PRICES)

Project Code	Actual Renewal Expenditure			Matched Forecast Expenditure			Notes
	2009	2010	2011	2009	2010	2011	
Moogerah Dam access ladder, gate and handrail			10,283			60,476	Part of the forecast for 'refurbishments - infrastructure' included 'Refurbishment: Access Crossings in Warrill. Rationalisation of crossings to be carried out" \$60,476

7) Cedar Pocket Actual and Forecast Renewals Expenditures 2009 - 2011

CEDAR POCKET ACTUAL RENEWALS (DIRECT COSTS, NOMINAL PRICES)			
Project Code	Actual Renewal Expenditure		
	2009	2010	2011
DCP: (MS) Grnds Maint - Cedar Pocket Dam	2,179	2,293	0
Cedar Pkt D Ops	2,297	2,417	0
TOTAL	4,475	4,710	0

CEDAR POCKET FORECAST RENEWAL (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Overall Risk Assessment	0	0	36,285
Study - Dam safety inspection (condition assessment) Last occurred on Oct 05	0	0	24,190
TOTAL	0	0	60,476

NO MATCHES FOR CEDAR POCKET

8) Mortonvale Actual and Forecast Renewals Expenditures 2009 – 2010

MORTONVALE ACTUAL RENEWALS (DIRECT COSTS, NOMINAL PRICES)			
	Actual Renewal Expenditure		
Project Code	2009	2010	2011
Operational Maintenance Services	943	1,111	0
Infrastructure Maint - Scheduled Maint	1,664	0	1,962
Infrastructure Maint - Reactive Maint	175	0	206
TOTAL	2,782	1,111	2,167

MORTONVALE FORECAST RENEWAL (DIRECT COSTS, NOMINAL PRICES)			
Forecast Renewal Expenditure	2009	2010	2011
Change out:: Capital Purchase of Meters for all CLO	11,177	11,625	0
Change out:: Capital Purchase of Meters for all CLO- carry over line from CLO-SBB as annual program	0	0	12,095
TOTAL	11,177	11,625	12,095

NO MATCHES FOR MORTONVALE