

22nd February 2018

# NOTICE OF MEETING OF THE COUNCIL

The meeting of the Council will be held at

RIVERINA WATER COUNTY COUNCIL CHAMBERS,

91 HAMMOND AVENUE, WAGGA WAGGA

WEDNESDAY, 28th FEBRUARY 2018 at 9.30 am

and your attendance is requested accordingly.

9.00 am - Tour of proposed new Meeting Room

9.30 am - Council Meeting, followed by:

Budget Workshop, and

**Light Lunch** 

Yours sincerely

Andrew Crakanthorp

**GENERAL MANAGER** 

# \* AGENDA \*

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#### **APOLOGIES**

# DECLARATION OF PECUNIARY AND NON-PECUNIARY INTEREST CONFIRMATION OF MINUTES HELD ON 13<sup>TH</sup> DECEMBER 2017 CORRESPONDENCE

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# **GENERAL MANAGER'S REPORT TO THE COUNCIL**

# **BUSINESS WITH NOTICE**

22nd February 2018

The Chairperson and Councillors:

#### 1. FINANCIAL STATEMENTS - LIST OF INVESTMENTS

**RECOMMENDED** that the report detailing Council's external investments for the months of December 2017 and January 2018 be received.

- Investments December 2017
- Investments January 2018

# Monthly Investment Report as at 31/12/17

#### a) Council's Investments as at 31/12/17

		Term	Maturity	S&P	Interest	Performance	Benchmark	Percentage of		
Investment	Inception Date	(Days)	Date	Rating	Rate (%)	Benchmark	Rate (%)	Portfolio	Principal Value	Market Value
Term Deposits										
ME Bank	20/12/2017	90	20/03/18	A-2	2.40	BBSW	1.63	4.605%	\$1,000,000.00	\$1,000,000.00
Defence Bank	31/10/2017	91	30/01/18	A-2	2.45	BBSW	1.63	6.907%	\$1,500,000.00	\$1,500,000.00
ANZ	12/10/2017	90	10/01/18	A-I+	2.40	BBSW	1.63	6.907%	\$1,500,000.00	\$1,500,000.00
ANZ	10/10/2017	92	10/01/18	A-I+	2.40	BBSW	1.63	6.907%	\$1,500,000.00	\$1,500,000.00
ME Bank	5/12/2017	91	06/03/18	A-2	2.40	BBSW	1.63	6.907%	\$1,500,000.00	\$1,500,000.00
ME Bank	14/12/2017	90	14/03/18	A-2	2.40	BBSW	1.63	4.605%	\$1,000,000.00	\$1,000,000.00
ME Bank	20/12/2017	90	20/03/18	A-2	2.40	BBSW	1.63	6.907%	\$1,500,000.00	\$1,500,000.00
National Australia Bank	10/10/2017	92	10/01/18	A-I+	2.47	BBSW	1.63	4.605%	\$1,000,000.00	\$1,000,000.00
National Australia Bank	19/12/2017	91	20/03/18	A-I+	2.43	BBSW	1.63	9.210%	\$2,000,000.00	\$2,000,000.00
National Australia Bank	20/12/2017	90	20/03/18	A-I+	2.43	BBSW	1.63	6.907%	\$1,500,000.00	\$1,500,000.00
National Australia Bank	5/10/2017	96	09/01/18	A-I+	2.48	BBSW	1.63	9.210%	\$2,000,000.00	\$2,000,000.00
								73.68%	\$16,000,000.00	\$16,000,000.00
Cash Deposit Account										
T Corp				A-I+	2.28	Cash Rate	1.50	14.29%	\$3,102,398.38	\$3,102,398.38
AMP				A-I	2.05	Cash Rate	1.50	12.038%	\$2,614,319.72	\$2,614,319.72
								26.32%	\$5,716,718.10	\$5,716,718.10
TOTAL INVESTMENTS								100.00%	\$21,716,718.10	\$21,716,718.10
Cash at Bank										\$1,204,250.87
TOTAL FUNDS										\$22,920,968.97

#### b) Application of Investment Funds

Restricted Funds	Description	Value
Externally Restricted		
	LIRS Loan Funds	\$0.00
		\$0.00
Internally Restricted		
	Employee Leave Entitlements (30% of ELE)	\$1,158,264.28
	Asset Replacement	\$1,949,860.96
	Loan Funds	\$0.00
	Sales Fluctuation	\$5,000,000.00
		\$8,108,125.24
Unrestricted Funds		\$14,812,843.73
TOTAL FUNDS		\$22,920,968.97

<sup>\*</sup> Externally & Internally Restricted Reserve figures are subject to final adjustment and external audit at 30 June each year.

#### CERTIFICATE

I hereby certify that all the above investments have been made in accordance with the provision of Section 625 of the Local Government Act 1993 and the regulations thereunder.

M.C. Cura.

M Curran

MANAGER CORPORATE SERVICES

# Monthly Investment Report as at 31/1/18

#### a) Council's Investments as at 31/1/18

		Term	Maturity	S&P	Interest	Performance	Benchmark	Percentage of		
Investment	Inception Date	(Days)	Date	Rating	Rate (%)	Benchmark	Rate (%)	Portfolio	Principal Value	Market Value
Term Deposits										
ME Bank	20/12/2017	90	20/03/18	A-2	2.40	BBSW	1.63	4.583%	\$1,000,000.00	\$1,000,000.00
Defence Bank	31/01/2018	90	01/05/18	A-2	2.45	BBSW	1.63	6.874%	\$1,500,000.00	\$1,500,000.00
ME Bank	11/01/2018	90	11/04/18	A-2	2.50	BBSW	1.63	11.456%	\$2,500,000.00	\$2,500,000.00
National Australia Bank	11/01/2018	90	11/04/18	A-I+	2.44	BBSW	1.63	6.874%	\$1,500,000.00	\$1,500,000.00
ME Bank	5/12/2017	91	06/03/18	A-2	2.40	BBSW	1.63	6.874%	\$1,500,000.00	\$1,500,000.00
ME Bank	14/12/2017	90	14/03/18	A-2	2.40	BBSW	1.63	4.583%	\$1,000,000.00	\$1,000,000.00
ME Bank	20/12/2017	90	20/03/18	A-2	2.40	BBSW	1.63	6.874%	\$1,500,000.00	\$1,500,000.00
National Australia Bank	10/01/2018	120	10/05/18	A-I+	2.45	BBSW	1.65	4.583%	\$1,000,000.00	\$1,000,000.00
National Australia Bank	19/12/2017	91	20/03/18	A-I+	2.43	BBSW	1.63	9.165%	\$2,000,000.00	\$2,000,000.00
National Australia Bank	20/12/2017	90	20/03/18	A-I+	2.43	BBSW	1.63	6.874%	\$1,500,000.00	\$1,500,000.00
National Australia Bank	9/01/2018	91	10/04/18	A-I+	2.43	BBSW	1.63	9.165%	\$2,000,000.00	\$2,000,000.00
								77.90%	\$17,000,000.00	\$17,000,000.00
Cash Deposit Account										
T Corp				A-I+	2.23	Cash Rate	1.50	12.64%	\$2,757,909.67	\$2,757,909.67
AMP				A-I	2.05	Cash Rate	1.50	9.460%	\$2,064,319.72	\$2,064,319.72
								22.10%	\$4,822,229.39	\$4,822,229.39
TOTAL INVESTMENTS								100.00%	\$21,822,229.39	\$21,822,229.39
Cash at Bank										\$549,511.85
TOTAL FUNDS										\$22,371,741.24

#### b) Application of Investment Funds

Restricted Funds	Description	Value
Externally Restricted	LIBS Love Foods	<b>#0.00</b>
	LIRS Loan Funds	\$0.00
		\$0.00
Internally Restricted		
	Employee Leave Entitlements (30% of ELE)	\$1,158,264.28
	Asset Replacement	\$2,091,192.96
	Loan Funds	\$0.00
	Sales Fluctuation	\$5,000,000.00
		\$8,249,457.24
Unrestricted Funds		\$14,122,284.00
TOTAL FUNDS	1	\$22,371,741.24

<sup>\*</sup> Externally & Internally Restricted Reserve figures are subject to final adjustment and external audit at 30 June each year.

#### CERTIFICATE

I hereby certify that all the above investments have been made in accordance with the provision of Section 625 of the Local Government Act 1993 and the regulations thereunder.

M.C. Cura.

M Curran

MANAGER CORPORATE SERVICES

#### 2. QUARTERLY BUDGET REVIEW - PERIOD ENDED THE 31ST DECEMBER 2017

**RECOMMENDATION** that the Quarterly Budget Review for the period ended 31 December 2017 be received and adopted.

The Quarterly Review of Council's Budget for the period ended 31 December 2017 is submitted for examination by the Council.

The anticipated Operating Result for 2017/2018 is a surplus of \$7,539,000. The Operating Result from the September 2017 review was a surplus of \$5,635,000. The Capital Works expenditure budget is in addition to this amount and is covered in the following paragraph. Proposed December quarterly review operational adjustments relate to:

- \$400,000 additional water sales due to out of the ordinary dry spring weather
- \$200,000 additional connection fees
- \$31,500 unanticipated worker's compensation scheme rebate
- \$1,200,000 additional S64 developer contributions
- Reallocation of wages to various maintenance works from overheads
- \$53,500 additional allocation to Council donations due to contribution towards water connection charges for Clay Target Assoc

Also included is a quarterly review of Capital Works Projects. The Proposed Capital Budget totals \$21,039,000. The Capital Budget from the September 2017 review was \$29,603,000. Proposed December quarterly review reductions total \$8,564,000, items of note include:

- \$166,000 deferral of Operations Office Refurbishment
- \$700,000 deferral of Levee construction
- \$155,000 deferral of Radio Telemetry upgrades
- \$160,000 deferral of East Wagga Aeration Basin Cover
- \$1,500,000 deferral of Water Treatment Plant roadworks, landscaping, old intake works
- \$1,300,000 deferral of Urana Treatment Plant construction
- \$4,500,000 deferral of Low Level Reservoir construction
- \$192,000 additional works on Rising Mains from CWS
- \$600,000 additional works for Rock Milbrulong Trunk Mains Replacement
- \$400,000 deferral of New Low Level Reservoir Connection Main Refurbishment
- \$250,000 cancellation of remote metering trial

The Quarterly Budget Review Statement should be read in conjunction with the detailed Capital Expenditure Quarterly Review, which is included at the end of this report

Quarterly Budget Review

# Quarterly Budget Review Statement for the period 01/10/17 to 31/12/17

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for the period 01/10/17 to 31/12/17

#### **Report by Responsible Accounting Officer**

The following statement is made in accordance with Clause 203(2) of the Local Government (General) Regulations 2005:

It is my opinion that the Quarterly Budget Review Statement for Riverina Water County Council for the quarter ended 31/12/17 indicates that Council's projected financial position at 30/6/18 will be satisfactory at year end, having regard to the projected estimates of income and expenditure and the original budgeted income and expenditure.

Signed:	M.C. Cleva.	date:	6/02/2018
	Ms Michele Curran Responsible Accounting Officer		

for the period 01/10/17 to 31/12/17

#### **Income & Expenses Budget Review Statement**

Budget review for the quarter ended 31 December 2017

							Current	
							Year	Prior Year
		Approved						
	Original	Changes	Revised	Variations	Notes	Projected	Actual	Actual
(\$000's)	Budget	Sep	Budget	for this		Year End	YTD	YTD
(4000 0)	2017/18	QBRS	2017/18	Dec Qtr		Result	figures	figures
Income							<b>J</b>	3
Rates and Annual Charges	5,016		5,016			5,016	2,626	2,606
User Charges and Fees	20,901		20,901	620	2a	21,521	8,394	7,089
Interest and Investment Revenues	200	150	350			350	192	180
Other Revenues	125	30	155	32	2b	187	288	142
Grants & Contributions - Operating	207		207			207	13	3
Grants & Contributions - Capital	2,662		2,662	1,200	2c	3,862	2,525	1,306
Total Income from Continuing Operations	29,111	180	29,291	1,852		31,143	14,038	11,326
Expenses								
Employee Costs	8,330		8,330	(283)	2d	8,047	3,301	3,643
Borrowing Costs	745	(43)	702	(32)	2e	670	280	313
Materials & Contracts	3,489	` ,	3,489	232	2f	3,721	1,233	1,220
Depreciation	7,120	(1,000)	6,120			6,120	3,019	2,865
Other Expenses	5,015	, ,	5,015	31	2g	5,046	1,631	1,290
Total Expenses from Continuing Operations	24,699	(1,043)	23,656	(52)		23,604	9,464	9,331
Net Operating Result from Continuing Operation	4,412	1,223	5,635	1,904		7,539	4,574	1,995
Net Operating Result before Capital Items	1,750	1,223	2,973	704		3,677	2,049	689

for the period 01/10/17 to 31/12/17

# Income & Expenses Budget Review Statement Recommended changes to revised budget

Budget Variations being recommended include the following material items:

Notes	Details
2a	\$400k additional water sales from dry spring weather, additional connection fees and plumbing permits
2b	\$32k workers compensation rebate from StateCover scheme
2c	Increase in S64 contributions due to additional subdivision works not anticipated
2d	Transfer engineering wages to operational and CAPEX projects from wages originally budgeted to overhead costs
2e	Reduction in loan interest due to loans not taken up in 2017/18
2f	Higher than anticipated reservoir and mains maintenance costs, including unplanned modifications to Woomargama Reservoir and electrical issues with meters and control systems
2g	Higher than anticipated reservoir and mains maintenance costs, including unplanned modifications to Woomargama Reservoir and electrical issues with meters and control systems

for the period 01/10/17 to 31/12/17

#### **Capital Budget Review Statement**

Budget review for the quarter ended 31 December 2017

							Γ	Current	
								Year	Prior Year
(\$000's)	Original Budget 2017/18	Approved C Carry Forwards	<b>hanges</b> Sep QBRS	Revised Budget 2017/18	Variations for this Dec Qtr	Notes	Projected Year End Result	Actual YTD figures	Actual YTD figures
Capital Expenditure									_
Plant & Equipment	759		30	789	6	За	795	355	886
Office Equipment & IT	791	161	(30)	922	(155)	3b	767	117	188
Land & Buildings	1,675	240		1,915	(881)	3с	1,034	66	153
Water Infrastructure	20,298	5,649	30	25,977	(7,534)	3d	18,443	3,115	8,260
Other Assets				-			-		
Loan Repayments (Principal)	1,626			1,626			1,626	778	739
Total Capital Expenditure	25,149	6,050	30	31,229	(8,564)		22,665	4,431	10,226
Capital Funding									
Rates & Other Untied Funding	19,149	6,050	4,030	29,229	(6,564)		22,665	4,431	10,226
New Loans	6,000		(4,000)	2,000	(2,000)	Зе	-		-
Total Capital Funding	25,149	6,050	30	31,229	(8,564)		22,665	4,431	10,226
Net Capital Funding - Surplus/(Deficit)		-	-	-	-		-	-	-

for the period 01/10/17 to 31/12/17

#### Capital Budget Review Statement Recommended changes to revised budget

Budget Variations being recommended include the following material items:

Notes	Details
	Refer to Capital Works Progress report for more detail on Capital Projects and review adjustments
3a	\$6k revision to plant replacement program
3b	Defer Radio Telemetry project due to site issues
3c	\$20k reduction in airconditioner replacement program, \$166k deferral of operations office project, \$700k levee construction deferred to 2018/19
3d	Minor reallocations of smaller project in addition to items of note: \$1.5M deferral of WTP project for road and old intake demo, \$1.3M deferral of Urana WTP, \$4.5M deferral of Main Low Level Reservoir
3e	Reduction in borrowings not required in 2017/18

for the period 01/10/17 to 31/12/17

#### **Cash & Investments Budget Review Statement**

Budget review for the quarter ended 31 December 2017

		Approve d					
(\$000's)	Original Budget 2017/18	Changes Sep QBRS	Revised Budget 2017/18	Variations for this Dec Qtr	Notes	Projected Year End Result	Actual YTD figures
Externally Restricted (1)							
Loan Funds - LIRS	-		-				
Total Externally Restricted	-	-	-	-		-	-
(1) Funds that must be spent for a specific purpose							
Internally Restricted (2)							
Employee Leave Entitlements	1,181		1,181			1,181	1,158
Asset Replacement	1,941		1,941			1,941	2,091
Sales Fluctuation	3,000		3,000	2,000	4a	5,000	5,000
Total Internally Restricted	6,122	-	6,122	2,000		8,122	8,249
(2) Funds that Council has earmarked for a specific purpose							
Unrestricted (ie. available after the above Restrictions)	62	(1,654)	(1,592)	5,601	4b	4,009	14,672
Total Cash & Investments	6,184	(1,654)	4,530	7,601		12,131	22,921

for the period 01/10/17 to 31/12/17

#### **Cash & Investments Budget Review Statement**

#### **Comment on Cash & Investments Position**

Due to Cash & Investment balance at the start of the financial year being higher than anticipated after 2016/17 end of year final results, in addition to additional developer income, reduction in CAPEX budgets, anticipated cash on hand is higher than originally budgeted.

#### **Investments**

Investments have been invested in accordance with Council's Investment Policy.

#### <u>Cash</u>

This Cash at Bank amount has been reconciled to Council's physical Bank Statements. The date of completion of this bank reconciliation is 31/12/17

**Reconciliation Status** 

The YTD Cash & Investment figure reconciles to	\$ 000's	
Cash at Bank (as per bank statements) Investments on Hand		1,193 21,717
less: Unpresented Cheques add: Undeposited Funds	(Timing Difference) (Timing Difference)	(6) 17
Reconciled Cash at Bank & Investments		22,921
Balance as per Review Statement:	<u> </u>	22,921
Difference:		-

#### Recommended changes to revised budget

Budget Variations being recommended include the following material items:

Notes	Details
4a	Maintain anticipated water sales reserve at previous year's balance of \$5M due to cash levels being higher than originally budgeted from deferred CAPEX projects and additional S64 contributions
4b	Cash on hand projected to be higher than original budget due to deferred CAPEX projects and additional S64 contributions

for the period 01/10/17 to 31/12/17

#### Key Performance Indicators Budget Review Statement - Council specific KPI's

Budget review for the quarter ended 31 December 2017

	<b>Current Projection</b>			Actuals	
(\$000's)	Amounts	Indicator	Budget	<b>Prior Periods</b>	
	17/18	17/18	17/18	16/17	15/16

The Council monitors the following Key Performance Indicators:

#### 1. Current Ratio (Liquidity)

Current Assets	17723	2.50	1.76	2 90	1 52
Current Liabilities	6874	2.58	1.76	3.89	4.55

This measures Council's ability to pay existing liabilities in the next 12 months. (target > 1.5)

#### 2. Debt Service Ratio

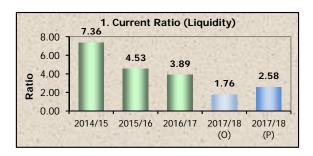
Debt Service Cost	670 2.15 %	2.56 %	2.39 %	2.42 %
Income from Continuing Operations	31143	2.30 /6	2.59 /0	2.42 /0

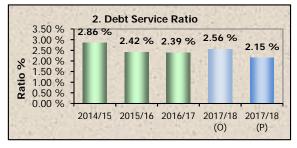
This measures Council's ability to meet interest payments and therefore service debt. (target 0% to 5%)

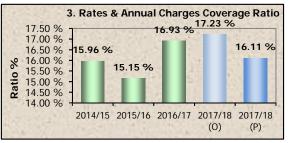
#### 3. Rates & Annual Charges Coverage Ratio

Rates & Annual Charges	5016 16.11 %	17.23 %	16.93 % 15.15 %
Income from Continuing Operations	31143	17.25 /6	10.93 /0 13.13 /0

To assess the degree of Council's dependence upon revenue from rates and annual charges and to assess the security of Council's income. (target < 25%)







for the period 01/10/17 to 31/12/17

#### Key Performance Indicators Budget Review Statement - Council specific KPI's

Budget review for the quarter ended 31 December 2017

	Current Pr	Current Projection			Actuals	
(\$000's)	Amounts	Amounts Indicator Budg		Prior Periods		
	17/18	17/18	17/18	16/17	15/16	

The Council monitors the following Key Performance Indicators:

#### 4. Capital Replacement Ratio

Infrastructure, Property, Plant & Equipment	21039	2 11	2 20	2.96	5.04
Depreciation	6120	3.44	3.30	2.90	5.04

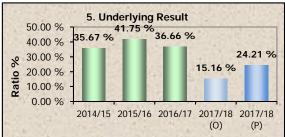
Comparison of the rate of spending on IPP&E with consumption of assets. This is a long-term indicator, as capital expenditure can be deferred in the short term if insufficient funds are available from operations and borrowing is not an option. (target > 1.5)

#### 5. Underlying Result

Net Result	7539 24.21 %	15.16 %	36.66 % 41.75 %
Total Revenue	31143	15.10 /6	30.00 /6 41.73 /6

A positive result indicates a surplus and the larger the percentage the stronger the result. A negative result indicates a deficit. Operating deficits cannot be sustained in the long term. (target > 0%)





for the period 01/10/17 to 31/12/17

#### **Consultancy & Legal Expenses Budget Review Statement**

Consultancy & Legal Expenses Overview

Expense	YTD Expenditure (Actual Dollars)	Bugeted (Y/N)	
Consultancies	-	Υ	
Legal Fees	7,492	Υ	

#### **Definition of a consultant:**

A consultant is a person or organisation engaged under contract on a temporary basis to provide recommendations or high level specialist or professional advice to assist decision making by management. Generally it is the advisory nature of the work that differentiates a consultant from other contractors.

Comments
Expenditure included in the above YTD figure but not budgeted includes:
Details
N/A

#### **Riverina Water County Council**

#### **OPERATIONAL PLAN - DECEMBER 2017 REVIEW**

OPERATING SUMMARY	YTD ACTUAL \$'000	CURRENT BUDGET \$'000	REMAINING \$'000	% AVAILABLE	2017/18 BUDGET \$'000	31/12/17 REVIEW ADJUSTMENT	REVISED BUDGET \$'000	REVIEW ADJUSTMENT COMMENT
OPERATING INCOME	Ψ 000	202021 4 000	Ψοσο	70 AVAILABLE	<b>\$ 555</b>	ADOCOTINENT	B0B0E1 \$ 000	REVIEW ADDOCTMENT COMMENT
Access Charges	0.454	4.050	0.400	500/	4.050		4.050	
Urban Non-Urban	2,151 475	4,053 963	2,103 489	52% 51%			4,053 963	
Non-Urban	2,626	5,016	2,591	51%		0		
User Charges	2,020	5,016	2,591	32%	5,016	U	5,016	
Consumption Charges								
Urban	6,579	16,516	10,844	66%	16,516	400	16 916	Increase water sales due to dry spring
Non-Urban	1,268	3,542	2,282	64%		400	3,542	increase water sales due to dry spring
Non Olban	7,847	20,058	13,126	65%		400		
	7,011	20,000	10,120	0070	20,000	100	20, 100	
Extra Charges	0.4			<b>=0</b> 0/				
Urban	31	20	-11	-53%			20	
Non-Urban	7	20	13	0%		0	20	
	38	40	2	5%	40	0		
		0.10		2001	0.40	0=0		Increase in connection fees and plumbing
Other Income	739	918	180	20%	918	252	1,170	permits
Interest	192	350	194	55%	350	0	350	
Operating Grants & Contributions	13	207	194	94%	207		207	
<b>Capital Grants &amp; Contributions</b>	2,525	2,662	494	19%	2,662	1,200	3,862	S64 developer contributions
Private Works Income	5	40	35	0%	40		40	
TOTAL OPERATING INCOME	14,120	29,291	16,681	57%	29,155	1,852	31,143	
OPERATING EXPENSES								
OI ENATING EXI ENGES								
								Transfer a portion of wages to operational
Management	3,188	8,560	5,372	63%	8,560	-353		maintenance & CAPEX projects
Operations & Maintenance								
Buildings & Grounds								
Urban	196	712	516	72%	712	0		
Non-Urban	33	49	17	34%		0		
	229	761	532	70%	761	0	761	

OPERATING SUMMARY	YTD ACTUAL \$'000	CURRENT BUDGET \$'000	REMAINING \$'000	% AVAILABLE	2017/18 BUDGET \$'000	31/12/17 REVIEW ADJUSTMENT	REVISED BUDGET \$'000	REVIEW ADJUSTMENT COMMENT
Management - Operations	·		•		·		•	_
Urban ,	391	1,000	609	61%	1,000	0	1,000	
Non-Urban	144	350	206	59%	350	0	350	
	535	1,350	815	60%	1,350	0	1,350	
Sources								
Urban	333	1,366	1,033	76%	1,366	0	1,366	
Non-Urban	117	287	171	59%	287	20		Bulgary Bore VSD & meters damaged in electrical spike
NOII-OIDAII	449	1,653	1,204	73%	1,653	20	1,673	electrical spike
D 1 0 1	110	1,000	1,201	7070	1,000	20	1,070	
Pumping Stations	137	474	337	71%	474	0	474	
Urban Non-Urban	86	386	301	71% 78%	386	0	386	
Non Olban	223	860	637	74%	860	0	860	
December								
Reservoirs								Additional chlorine purchases & 10MG
Urban	127	161	34	21%	161	30	191	reservoir maintenance
								Unplanned electrical & fitting modifications to facilities incl
Non-Urban	82	65	-17	-27%	65	60		Woomargama reservoir
	209	226	17	7%		90	316	
Treatment Plant								
Urban	694	2,118	1,425	67%	2,118	0	2,118	
Non-Urban	215	719	504	70%	719	0	719	
	909	2,837	1,928	68%	2,837	0	2,837	•
Mains & Services								
Supervision	80	319	239	75%	319	0	319	
	100	0.75	4.40	<b>540</b> /	075	4.40		Additional unplanned works incl mains
Urban	432	875	443	51%	875	140		bursts over summer Additional unplanned works incl mains
Non-Urban	239	501	262	52%	501	50		bursts over summer
	751	1,695	944	56%	1,695	190	1,885	
Other Operations	-101	-406	-305	75%	-406		-406	
Depreciation	3,019	6,120	3,101	51%	6,120	0	6,120	
TOTAL OPERATING EXPENSES	9,411	23,656	14,245	60%	23,656	-53	23,604	
OPERATING RESULT	4,709	5,635			5,499	1,904	7,539	•
								•

Riverina Water County Council		
BALANCE SHEET	Actuals 2016/17	Projected 2017/18
	\$'000	\$'000
ASSETS		
Current Assets		
Cash & Cash Equivalents	21,246	12,131
Receivables	3,160	3,265
Inventories	2,383	2,327
Total Current Assets	26,789	17,723
Non-Current Assets		
Infrastructure, Property, Plant & Equipment	335,702	350,621
Intangible Assets	3,575	3,575
Total Non-Current Assets	339,277	354,196
TOTAL ASSETS	366,066	371,919
		011,010
LIABILITIES		
Current Liabilities		
Payables	1,449	847
Borrowings	1,582	1,668
Provisions	3,861	4,359
Total Current Liabilities	6,892	6,875
Non-Current Liabilities		
Borrowings	10,680	9,012
Total Non-Current Liabilities	10,680	9,012
TOTAL LIABILITIES	17,572	15,887
Net Assets	348,494	356,033
EQUITY		
Retained Earnings	110,199	117,738
Revaluation Reserves	238,295	238,295
Total Equity	348,494	356,033

#### 31 DECEMBER 2017 CAPEX QUARTERLY REVIEW

Description	Current Budget 2017/18	YTD Actual 2017/18	<b>Budget Remaining</b>	31/12/17 QBR	Revised Budget 2017/18	Comment
	\$	\$	\$	\$	\$	
MANAGEMENT						
LAND & BUILDINGS FOR ADMIN. DEPOTS AND WORKSHOPS						
Administration Office	37,600	1,397	36,203	-20,000	17,600	Airconditioner replacement project finalised
Depot Buildings	176,000	15,252	160,748	-160,748	15,252	Deferral of operations office refurbishment project
Workshops	5,000	0	5,000	0	5,000	
Access, Parking and Landscaping	1,696,658	49,861	1,646,797	-700,000	996,658	Carry forward construction of levee to 2018/19
SUB-TOTAL LAND & BUILDINGS FOR ADMIN, DEPOTS & WORKSHOPS	1,915,258	66,510	1,848,748	-880,748	1,034,510	
PLANT & EQUIPMENT						
IT Equipment	182,500	80,617	101,883	0	182,500	
Office Furniture & Equipment	8,000	0	8,000	0	8,000	
Working Plant & Vehicle Purchases	769,000	352,142	416,858	6,000	775,000	Revised plant replacement program
Fixed Plant Tools & Equipment	20,000	2,909	17,091	0	20,000	
Telemetry & Control Systems Upgrade	305,613	3,807	301,806	-155,000	150,613	Issues with radio telemetry sites. Defer to 2018/19
Radio Communications Upgrade/Replacements/Improvements	388,225	19,256	368,969	0	388,225	
RTUs - New/Additional	15,000	3,089	11,911	0	15,000	
Energy Efficiency & Cost Minimisation	20,000	8,293	11,707	0	20,000	
CAD/GIS/Asset Management System	0	2,161	-2,161	0	0	
Communication Equipment	2,000	0	2,000	0	2,000	
SUB-TOTAL PLANT & EQUIPMENT	1,710,338	472,276	1,238,062	-149,000	1,561,338	
TOTAL MANAGEMENT	3,625,596	538,786	3,086,810	-1,029,748	2,595,848	
SOURCES						
Bores-renew/refurbish/decommission	241,504	83,884	157,620	23,000	264,504	Over budget due to additional work at West Wagga bore
Source Works General Improvements	53,183	35,686	17,497		53,183	
Switchboards Improvements/Replacements	13,000	9,374	3,626		13,000	
TOTAL SOURCES	307,687	128,944	178,743	23,000	330,687	
TREATMENT PLANTS						
General Improvements	5,000	158	4,843	0	5,000	

Description	Current Budget 2017/18	YTD Actual 2017/18	<b>Budget Remaining</b>	31/12/17 QBR	Revised Budget 2017/18	Comment
	\$	\$	\$	\$	\$	
Aeration Tower Replacements	15,000	0	15,000	0	15,000	
Aeration Tower Covers	295,082	15,312	279,770	-148,000	147,082	Defer East Wagga Aeration Basin Cover to 2018/19
Specific Treatment Plant improvements	45,000	4,829	40,171	40,000	85,000	Tarcutta Backwash Discharge to Sewer project allocation
Treatment Plant refurbishments	11,509,062	601,048	10,908,014	-2,880,000	8,629,062	Defer \$1.5M WTP works for road & old intake works, \$1.3M for Urana WTP
Laboratory Facilities Upgrade	0	1,294	-1,294	30,000	30,000	Transportable Tarcutta Lab purchase
Treatment Plant Switchboards/Control Systems Replacement/Upgrade	5,000	274	4,726	0	5,000	
TOTAL TREATMENT PLANTS	11,874,144	622,915	11,251,229	-2,958,000	8,916,144	
PUMPING STATIONS						
General Improvements	22,000	4,070	17,930	2,070	24,070	Genset plug additional allocation
Magflow Replacements	10,000	8,820	1,180	0	10,000	
Pump Stations Renewal/Refurbish/Upgrade	216,731	87,195	129,536	0	216,731	
Pump & Motor Maintenance / Replacements	25,000	-5	25,005	0	25,000	
Pump Station Switchboards/Control Systems Replacement/Upgrade	75,000	33,639	41,361	0	75,000	
TOTAL PUMPING STATIONS	348,731	133,719	215,012	2,070	350,801	
RESERVOIRS						
General Improvements	19,247	5,806	13,441	0	19,247	
New/Replacement Reservoirs	7,664,333	263,207	7,401,126	-4,496,374	3,167,959	Defer Low Level Reservoir construction
Reservoirs - Refurbish	55,000	0	55,000	-55,000	0	Reinvestigation of Oaklands Reservoir project required
Reservoirs - Upgrade Ladders and Access	28,610	3,693	24,917	0	28,610	
Reservoir Hatches Magflows	42,000	30,557	11,443	0	42,000	
TOTAL RESERVOIRS	7,809,190	303,262	7,505,928	-4,551,374	3,257,816	
TO THE RESERVOING		,				
MAINS, SERVICES & METERS						
MAINS						
System Improvements	530,000	93,452	436,548	0	530,000	
Reticulation for Developers (including other extensions)	860,000	448,178	411,822	0	860,000	
Renew Reticulation Mains	860,000	436,097	423,903	-30,000	830,000	McDonnell St, Collingullie project completed under budget
Renew Trunk Mains	2,227,911	512,751	1,715,160	230,000	2,457,911	Reallocation to Rock-Milbrulong, Rising Mains from CWS
SUB-TOTAL MAINS	4,477,911	1,490,478	2,987,433	200,000	4,677,911	

Description	Current Budget 2017/18	YTD Actual 2017/18	<b>Budget Remaining</b>	31/12/17 QBR	Revised Budget 2017/18	Comment
	\$	\$	\$	\$	\$	
SERVICES						
Service Connections, new including Meters	550,000	287,074	262,926	0	550,000	
Renew Services	130,000	37,490	92,510	0	130,000	
SUB-TOTAL SERVICES	680,000	324,564	355,436	0	680,000	
METERS						
Water meters replacement	180,000	94,413	85,587	0	180,000	
Remote metering	275,000	15,219	259,781	-250,000	25,000	Remote metering trial cancelled, needs further investigation
Water Filling Stations Upgrade	25,000	1,391	23,609	0	25,000	
SUB-TOTAL METERS	480,000	111,022	368,978	-250,000	230,000	
TOTAL MAINS, SERVICES & METERS	5,637,911	1,926,064	3,711,847	-50,000	5,587,911	
TOTALS	29,603,259	3,653,691	25,949,568	-8,564,052	21,039,207	

#### 3. OPERATIONAL PLAN - PERFORMANCE TARGETS

**RECOMMENDATION**: That the report detailing progress, as at 31 December 2017, achieved towards the various objectives set out in the 2017/2018 Operational Plan be noted and received.

In accordance with the provisions of Section 407 of the Local Government Act 1993, I report to Council on the progress achieved in the year for the various Key Performance Indicators set out in the 2017/2018 Operational Plan.

#### Services

Measure	Key Performance Indicator	Progress to 31 December 2017
Customer Satisfaction Rating	>4 (out of 5)	N/A – Annual measure
Water Quality Satisfaction	>4 (out of 5)	N/A – Annual measure

Asset Replacement

Measure	Key Performance Indicator	Progress to 31 December 2017
Projects completed from Capital	>85%	N/A – Annual Measure (Refer DoE
Works Program		Report for Progress)

**Demand Management** 

Measure	Key Performance Indicator	Progress to 31 December 2017
Peak Day Demand (weekly average)	<65 ML	51.65 ML

#### WHS

Objectives	Key Performance Indicator	Progress to 31 December 2017
Number of days lost through injury	< previous period	Sept Qtr Dec Qtr.
		140 7
Percentage of sick leave hours to ordinary hours worked	<3.5%	3.69% 2.8%
Total hours worked compared to time lost through injury & illness	< previous period	.085% .198%

#### **Environmental Protection**

Key Performance Indicator	Key Performance Indicator	Progress to 31 December 2017		
Power used per MI of water billed	< same period last year	Dec Qtr. 2016	Dec Qtr. 2017	
KWh		1005Wh	1110Wh	
Power costs per MI of water billed \$	< same period last year	\$190	\$267	

**Equal Employment Opportunity** 

Key Performance Indicator	Key Performance Indicator	Progress to 31 December 2017		
Number of legitimate EEO	100%	Nil lodged		
complaints resolved				
Percentage of staff returning from	100%	100%		
parental leave				

Charges and Fees

Key Performance Indicator	Key Performance Indicator	Progress to 31 December 2017
Level of Water Charges overdue	<5%	2.97%
compared to water sales for previous		
12 months		
Level of Sundry Debtor Accounts overdue compared to debtors raised	<5%	0.46%
for previous 12 months		

#### 4. REVIEW OF REMUNERATION FEES FOR COUNCILLORS AND CHAIRPERSON

**RECOMMENDED** that the Councillors and Chairpersons annual fee be set at \_\_% of the maximum allowable, as determined annually by the Local Government Remuneration Tribunal, pursuant to Section 242 of the Local Government Act 1993

As Councillors are aware, staff are preparing the draft budget and Operational Plan for 2018/19. Given that it has been eleven years since the matter of Councillors Fees was considered, this report provides an opportunity for Council to consider its position on the matter. It will also allow Council to include the actual amount in the Draft Operational Plan when it exhibited to the community in May 2018.

Since that time, workloads and commitments of the Chair and Councillors have increased and the nature and volume of the business dealt with by Councillors have increased.

Section 248 of the Local Government Act states that:

- (1) A council must pay each councillor an annual fee.
- (2) A council may fix the annual fee and, if it does so, it must fix the annual fee in accordance with the appropriate determination of the Remuneration Tribunal.
- (3) The annual fee so fixed must be the same for each councillor.
- (4) A council that does not fix the annual fee must pay the appropriate minimum fee determined by the Remuneration Tribunal.

Council resolved at its meeting on the 27th June 2007, in respect of Councillor Fees, that Councillors' and Chairperson's annual fee be set at 60% of the maximum allowable, as determined annually by the Local Government Remuneration Tribunal, pursuant to section 242 of the Local Government Act 1993.

Section 241 of the Local Government Act 1993, states that the annual fees to be paid for each of the categories Councils, as determined under section 239, to Councillors and Chairperson, during the period 1st July 2017 to 30th of June 2018 are determined as follows:

Category		Councillor/Member			Mayor/Chairperson				
		Annual Fee				Annual Fee*			
		Μ	inimum	Maximum		Minimum		Maximum	
General Purpose Councils - Metropolitan	Principal CBD	\$	26,310	\$	38,580	\$	160,960	\$	211,790
	Major CBD	\$	17,540	\$	32,500	\$	37,270	\$	105,000
	Metropolitan Large	\$	17,540	\$	28,950	\$	37,270	\$	84,330
	Metropolitan Medium	\$	13,150	\$	24,550	\$	27,940	\$	65,230
	Metropolital Small	\$	8,750	\$	19,310	\$	18,630	\$	42,120
General Purpose Councils - Non-Metropolitan	Regional City	\$	17,540	\$	30,500	\$	37,270	\$	95,000
	Regional Strategic Area	\$	17,540	\$	28,950	\$	37,270	\$	94,330
	Regional Rural	\$	8,750	\$	19,310	\$	18,630	\$	42,120
	Rural	\$	8,750	\$	11,570	\$	9,310	\$	25,250
County Councils	Water	\$	1,740	\$	9,650	\$	3,730	\$	15,850
	Other	\$	1,740	\$	5,770	\$	3,730	\$	10,530
			_						
	60% of Maximum			\$	5,790			\$	9,510

\* This fee must be paid in addition to the fee paid to the Mayor/Chairperson as a Councillor/Member (s.249 (2))

The annual fee is paid in monthly instalments in arrears.

Council Fees for 2017/2018 were set at \$9,510 for Chairman and \$5,790 for Councillor.

The Tribunal will hand down its decision in respect of the 2018/19 Determination in April 2018 and a further report will be presented to the April meeting (time permitting) or the June meeting.

#### 5. JOINT ORGANISATIONS

#### **RECOMMENDED** that:

- (a) Council receive a further report on the formation of Joint Organisations following the proclamation of a Joint Organisation(s) in the Riverina Murray Planning Region.
- (b) Council maintain its associate membership of REROC Inc. until further notice

The NSW Government has introduced legislation to create Joint Organisations (JOs) which are intended to be a key NSW Government commitment to build stronger councils and improve service delivery and infrastructure across rural and regional communities.

The Local Government Amendment (Regional Joint Organisations) Act 2017 commenced on 15 December 2017 allowing councils to voluntarily join new JOs in their planning region. JOs will provide a forum for local councils and State agencies to collaborate, plan, set priorities and deliver important projects in regional NSW.

The NSW Government is providing \$3.3 million in seed funding to establish JOs which will focus on the issues that matter most to regional communities. These include building strong businesses, creating jobs, securing water supplies, improving regional transport, and providing community infrastructure, services and facilities.

The principal function of JOs is to undertake strategic planning and priority setting, intergovernmental collaboration, and regional leadership and advocacy.

The Office of Local Government (OLG) is actively supporting councils to develop a JO that best suits their needs. This has included visits to councils and regions and the provision of an information pack to councils.

Interested rural and regional councils have been requested to take the following steps in order to complete the nomination process:

- 1. Identify their council's planning region according to the map provided in the information pack.
- 2. Consult with councils within the preferred regional grouping to reach agreement on JO membership, noting that each JO must have a minimum of three member councils;

- 3. Once the proposed membership is agreed, ensure each member council endorses the proposal by a resolution of council;
- 4. By 28 February 2018, each Council can submit a nomination to form a JO. In the case of REROC Council's, an extension of time has been granted to the 28 March 2018

The JO network and funding allocations will be announced in March, with JOs proclaimed in April and operational by July 1. The timeline for the formation of a JO in this region will likely be one month later than the above dates.

Each Council was written to by the Minister for Local Government to advise of the above processes. Such letters were not sent to any County Councils, as under the legislation they do not have a role in the formation of the Jos, which is the current activity being undertaken.

It is understood that the JO itself needs to be formed first, via proclamation from the Minister. Following proclamation, a Count Council can seek to participate in a JO although a County Council will not have any voting rights. This arrangement is the same as Council's membership of REROC. Council is an Associate member of REROC and does not pay any membership or have voting rights.

Some key points for County Councils in relation to JO's are:

#### **Board membership (s400T of the Local Government Act)**

- The board of the JO can invite "any other person" to be a non-voting member of the JO (this would include a representative from a County Council)
- The Regulation can also prescribe classes of person to be a non-voting member of the JO

The Regulations are still being developed, and the OLG advises that they are unsure if the government is considering including County Councils as a prescribed class of persons.

#### Impacts of JOs on County Councils (s394A of Local Government Act)

A further important amendment to the Local Government Act was made to require that County Council's must, when exercising their functions, take into account any strategic regional priorities and other plans of the JO that apply to any relevant part of the County Council's area of operations or that are relevant to the County Council's operational functions.

Given the above, it is critical that the Council is represented on the JO so that Council has an opportunity to influence any plans that they may develop.

Council has been represented at meetings held in the region over the past four weeks so as to be able to contribute to the discussions and be privy to the intentions of Councils in the region.

At the February meeting of REROC, the meeting resolved that REROC Inc. and REROC JO operate side by side as explained below:

- REROC provides the secretarial services for the JO on a peppercorn basis.
- The two Organisations share the same Board members (however, GMs are not on the JO Board). It will in effect be two separate Boards because they are separate organisations however the membership can be the same.

- Two Organisations share the same Executive Officer. The JO employs a part-time Executive Officer – the JO has to have an employed EO because the EO is the Public Officer.
- REROC Inc. continues with its contracted arrangements for the provision of Executive Officer services.
- Employment of the JO Executive Officer is on a GM's contract with the salary set by the Board. The expectation is that it is at SES One level.
- Board meetings are held consecutively. The JO meeting is held and then closed. The REROC Inc. meeting opens and then closes. AGMs are held consecutively as well.
- Community of Interest the community of interest for the JO is the membership of REROC Inc. Membership of REROC requires that the member council looks to Wagga Wagga as its regional centre. Clause 7.3 of the Constitution states:

Members should only be drawn from the Eastern Riverina and should recognise Wagga Wagga as their primary, commercial, professional, social and sporting reference point or be an existing (as at 2005) member of the Shire's Association G Division.

- The expenditures associated with the activities that the JO undertakes are transferred from the REROC Inc budget to the JO budget.
- Member council contributions remain unchanged (apart from the usual rate-pegged annual increase).

REROC also resolved that any Council can be member of REROC Inc. and does not have to be a member of the REROC JO.

The most recent meeting of Councils from REROC and RAMROC, in broad terms, supported the formation of two JO's in the Riverina Murray Planning Region. At that meeting both Goldenfields Water and Riverina Water flagged their respective interest in seeking non-voting membership of a JO that forms that includes their geographic areas.

#### 6. PROPOSED NEW BOARD ROOM

**RECOMMENDED** that Council make provision in the 2018/19 Capital Works budget for the completion of the Board Room in the Stores Building and that the General Manager proceed with preparing an appropriate design and fit out, supported by an estimate of the works.

At the time that the new Stores Building was designed in 2012, provision was made for a room on the mezzanine level of the building for the purposes of a Board Room/Meeting Room.

The room has not been fitted out or completed. Given that, it is intended that it can function as a meeting room for the Board as well as serve as a training room and function room.

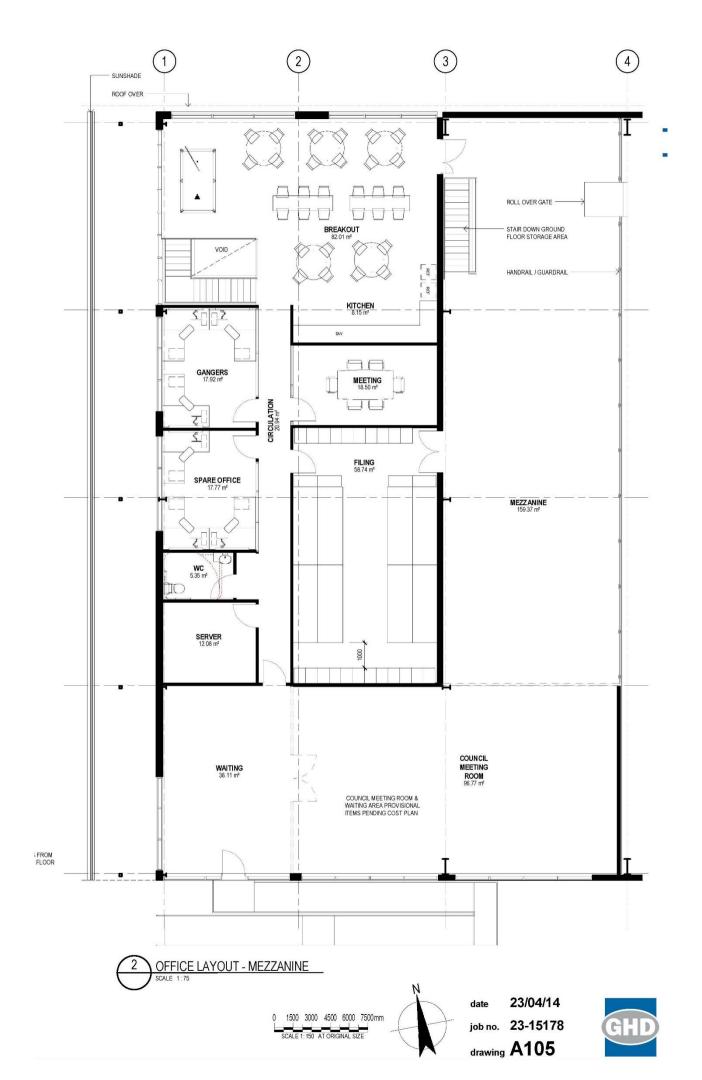
There is considerable space available for the meeting room with the Stores Building. The attached sketch (Attachment 1) provide an initial concept for the use of the space. It is suggested that Councillors arrive early for the Council meeting so that an inspection of the available space can be undertaken. The room is wheelchair accessible to facilitate public egress to the proposed meeting room.

Provision has been made in the four-year delivery plan to complete the room (a rear wall to the room is yet to be erected) and also purchase furniture and fittings for the room (including air conditioning)

Proceeding with the completion of the room as originally intended will provide several advantages to Council including:

- ✓ Allow the existing Board Room to be renovated to either office space or smaller meeting rooms
- ✓ Having all administration staff in the Administration Building will improve teamwork and collaboration (it is proposed that the WHS/Risk Officer would relocate to the Administration Building as well as the Information Technology staff)
- ✓ Provide an opportunity to locate more of the Engineering Managers and their teams in proximity to staff who they interact with on a regular basis, in the existing Administration Building.

The purpose of this report is to gauge councillor comment on the proposal and pending feedback, proceed with detailed design and costing so that the project can be commenced in the 2018/19 Delivery Plan, supported by a fully costed plan



#### 7. DRAFT POLICY 3.1 ASSET MANAGEMENT

**RECOMMENDATION** that Riverina Water County Council adopt Draft Policy 3.01 Asset Management.

As part of an ongoing review of Council's Policies, it was necessary to review Council's Asset Management Policy.

A draft policy has been prepared and is attached for Council's consideration. Minor changes have been made to recognise the creation of Federation Council as part of Riverina Water County Council's service area.

The objectives of the Policy are:

- Provides a link between asset management and a platform for service delivery
- Integrates asset management with Council's strategic planning
- Maximises value for money by adoption of lifecycle costing ,combined with performance management
- Assigns accountability and responsibility for service delivery together with asset management
- Promotes sustainability to protect the needs of future generations.

The draft policy takes into account the requirements of the Local Government Act, 1993, Local Government (General) Regulation 2005, Ministerial Investment Orders and general advice from the Office of Local Government.

Policy 3.1 Asset Management



# **POLICY**

# **ASSET MANAGEMENT**

POLICY REFERENCE	NUMBER:	POL 3.1						
Original publication da	nte	14 December 2012						
Revision number	Issue Date	Approved	Approval date					
0	14 Dec 2012	Res: 12/176	14 Dec 2012					
NAME CHANGED 22/11/13 FROM 5.33								
1	30 Jan 2018	Res: 18/	28 Feb 2018					
This document is to be reviewed every year.								
Next review date: January 2020								
RESPONSIBLE OFFICE	ER Director of	Director of Engineering						

#### I. INTRODUCTION

The purpose of this policy is to outline a framework which provides for the sustainable management of Council's water supply infrastructure to ensure it meets the current and future planned needs of its consumers.

#### 2. POLICY OBJECTIVES

This policy sets the broad framework for undertaking infrastructure asset management in a structured and coordinated way. It outlines why and how asset management will be undertaken. It provides a clear direction for asset management and defines key principles that underpin asset management for Council.

Accordingly the policy has the following objectives;

- Provides a link between asset management and a platform for service delivery
- Integrates asset management with Council's strategic planning
- Maximises value for money by adoption of lifecycle costing, combined with performance management
- Assigns accountability and responsibility for service delivery together with asset management
- Promotes sustainability to protect the needs of future generations.

#### 3. DEFINITIONS

- Infrastructure Assets Include all components of the water reticulation network, plant and building assets owned or managed by Council.
- Life Cycle Cost The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
- Asset Register A record of asset information considered worthy of separate identification including inventory, historical, financial, condition, construction and technical.
- Useful Life The period over which a depreciable asset is expected to be used.
- Asset Management Plan A plan developed for the management of an infrastructure asset or asset category that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset. The Asset Management Plan establishes, for each Asset Category and sub category:
  - Levels of service specifies the services and levels of service to be provided by Council
  - Future demand how this will impact on future service delivery and how this is to be met.

#### 4. RELATED DOCUMENTS

This policy is supported and linked with the following documents;

RWCC Management Plan
RWCC Strategic Business Plan & Resource Strategy Rev 3
RWCC Asset Management Plan
Four (4) Year Capital Works Program
Assets Register
Integrated Water Cycle Management (IWCM)

#### 5. APPLICABLE LEGISLATION

Local Government Act 1993 and subsequent Regulations under the Act. NSW Water Management Act 2000 Water Act 1912 Integrated Planning and Reporting Framework

#### **6. ASSET MANAGEMENT**

#### 6.1 Background

Riverina Water County Council (Riverina Water) is responsible for the water supply functions within the local government areas of Wagga Wagga City Council, Lockhart Shire, and parts of Greater Hume Shire and Federation Shire Council's area. There are currently some 32,000 service connections within a service area of approximately 15,400 sq. kms.

Riverina Water core assets include;

- Sources
- Water Treatment Plants
- Pumping Stations
- Distribution Mains
- Reservoirs
- Land & Buildings
- Plant & Equipment

These assets are listed in detail within Councils Asset Management Plan and Councils Asset Register.

#### 6.2 Policy Principles

The purpose of this policy is to outline a framework for the sustainable management of Councils infrastructure.

Council is committed to delivering financial sustainability by making decisions that lead to cost effective management of its asset base, by focusing on asset renewal, rationalising under-utilised assets and limiting asset expansion unless justified. The principles supporting this policy are;

- Providing a level of service to the community that is affordable and responds to changing community needs
- Ensuring asset condition and development meets the future needs of the communities served by Riverina Water County Council.
- Identifies funding to support and maintain necessary infrastructure development and maintenance.

#### 6.3 Policy Integrating with Asset Strategy and Planning

This asset management policy sets out the framework, goals and objectives for Riverina Water Service delivery. It also sets the context for asset management systems and identifies key performance measures, timeframes and responsibilities.

These policy provisions are supported by an Asset Management Strategy and an Asset Management Plan.

The purpose of an Asset Management Strategy is to detail where Riverina Water is currently positioned in regard to asset management, its future targets for asset management and the means to achieve these targets. This information is set out in Section 1 of the Riverina Water County Council Asset Management Plan. The Strategic Business Plan is an integral part of this strategy, as it is linked with the rolling 30 year capital works program and includes forecasting of necessary renewal investment. The Riverina Water Long

Term Financial Plan demonstrates the financial sustainability of the organisation and its ability to meet the funding of the Asset Management Plan.

The aim of an asset management plan is to provide, operate and maintain physical assets over the whole life cycle to achieve the required levels of service at least cost, while still satisfying statutory, regulatory and sustainability requirements. When the "reason" for and "resources" available to asset management change (as a result of changes in community priorities), Councils asset management plans will be modified to suit. The asset management plans will be reviewed over time with improved information on assets (condition and costs) and as asset condition changes over time.

### 6.4 Policy Statement

In the process of planning for asset management involving the principles outlined in this policy the following Policy Statement was developed;

#### Context

Riverina Water uses a large asset base to deliver water supply services to residential, rural, industrial, commercial and municipal customers in the Riverina Region. The water supply system is critical to the development, the economic viability and the way of life of the community.

### Criticality

The ability of Riverina Water to deliver water at the appropriate quality and quantity is reliant on the effective operation, maintenance and replacement of the existing assets and the development of new assets. Riverina Water will rely on a robust asset management system to successfully manage the assets. The system will be reviewed annually and audited as required.

### **Objectives**

Riverina Water assets will continue to deliver the levels of service adopted by Riverina Water and accepted by the community.

#### **Strategic Direction**

Riverina Water County Council reviews the levels of service for its consumers through its strategic planning process. The asset management strategy and asset management plan together with this policy will ensure that the adopted levels of service are achieved.

This asset management planning process is part of Riverina Water Strategic Business Plan which also satisfies Integrated Planning and Reporting and Best-Practice Management requirements.

### Value

Riverina Water will maximise value for money over the asset life cycle. This objective will also involve development of fees and charging regimes that will ensure acceptable cost recovery of assets provided.

### Sustainability

Riverina Water assets will continue to support the community and protect the environment now and in the future. Riverina Water will review its Business Plan on an annual basis to ensure that sufficient funding is available to achieve a sustainable asset management strategy and plan.

## **Community Input**

The asset management policy will be included in Riverina Water community consultation activities, providing opportunity for community input.

### Responsibility

The Elected Councillors are responsible for the implementation of the asset policy.

The General Manager and Director are responsible for the implementation of the asset strategy.

The Managers are responsible for the implementation of the asset plan.

## 8. COUNCIL RESOLUTION SHEET

**RECOMMENDATION** that Riverina Water Council note Council's Resolution Sheet.

Report Ref	Subject	Responsible Officer	Council Decision	Action Taken
Meeting h	neld 12 December 2014			
14/190	Purchase of Land for Alternative Access to Hammond Ave	GM	That Council: 1) Purchase land for operational and access requirements in accordance with Section 187 of the Local Government Act 1993.  2) Delegate authority to the General Manager to negotiate the land purchase and sign the relevant sale documents.  3) Affix Council's Common Seal to documentation as required.	Negotiations continuing. Business Valuation completed. Additional investigations underway. Discussions to resume with Executive Team this month with a view to implementing the decision
Meeting he	eld 26 October 2016			
16/208	Replacement of Low Level Reservoir Land Matters	DoE	That Council: 1) Purchase the land on Lot 22 DP 835331 for the replacement of Low Level reservoir (10MG) at Willans Hill. The area to acquire is approximately 11,250m2. Compensation estimated by OPTEON property group \$130,000.00 ex GST.  2) Lease the land on Lot 22 DP 835331 (adjacent to proposed acquisition area) for Low Level reservoir (10MG) replacement earthworks (for material storage) at Willans Hill. Lease on Approximate area of 9600m2 for 2 years. Lease amount per year estimated by OPTEON property group \$14,400.00 ex GST.  3) Delegate authority to the General Manager to negotiate the land purchase, lease, establishment of easements for the pipeline and access.  4) Affix Council's Common Seal to documents as required.	Proceeding with Council Resolution Legal process ongoing. Earthworks 50% completed. Encountered some rock
Meeting he	eld 25 October 2017			
17/177	Feasibility of Incorporating the GHSC Water Function into RWCC Operations	DoE	That Riverina Water County Council advise Greater Hume Shire Council that it:  1) Would not support a proposal to incorporate the GHSC village water scheme into RWCC's existing operations  2) Would not support a proposal to incorporate the entire water supply operations of GHSC into RWCC's existing operations on the basis of postage stamp pricing  3) Would support a proposal to incorporate the Culcairn town water system into RWCC's existing operations.  4) The matter lay on the table until the constituent Council has had an opportunity to consider the report.	GHSC advised, awaiting response. Discussions continuing at management level.

17/192	Audit and Risk Committee Charter	GM	That the revised Audit & Risk Committee Charter be adopted.	On Council Intranet
17/193	Workshop Operational Plan 2087/2019	GM	That Council hold a workshop to discuss key aspects of the 2018/2019 Operational Plan, following Council's February Meeting.	Workshop scheduled for 28 February
17/195	Delegation of Authority to New General Manager	GM	That in accordance with Section 377 Local Government Act 1993, Council ratify and grant the delegations as set out in the Delegations of Authority Register to the General Manager Mr. Andrew Crakanthorp, commencing 10 January 2018.	Noted, included in Delegations Register
17/196	Daryl Maguire MP – Proposal to Increase Tariff Step	GM	That Council consider a proposal by Daryl Maguire MP to increase he Tariff step for residential blocks above 3 acres at the workshop examining the 2018/2019 Operational Plan, following Council's February Meeting and that the General Manager obtain further information from Wagga Wagga City Council and advise Mr Maguire.	Noted, Correspondence forwarded to WWCC requesting information. Mr Maguire MP advised. Matter to be discussed at Council workshop on 28 February
17/198	Purchase of Portable Devices on Retirement	MCS	That Council agree to sell used iPad Pro and iPhone SE to the General Manager for \$583 and \$418 respectively.	Noted, Sundry Debtor account was issued and paid in December 2017.
17/215	Tender W.223 for Levee Material Supply	MP	That Council:  • Accept the Tender received from Steelpipes Pty Ltd in the amount of \$761,750 excl GST,  • Authorise the General Manager to undertake post tender negotiations with Steelpipes, to finalise outstanding technical requirements and any adjustments to the quantity of materials.	Tender let and ongoing discussions in relation to some technical elements of the final design
17/216	Development of New General Manager's Performance Agreement	Chairperson	That the Chairperson be authorised to negotiate with Mr Terrey Kiss of Blackadder and Associates, for the engagement of their services for the development of a Performance Agreement, required under the employment contract with the new General Manager, Mr. Andrew Crakanthorp.	Draft Performance prepared and expected to be signed by all parties on the 28 February. Draft Performance Agreement for 2018/19 in the process of being created

AGCOCI

Andrew Crakanthorp GENERAL MANAGER



## **DIRECTOR OF ENGINEERING'S REPORTS TO COUNCIL MEETING**

### 1. WORKS REPORT COVERING DECEMBER 2017

**RECOMMENDATION** That this report be received and noted.

• Works Report December 2017



# DIRECTOR OF ENGINEERING'S REPORTS TO FEBRUARY 2018 COUNCIL MEETING

24th January 2018

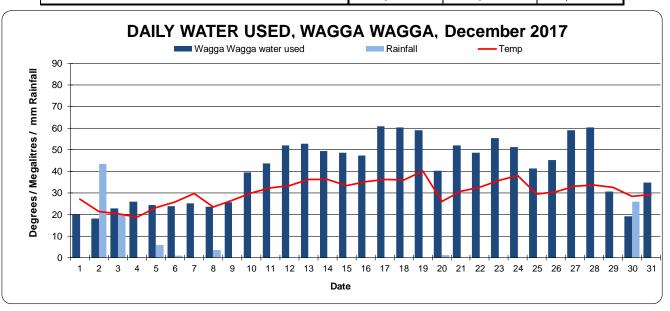
### 1 WORKS REPORT COVERING DECEMBER 2017

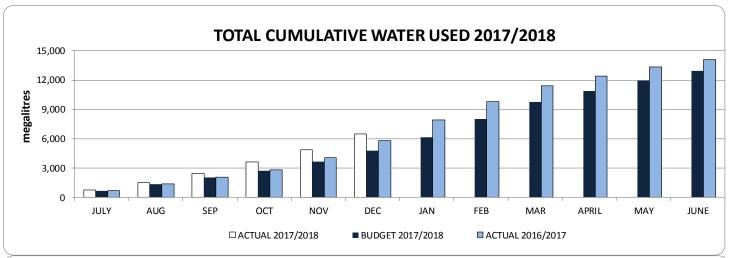
**RECOMMENDATION:** That this report be received and noted.

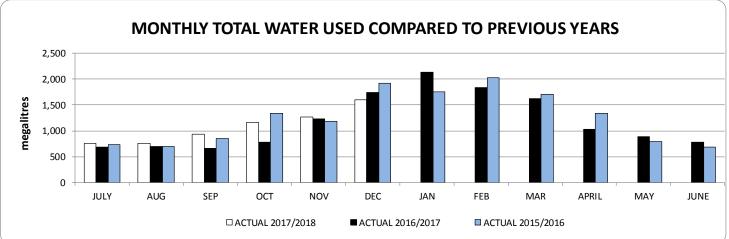
### 1.1 WATER SOURCED AND USED

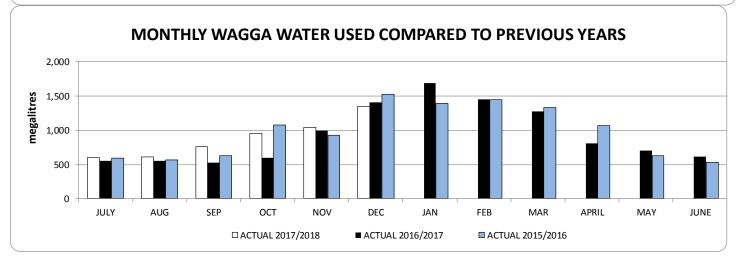
December	2015	2016	2017
Rainfall	37.6	57.0	101.8
Wet Days	4	7	10
WATER SOURCED De	cember 20	17 (MI)	
North Wagga bores	255.86	292.34	241.78
West Wagga bores	633.34	707.50	534.84
East Wagga bores	315.97	283.01	246.26
Murrumbidgee River	361.14	468.13	423.99
SUB-TOTAL	1,566.31	1,750.98	1,446.87
Bulgary Bores	59.53	62.08	38.85
Urana Source	11.33	7.98	5.38
Ralvona Bores	33.04	35.03	23.61
Walla Walla Bores	34.58	34.74	17.95
Goldenfields Water Supply System	3.27	5.21	5.27
SUB-TOTAL	141.75	145.04	91.06
Woomargama	1.95	2.61	1.72
Humula	1.02	1.24	0.59
Tarcutta	4.27	6.10	3.74
Oura	3.74	6.21	3.75
Walbundrie/Rand	5.29	4.32	3.36
Morundah	1.36	1.67	0.65
Collingullie	8.92	9.02	5.56
SUB-TOTAL	26.55	31.17	19.37
TOTALS	1,734.61	1,927.19	1,557.30

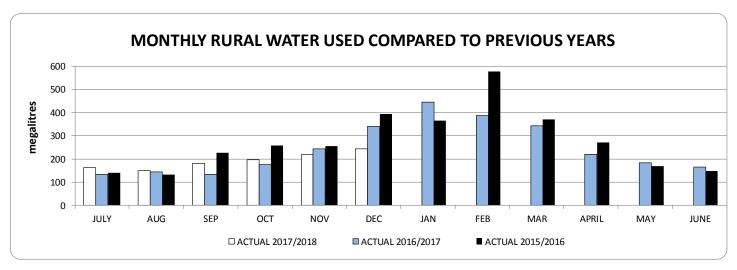
WATER USED December 2017 (MI)					
	2015	2016	2017		
East Bomen	28.58	27.23	22.04		
Estella	119.98	103.38	98.84		
North Wagga	98.41	95.60	90.44		
Wagga Wagga – Low Level	216.94	216.54	318.94		
Wagga Wagga – High Level	920.50	849.17	766.25		
Wagga Wagga – Bellevue Level	144.20	113.39	56.17		
SUB-TOTAL	1,528.61	1,405.31	1,352.68		
Ladysmith System	9.44	7.93	7.14		
Brucedale Scheme	34.07	34.01	25.23		
Currawarna Scheme	20.66	19.96	13.97		
Rural south from Wagga Wagga	161.43	129.61	92.52		
Rural from Walla Walla Bore	34.74	38.73	17.95		
Bulgary, Lockhart and Boree Creek	37.76	33.78	20.93		
From Boree Crk to Urana and Oaklands	30.95	25.07	24.10		
Holbrook	35.03	28.53	23.61		
SUB-TOTAL	364.08	317.62	225.45		
Woomargama	2.61	2.00	1.72		
Humula	1.24	0.62	0.59		
Tarcutta	6.10	5.05	3.74		
Oura	6.21	5.00	3.75		
Walbundrie/Rand	4.32	3.07	3.36		
Morundah	1.67	1.38	0.65		
Collingullie	9.02	6.18	5.56		
SUB-TOTAL	31.17	23.30	19.37		
TOTALS	1,923.86	1,746.23	1,597.50		











## 1.2 <u>NEW SERVICE CONNECTIONS, REPAIRS, METERS, LOCATIONS & COMPLAINTS FOR THE MONTH OF DECEMBER 2017</u>

Location	New Connect., Residential	New connect., Non Residential	Services Renewed	Services Repaired	Quality Complaints	Supply Complaints *	Customer dealings complaints	Other Complaints	Frost damage	Meter or Metercock fault	Leaking valves or hydrants	Locations
Wagga	10		2	23	16	8				32	3	4
Brucedale				1								
Currawarna												
Euberta												
Humula												
Ladysmith						1				1		
Oura			***************************************	1		1						
San Isidore												
Tarcutta				1								
The Gap				1								
Bulgary				1								
Collingullie												
French Park			***************************************					•				
Lockhart												
Mangoplah												
Milbrulong												1
Pleasant Hills												
The Rock										1		
Uranquinty												
Yerong Creek												
Culcairn												
Henty	***************************************		200000000000000000000000000000000000000									***************************************
Holbrook				2						3		1
Morven	***************************************		200000000000000000000000000000000000000									***************************************
Walbundrie												
Walla Walla												•
Woomargama				1								
Boree Creek						1						
Morundah	***************************************	***************************************	***************************************	1			***************************************	***************************************	***************************************		***************************************	***************************************
Oaklands												
Rand												•
Urana												
TOTAL	10	0	2	32	16	11	0	0	0	37	3	6

## 1.3 WATER SYSTEM REPAIRS

	WAGGA WAGGA							
						Outage	Customers	Water
Date	Location	Town	Main	Cause	Live	Duration	Affected	Lost
			Type		Repair	Time	(no supply)	KI
17	365 Edward Street	Wagga	200 AC	Pipe Failure (not	No	3:00	0	0
18	192 Morgan Street	Wagga	100 AC	Pipe Failure (not	No	3:00	0	32
19	Billigah Street	Wagga	100 AC	Pipe Failure (not	No	2:00	0	0
20	21 Copland Street	Wagga	100 AC	Pipe Failure (not	No	3:00	0	0
20	Mair Street	Turvey Park	100 AC	Pipe Failure (not	No	4:30	0	0
20	Powers Ammo Copland	Wagga	100 AC	Pipe Failure (not	No	1:00	10	16
21	Berrembe Drive	Bourkelands	300 AC	Tree Roots	No	4:30	0	0
21	12 Mount Street	Wagga	100 AC	Pipe Failure (not	No	3:30	40	64
22	56 Narrung Street	Wagga	100 AC	Pipe Failure (not	No	3:25	0	0
22	Billagha Street	Wagga	100 AC	Pipe Failure (not	No	2:30	6	32
23	1 Kulgoa Street	Kooringal	100 AC	Tree Roots	No	2:00	3	0
24	72 Mckell Avenue	Mt Austin	150 AC	Pipe Failure (not	No	2:45	40	129
25	74 McKell Avenue	Mt Austin	150 AC	Pipe Failure (not	No	3:00	40	129
25	10 McDonough Avenue	Mt Austin	150 AC	Pipe Failure (not	No	2:00	15	129
26	20 McDonough Avenue	Mt Austin	150 AC	Pipe Failure (not	No	4:00	15	129
27	Inglewood Road	Lake Albert	150 AC	Pipe Failure (not	No	4:00	0	0
28	16 RUDD ST	Turvey Park	100 AC	Pipe Failure (not	No	3:15	0	0
28	Lowrie Prd/McDonough	Mt Austin	150 AC	Pipe Failure (not	No	3:30	0	0
28	Heydon/Mitchelmore	Turvey Park	100 AC	Pipe Failure (not	No	8:00	0	0
28	Inglewood Road	Lake Albert	150 AC	Pipe Failure (not	No	3:00	0	0
30	9 Mair Street	Turvey Park	100 AC	Pipe Failure (not	No	7:30	0	8
30	21 Heydon Avenue	Turvey Park	100 AC	Pipe Failure (not	No	2:30	0	0
2	12 COCHRANE ST	Kooringal	100 AC	Pipe Failure (not	No	3:00	32	20
					<b>TOTALS</b>	78:55	201	688
				Breaks needing			Breaks affecting	
	Total Breaks –	23		shut off -	23		customers –	9

	RURAL							
						Outage	Customers	Water
Date	Location	Town	Main	Cause	Live	Duration	Affected	Lost
			Type		Repair	Time	(no supply)	KI
6	Connorton Street	Uranquinty	25 PVC	Accidental damage	No	0:30	0	0
12	Flowerdale Rd	The Gap	50 PVC	Pipe Failure (not	No	1:00	0	0
4	Olympic hwy	Collingullie	100	Pipe Failure -	Yes		0	3
4	County boundry rd	Milbrulong	80 PVC	Pipe Failure -	Yes		0	8
11	Chaplins Ine	The Rock	50PE	Pipe Failure -	Yes		0	4
13	Lockhart rd	Milbrulong	200 DICL	Pipe Failure -	Yes		0	34
21	Linton st	Collingullie	100	Pipe Failure -	Yes		0	7
21	Albury rd	Lockhart	40 PE	Pipe Failure -	Yes		0	9
21	Doings Lane	Pleasant Hills	40 PE	Pipe Failure -	Yes		0	5
	<b>TOTALS</b> 1:30 0 70							
				Breaks needing			Breaks affecting	
	Total Breaks –	9		shut off -	2		customers –	0

### 1.4 WATER QUALITY COMPLAINTS

Water quality complaints received during December 2017 were:

Date	Location	Problem	Action Taken
1/12/2017	Girraween Mews, Glenfield	Bad tasting water	Flushed main
8/12/2017	Hampden Ave, North Wagga	White water	Flushed mains
8/12/2017	North Wagga	Dirty water all throughout North Wagga	Flushed all over North Wagga until clear
8/12/2017	208 Fitzmaurice St, Wagga Wagga	Bad taste to water	Site visit, all results within ADWG
14/12/2017	40B Railway St, Wagga Wagga	Dirty water	Flushed service and main
14/12/2017	50 Whittle St, North Wagga	Dirty water	Service flushed
15/12/2017	7 Springvale Dr, Springvale	Dirty water	Flushed service
15/12/2017	180 Forsyth St, Wagga Wagga	Dirty water	Flushed mains turbidity 3.2 NTU
18/12/2017	48 Fox St, Wagga Wagga	Dirty water	Flushed mains in area
19/12/2017	180 Forsyth St, Wagga Wagga	Dirty water	Plumber replaced duo valve in hot water system and no dirty water since
20/12/2017	Amaroo St, Kooringal	Dirty water	Flushed main
20/12/2017	65 Ziegler Ave, Tolland	Dirty water	Flushed main
20/12/2017	Kooringal Mall, Kooringal	Dirty water previous afternoon	From mains burst, now repaired and water clear
21/12/2017	48 Cooramin St, North Wagga	Dirty water	Clean water present, no flushing required
23/12/2017	9 Osborne Cres, Wagga Wagga	Dirty water	Flushed water main
29/12/2017	22 Blamey St, Wagga Wagga	Dirty water	Meter taken off and flushed

### 1.5 MAINS CONSTRUCTIONS

### 1.5.1 MAINS EXTENSIONS AND NEW WORKS

New water mains laid during December 2017 include:

LOCATION	PROJECT	450 DICL
Dunns Rd	New Rural Main	78
	TOTAL	78

### 1.5.2 REPLACEMENT OF EXISTING MAINS

Mains replaced during December 2017 include:

LOCATION	PROJECT	63		100
		PE	OPVC	DICL
Vonarx Road	Mains Replacment	200		
The Gap	Mains Replacment		18	20
Kooringal Road	Mains Replacment		123	22
	TOTAL	200	141	42

### 1.6 OTHER CONSTRUCTION

Other construction works during December 2017 include:

LOCATION OR PROJECT	WORK DONE		
Copland St Clay Target Gun Club	Install 100mm Fire Service		

### 1.7 MAJOR REPAIRS / OVERHAULS

Major repairs/overhauls during December 2017 include:

LOCATION OR PROJECT	WORK DONE
Tarcutta WTP	Replace manganese filter valve
Henty Balance Tank	Repair inlet valve
Fitter & Electrician workshop	Service rooftop air conditioners
Tarcutta WTP	Overhaul chlorine pump
Urana WTP	Commission and start
Bulgary #3 bore	Replace magflow meter - storm damage

### 1.8 WATER FILLING STATION ACTIVITY

Water Filling Station activity during December 2017 include:

LOCATION	NUMBER OF FILLS
Bomen Hereford Street	27
Estella Farrer Road	175
Forest Hill Elizabeth Avenue	15
Glenfield Red Hill Road	79
Henty Olympic Way	0
Holbrook Millswood Road	15
Lake Albert Plumpton Road	17
Lockhart Napier Road	23
Pleasant Hills Manson Street	0
The Rock	34
Yerong Creek Finlayson Street	8

### 1.9 STAFF TRAINING & SAFETY

The following training and/or safety activities were undertaken during December 2017:

Training or Programme	Number of Staff
Management Conference	1
Ground Support - Refresher	8
Ground Support - Full Course	6

## 1.10 FLEET DISPOSALS

Fleet disposals made during December 2017 are:

	Vehicle Details									
Vehicle No	Description	Vehicle Type	Make & Model	Year	kms					
342	The Rock	Extra cab with tray	ISUZU D-MAX	2015						
291	Carpenters	Extra cab with tray	Nissan Narvara D40	2012	96137					
319	Fitters	Extra cab with tray	ISUZU D-MAX	2013	94370					
312	Plumbing	Dual cab ute, hard cover	PX Ford Ranger	2013	104,574					
204	Carpenters	Extra cab with canopy	Ford Ranger Supercab 3ltd 2WD	2007	72,946					
301	Electrician	Dual cab tray	PX Ford Ranger	2013	62,500					
347	Engineering	Wagon	Holden Captiva wagon LS	2015						
326	Meters	Dual cab ute	ISUZU D-MAX	2014	105,274					
302	Engineering	Dual cab ute	Hyundai SantaFe	2012	96,812					
345	Works	Wagon	Subaru Outback Wagon	2015						
349	Admin G Haley	Sedan	Ford Mondeo	2015						
New	Admin									
101	Works	Truck	Iveco70 c21 truck with tray	2004						
64	Culcairn	Mower	Ford LGT14D	1991	2571hr					

Disposal Details						
Vehicle No	Method	Price exc GST				
342	Auctions	\$22,727.27				
291	Auctions	\$19,090.91				
319	Auctions	\$19,772.73				
312	Auctions	\$22,727				
204	Auctions	\$10,455				
301	Accident	\$28,182				
347	S Tompson is driving this car					
326	Auctions	\$21,364				
302	Auctions	\$19,318				
345	Not sold yet	\$0				
349	Not sold yet	\$0				
New		\$0				
101	Not sold yet	\$0				
64	Auctions	\$2,728				

## 1.11 FLEET ACQUISITIONS

Fleet acquisitions made during December 2017 are:

	New Vehicle Details									
Vehicle No	Tenders Received	Accepted Tenderer	Vehicle Type	Make & Model	Price exc GST					
375	8	Lieschke Motors	Extra cab with tray	Holden Colorado	\$30,248					
376	8	Lieschke Motors	Extra cab with tray	Holden Colorado	\$30,248					
377	8	Lieschke Motors	Extra cab with tray	Holden Colorado	\$33,279					
378	7	Lieschke Motors	Dual cab ute, hard cover	Holden Colorado	\$36,897					
379	9	Lieschke Motors	Extra cab ute with canopy	Holden Colorado	\$36,897					
380	3	Hillis Ford	Extra cab with tray	Ford Ranger	\$30,691					
381	4	Wagga Motors	Wagon	Captiva LTZ	\$29,057					
382	8	Wagga Motors	Dual cab ute	Holden Colorado LS	\$30,918					
383	9	Wagga Motors	Dual cab ute	Holden Colorado LTZ	\$34,912					
384	10	Jupiter Motors	Wagon	Subaru Outback Wagon	\$33,709					
385	8	Wagga Motors	A Crakanthorp-Sedan	Holden calais-V	\$36,453					
386	4	Jupiter Motors	Wagon	Subaru Outback Wagon	\$31,450					
387	4	Thomas Brothers	Truck	IVECO 70C21	\$82,223					



Bede Spannagle DIRECTOR OF ENGINEERING

### 2. WORKS REPORT COVERING JANUARY 2018

**RECOMMENDATION** That this report be received and noted.

• Works Report January 2018



# DIRECTOR OF ENGINEERING'S REPORTS TO FEBRUARY 2018 COUNCIL MEETING

14<sup>th</sup> February 2018

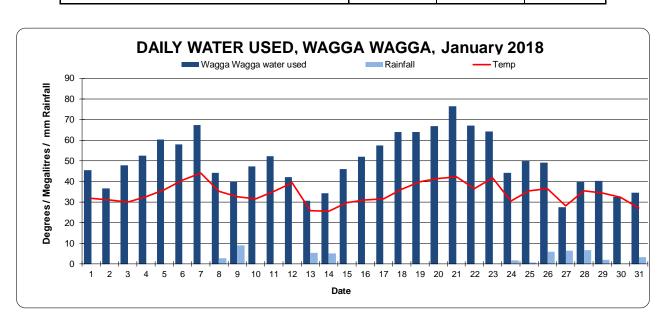
### 1 WORKS REPORT COVERING JANUARY 2018

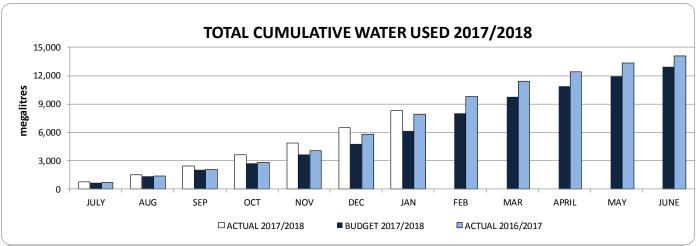
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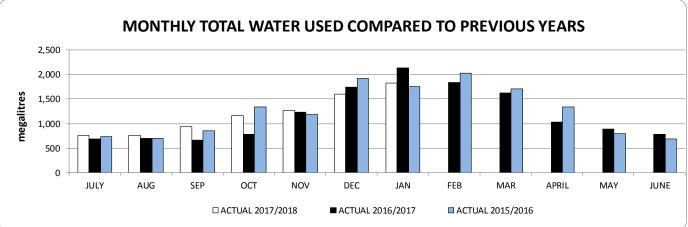
### 1.1 WATER SOURCED AND USED

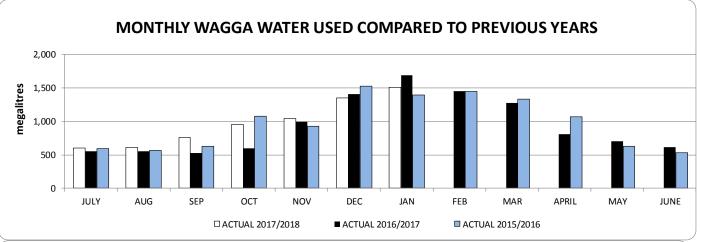
January	2016	2017	2018
Rainfall	54.2	13.8	49.8
Wet Days	13	3	12
WATER SOURCED Ja	anuary 201	8 (MI)	
North Wagga bores	274.99	326.18	297.23
West Wagga bores	507.50	685.56	595.97
East Wagga bores	305.19	492.85	210.79
Murrumbidgee River	516.93	432.43	664.79
SUB-TOTAL	1,604.61	1,937.02	1,768.78
Bulgary Bores	58.69	66.31	52.21
Urana Source	9.62	10.89	10.74
Ralvona Bores	27.00	36.58	32.65
Walla Walla Bores	31.39	45.84	31.58
Goldenfields Water Supply System	5.40	10.76	0.00
SUB-TOTAL	132.10	170.38	127.18
Woomargama	2.36	2.66	2.58
Humula	1.12	0.91	0.78
Tarcutta	4.60	6.11	5.37
Oura	5.62	6.32	6.13
Walbundrie/Rand	4.34	3.82	5.34
Morundah	1.31	1.85	1.32
Collingullie	8.31	10.05	7.92
SUB-TOTAL	27.66	31.72	29.44
TOTALS	1,764.37	2,139.12	1,925.40

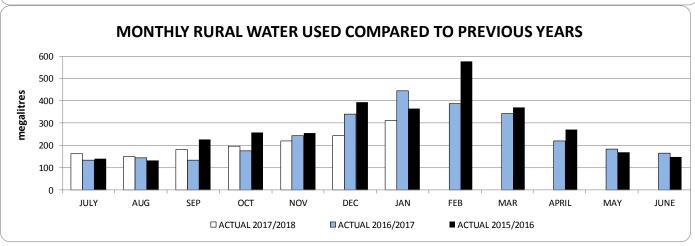
WATER USED Jan	uary 2018	(MI)	
	2016	2017	2018
East Bomen	25.04	43.31	30.35
Estella	101.87	144.12	142.32
North Wagga	107.28	82.94	76.60
Wagga Wagga – Low Level	214.38	242.69	241.14
Wagga Wagga – High Level	835.20	1,031.59	882.25
Wagga Wagga – Bellevue Level	112.27	146.40	139.97
SUB-TOTAL	1,396.04	1,691.05	1,512.63
Ladysmith System	8.67	8.63	9.33
Brucedale Scheme	30.47	45.18	30.42
Currawarna Scheme	19.53	26.12	21.88
Rural south from Wagga Wagga	152.51	171.53	92.52
Rural from Walla Walla Bore	31.39	45.84	31.58
Bulgary, Lockhart and Boree Creek	35.01	45.06	30.08
From Boree Crk to Urana and Oaklands	32.02	33.37	33.94
Holbrook	27.00	36.58	32.65
SUB-TOTAL	336.60	412.31	282.40
Woomargama	2.36	2.66	2.58
Humula	1.12	0.91	0.78
Tarcutta	4.60	6.11	5.37
Oura	5.62	6.32	6.13
Walbundrie/Rand	4.34	3.82	5.34
Morundah	1.31	1.85	1.32
Collingullie	8.31	10.05	7.92
SUB-TOTAL	27.66	31.72	29.44
TOTALS	1,760.30	2,135.08	1,824.47











## 1.2 <u>NEW SERVICE CONNECTIONS, REPAIRS, METERS, LOCATIONS & COMPLAINTS FOR THE MONTH OF JANUARY 2018</u>

Location	New Connect., Residential	New connect., Non Residential	Services Renewed	Services Repaired	Quality Complaints	Supply Complaints *	Customer dealings complaints	Other Complaints	Frost damage	Meter or Metercock fault	Leaking valves or hydrants	Locations
Wagga Wagga	40	2	5	28	6	4				51	3	9
Wagga Wagga	2	1	4	6	2					9		
Forest Hill	3			2	1					4		
North Wagga										2		
Estella	1			2								
Kooringal				2		1				1	1	1
Turvey Park	2				1	1				3	1	2
Lake Albert		1		7		1				9	1	5
Ashmont				2						8		1
Tolland										4		
Mt Austin				1						2		
Bourkelands	2					1				1		
Glen Oak				3								
Tatton										1		
Glenfield				1						4		
Lloyd	3		1		2					1		
East Wagga				1						1		
Boorooma	10			1						1		
Gobbagombalin	11											
Gumly Gumly	1											
Humula				2						1		
Ladysmith										1		
Oura	1									2		
Tarcutta				1								
The Gap				2								
Collingullie												
Lockhart				2	1							
Milbrulong				1								
The Rock			1	1							3	
Yerong Creek				1								
Henty	1				2							
Holbrook	1			1						2		
Morven				1		1						
TOTAL	43	2	6	40	9	5	0	0	0	58	6	9

## 1.3 WATER SYSTEM REPAIRS

	WAGGA WAGGA									
						Outage	Customers	Water		
Date	Location	Town	Main	Cause	Live	Duration	Affected	Lost		
			Type		Repair	Time	(no supply)	KI		
9	Cummins & Mitchell Rd	Lake Albert	150 AC	Pipe Failure (not	No	1:00	0	0		
13	Turner/Athol St	Turvey Park	100 AC	Pipe Failure (not	No	4:00	40	16		
15	Halloran Street 28	Turvey Park	100 AC	Pipe Failure (not	No	2:30	20	32		
30	Raye/Anne Street	Tolland	200 AC	Pipe Failure (not	No	5:00	0	0		
31	Veale Street 70	Ashmont	100 AC	Pipe Failure (not	No	2:00	0	0		
				7	<b>TOTALS</b>	14:30	60	48		
				Breaks needing		Breaks affecting				
	Total Breaks –	5		shut off -	5		customers -	2		

				RURAL				
						Outage	Customers	Water
Date	Location	Town	Main	Cause	Live	Duration	Affected	Lost
			Type		Repair	Time	(no supply)	KI
2	Olympic hwy	The Rock	300 CI	Pipe Failure -	No	5:00	25	75
5	Dennis Crossing Road	Brucedale	50 PVC	Pipe Failure (not	No	2:30	40	16
18	Parkins Road	Oura	40 PE	Pipe Failure (not	No	3:00	0	1
18	Olympic Highway	The Rock	300 CI	Corrosion	No	4:00	4	C
26	22 Lyne St	Henty	150 AC	Pipe Failure (not	No	3:00	0	C
29	Milbrulong	Milbrulong	225 DICL	Pipe Failure (not	No	3:00	1	20
30	Olympic Hwy	The Rock	300 CI	Pipe Failure -	No	3:00	30	90
3	Chaplins Lane	The Rock	50PE	Pipe Failure -	Yes		0	2
17	Chaplins Lane	The Rock	50 PVC	Pipe Failure (not	Yes		0	C
23	13 Linton St	Collingullie	100	Pipe Failure (not	Yes	***************************************	0	С
23	Kennedy St	Collingullie	100 CI	Pipe Failure (not	Yes		0	C
24	Linton St	Collingullie	100 CI	Pipe Failure (not	Yes		0	C
28	Milbrulong Balance	Milbrulong	200 AC	Pipe Failure (not	Yes		0	C
2	Doigs Ine	Pleasant Hills	40 PE	Pipe Failure -	Yes		0	4
<b>TOTALS</b> 23:30 100								208
				Breaks needing		Br	eaks affecting	
	Total Breaks –	14		shut off -	7		customers -	5

### 1.4 WATER QUALITY COMPLAINTS

Water quality complaints received during January 2018 were:

Date	Location	Problem	Action Taken
2/01/2018	Wheel of Fortune Rd, Oura	Leaking meter & air	Line bled
4/01/2018	4 Graham St, Henty	Smell	Meter water tested-OK. Advised customer
4/01/2010	4 Granam St, Henty	Sirieli	to flush taps
4/01/2018	35 Hargrave St, Lloyd	Dirty water	HWS problem
5/01/2018	28 Allonby Ave, Forest Hill	Dirty water	Mains OK. Gal pipes in property
10/01/2018	Lockhart-Gullie Rd, Lockhart	Dirty water	Flushed mains & service
12/01/2018	4 Graham St, Henty	Smell	Flushed mains & service-All good
17/01/2018	41 Wollundry Ave, Wagga	Dirty water	Flushed mains
29/01/2018	45 Bourke St, Turvey Park	Dirty water	Flushed mains & service
31/01/2018	RMB415 Holloway Rd,	Dirty water	Flushed mains
31/01/2016	Shepherds Siding	Dirty water	Flushed Hallis

### 1.5 MAINS CONSTRUCTIONS

### 1.5.1 MAINS EXTENSIONS AND NEW WORKS

New water mains laid during January 2018 include:

LOCATION	PROJECT	100	100	150		200
			DICL	DICL	OPVC	DICL
Brunslea Park	New Subdivision		126	75		84
Harness Racing	Main Extention	18	18	24	84	
	TOTAL	18	144	99	84	84

### 1.5.2 REPLACEMENT OF EXISTING MAINS

Mains replaced during January 2018 include:

LOCATION	PROJECT	63	200	600
		Poly	OPVC	DICL
Vonarx Road	Mains Replacment	2800		
Parkins Road	Mains Replacment	1176		
The Rock to	Mains Replacment		3996	
Edward Street	Mains Replacment			143
	TOTAL	3976	3996	143

### 1.6 OTHER CONSTRUCTION

Other construction works during January 2018 include:

LOCATION OR PROJECT	WORK DONE
West Wagga Shires Pump No.2	Ongoing discharge pipework modifications to existing pumphouse. New pump and motor arrived
Urana WTP Replacement	Finalisation of site master plan
Bomen Digital Repeater Coms Facility	Erection of coms tower on Bomen Reservoir

### 1.7 MAJOR REPAIRS / OVERHAULS

Major repairs/overhauls during January 2018 include:

LOCATION OR PROJECT	WORK DONE
Bulgary water treatment plant	Replace fluoride dosing pump
Tarcutta water treatment plant	Replace chlorine dosing pump
Walbudrie reservoirs	Replace electric inlet valve
The Rock pump station	Overhaul chlorination system
Gardeners Crossing water treatment plant	Repair RTU & CPU unit
Square reservoir	Replace level transducer
North Wagga water treatment plant	Repair fluoride drive fault
West Wagga water treatment plant	Overhaul silica dosing pump
Urana water treatment plant	Bird proof clarifier

### 1.8 WATER FILLING STATION ACTIVITY

Water Filling Station activity during January 2018 include:

LOCATION	NUMBER OF FILLS
Bomen Hereford Street	33
Estella Farrer Road	477
Forest Hill Elizabeth Avenue	17
Glenfield Red Hill Road	86
Henty Olympic Way	1
Holbrook Millswood Road	22
Lake Albert Plumpton Road	51
Lockhart Napier Road	30
Pleasant Hills Manson Street	2
The Rock	29
Yerong Creek Finlayson Street	0

### 1.9 STAFF TRAINING & SAFETY

No following training and/or safety activities were undertaken during January 2018.

### 1.10 FLEET DISPOSALS

No fleet disposals made during January 2018.

### 1.11 FLEET ACQUISITIONS

Fleet acquisitions made during January 2018 are:

			New Vehicle Details		
Vehicle No	Tenders Received	Accepted Tenderer	Vehicle Type	Make & Model	Price exc GST
384	10	Jupiter Motors	Wagon	Subaru Outback Wagon	\$33,709

## 1.12 MAJOR CAPITAL PROJECTS PROGRESS

- On track
- Behind Schedule
- Unlikely this Financial Year

## MAJOR PROJECTS 2017/18 (> Over \$100,000) - January 2018

Description	2017/18 <b>v</b> Budget	Actual & Commited to Date	Comments
MANAGEMENT			
Land & Buildings for Admin, Depot & Workshops			
Access, Parking and Landscaping			
Levee protection stage 2 Hammond Ave - Urban	\$1,597,658	\$143,862	Contract to supply sheet piles awarded
PLANT & EQUIPMENT			
IT Equipment			
Corporate IT software upgrade/improvements - Urban	\$162,500	\$93,911	Annual IT replacement program in progress
Working Plant & Vehicle Purchases			
Routine plant & vehicle replacements	\$769,000	\$620,638	
Telemetry & Control Systems Upgrade			
West Wagga WTP & Bores Control System Upgrade	\$106,965	\$110,547	Purchased communication and telemetry hardware. Finalising specification to install and commission comms and control system
Radio Telemetry SCADA Upgrade	\$168,648	\$1,240	Waiting for NSW Police approval to access Galore Hill and Mt Burngoogie towers
Radio Communications Upgrade/Replacements/Improvements			
Radio Communication	\$388,225	\$51,860	

SOURCES			
Bores-renew/refurbish/decommission			
Humula Well Replacement	\$180,000	\$0	Drilling contractor indicated availability for May-June 17
TREATMENT PLANTS			
Aeration Tower Covers			
East Wagga Aeration Basin cover - Urban	\$160,000	\$0	Project deferred until WTP complete and site handed back to RWCC
Treatment Plant Refurbishments			
WTP Stage 1 - Urban	\$9,929,062	\$3,761,370	See detailed report
Urana WTP replacement - Non-Urban	\$1,500,000	\$33,657	Finalising master plan
Pump Stations Renewal/Refurbish/Upgrade			
West Wagga Shires pump upgrade - Urban	\$151,731	\$125,424	315kW Motor and multistage pump arrived. Being prepared for installation at West Wagga pumphouse
RESERVOIRS			
New/Replacement Reservoirs			
Main Low Level Reservoir 2x11ML Investigation & Design - Urban	\$5,004,000	\$412,163	Excavation continuing. Hard rock encountered.
Glenoak Res 2 x 4.5ML - Investigate, design, land matters	\$100,000	\$29,356	REF & AHIMS completed. Ecological assessment underway.
Shires Reservoir Relocation - Non-Urban	\$2,560,333	\$1,556,936	Construction continuing.
MAINS, SERVICES & METERS			
MAINS			
System Improvements			
Broad St	\$120,000	\$0	
System Improvements - Urban	\$150,000	\$22,798	

\$800,000	\$655,785	
\$200,000	\$34,932	
\$400,000	\$132,858	
\$100,000	\$130,833	Completed
\$100,000	\$158,842	Completed
\$200,000	\$0	
\$200,000	\$0	
\$400,000	\$360,935	Completed
\$400,000	\$0	
\$1,000,000	\$213,191	Underway
\$500,000	\$289,028	
\$100,000	\$18,621	
\$150,000	\$73,408	
\$250,000	\$0	
	\$200,000 \$400,000 \$100,000 \$100,000 \$200,000 \$400,000 \$400,000 \$1,000,000 \$100,000	\$200,000 \$34,932 \$400,000 \$132,858 \$100,000 \$130,833 \$100,000 \$158,842 \$200,000 \$0 \$200,000 \$0 \$400,000 \$360,935 \$400,000 \$213,191 \$500,000 \$289,028 \$1,000,000 \$18,621



Bede Spannagle
DIRECTOR OF ENGINEERING

### 3. CONTRACT W195 - WATER TREATMENT PLANT (WTP) PROGRESS REPORT

**RECOMMENDATION**: that Council receive and note the report.

The WTP has been producing potable water meeting specification by using the temporary pipeline from the existing raw water pumps. Our operations team are enjoying the high level of automation and the challenges of learning the new plant.

Operation of the sludge treatment plant has been problematic. UGL are working with RWCC staff to improve the consistency of sludge and increase the percentage of solids in the sludge being fed to the plant.

The rock protection works around the Raw Water Intake concrete structure is well underway. Placement of rock on north side of the intake is completed and the contractor is now placing material on the south side and working up the river bank.

The Raw Water pumps have arrived on site and commissioning is planning for late March. Once the pumps are commissioned the plant can be tested at full capacity.

#### Contract issues and variations

The RWCC and UGL project managers continue to meet weekly and are working through contractual issues.

Since the last Council meeting there have been two variations approved through the Change Management process outlined in the Project Management Framework.

	CMR #	Description	Value \$ (ex GST)
1	12	Change length of raw water rising main sections from 6m	15,426
		to 4m	
2	13	Supply and install additional Wireless Access Points	8,235

The updated variation list is attached.

Variatio	on Summary	Cost \$ inc		
Approve	ed Variations	<b>GST</b> 1,809,600		
	ed Negative Variations	-725,067		
	ations approved	1,084,533		
Total Va	ariations considered	5,376,169		
Rejecte	d Variations	4,291,636		
	ns for Contamination	187,236		
<b> </b>	scope variations with CMR signoff	1,377,338		
Wagga	WTP Variations			
Variati on no.	Description	Cost \$ inc GST	Comment	CRF no.
1	Control system design for fully networked plant	16,500	Finalised	
2	AC14 Road sealing	111,563	Finalised	3
3	Provision for future UV	22,886	Finalised	2
4	Disabled Access to Control Room and Filter Area	305,360	Finalised	1
5	Changes to Concrete Specification. S32->S40 + XYPEX	86,900	Finalised	1
6	Removal of additional soil NSC02	5,781	Finalised	
7	Transformers supplied by RWCC	-268,210	Finalised	
8	Access to existing Clarifiers	140,078	RWCC constructing	
9	Alum tank increase size	88,862	Finalised	5
10	Increased Spare Capacity in Switchboards	8,850	Approved	
11	Additional Lamella Capacity	49,613	Finalised	4
12	Sewer pump station at Herritage Residence (1/2 cost)	5,933	Finalised	
13	Penstocks in lieu of stop boards	10,374	Finalised	
14	Increased Bearing Capacity in Filter Block	34,500	Finalised	
15	Rubbish near residence and asbestos at CWS excavation	11,107	Finalised	
16	Levee Asbestos Removal	28,893	Finalised	
17	Storage area sub-lease at 9 Say St	-19,800	Finalised	
18	Filter Gallery trenches	45,498	Finalised	
19	Additional 25mm cover on Clarifier outlet slab	9,236	Finalised	
-	•	•		

20	Raw Water Intake Coffer Dam & Concrete Works	401,500	Finalised	6
20 C	Raw Water Foundation requirements	2,750,000	Rejected	
21	Galvanised cable tray in lieu of Aluminium	-19,058	Finalised	
22	Non relocation of workshop sewer	-6,353	Not proceeding	
23	Removal of Additional Concrete Slab at Centrifuge Building	8,461	Finalised	
24	Clear Water Pump Mechanical Seals	1,650	Finalised	
25	Bomen Pump Line	88,000	Finalised	
26	NSC11 Material Excavated under UGL Carpark	30,102	Finalised	
27	NSC12 Asbestos Material at Wash Water Holding Tank	3,342	Finalised	
28	NSC13 Poor Ground at Sludge Thickener	21,952	Rejected	
29	Filter Wall Changes due to overflow concerns	-88,000	Finalised	
30	Road and Stormwater realignment	18,429	Finalised	
31	Roof Access Ladder to Centrifuge Building	15,511	Finalised	
32	NSC14 Damage to Scour Line & Repair	12,616	Rejected	
33	Flowmeter modifications	24,352	Finalised	9
34	Caustic Building Lighting	2,967	Finalised	
35	Eaves lining to Buildings	85,265	Rejected	
36	Sludge Thickener Floor	99,275	Finalised	7
37	Reinstallation of DICL		Rejected	
38	Modifications to Filter Building Stairs	41,938	Rejected	
38b	Modifications to Filter Building Stairs	19,250	RWCC offer for variation	
39	Electrical Field Isolators	73,986	Rejected	
40	Street Light Fittings	9,885	Finalised	
41	Offsite Cleaning of SS Reo Filters	28,346	Rejected	
42	Design Changes Roads and Gutters	0	Rejected	
43	Additional 150mm layer 4.8-9.6 Garnet	94,836	Finalised	8
44	Lamella Corrosion Warranty (agreed adjustment 23/1/17)	-330,000	Finalised	
45	Concrete Slab between filter and Lamellas	1,475	Finalised	

46	Remove Concrete Slab	4,459	Finalised	
47	Failed pressure test	10,265	Rejected	
48	Changes to Sludge Discharge pipework	24,578	Rejected	
49	Bore Water Pressure Line changes	10,252	Adjusted amount accepted	
50	Pop-up power outlets	2,445	Finalised	
51	Reroute centrate PS to Wash Water Holding Tank	78,085	Rejected	
52	Additional landscaping & Footpaths	184,044	Rejected	
53	NSC17 Asbestos at A2 to A203 and at A8-2	4,942	Finalised	
54	Buildings Roof Drainage Connection to Stormwater System	81,128	Rejected	
54b	Buildings Roof Drainage Connection to Stormwater System	0	RWCC offer for variation	
55	High Low Lift pump valves	26,067	Rejected	
56	Rework External Delivery Pipework	16,748	Finalised	
57	Rework Sludge Thickener Riser	10,403	Rejected	
58	Concrete Encase Stormwater	11,663	Rejected	
59	Concrete Encase Stormwater	16,364	Rejected	
60	Concrete Encase Washwater	46,411	Rejected	
61	Raw Water Piping Hazop Changes	59,871	Rejected	
61b	Raw Water Piping Hazop Changes			12
62	Ancillary Pipework Material Changes	88,438	Rejected	
62b	Ancillary Pipework Material Changes	3,740	RWCC offer for variation	
63	Dewatering Control Change	7,506	Rejected	
63b	Dewatering Control Change	3,300	RWCC offer for variation	
64	Joinery, Sink & Fume Hood to Control Room	24,616	Rejected	
65	Thickener Rake Bearing Flushing Line	18,292	Rejected	
66	Power Monitor Comms with PLC	5,603	Rejected	
66b	Power Monitor Comms with PLC	3,300	RWCC offer for variation	
67	Supply and Fix Additional Reinforcement in Concrete WRS	344,355	Rejected	

68	Additional Hydrotite Jointing in WRS	47,837	Rejected	
69	Provision of Water Meters	14,135	Rejected	
70	Reroute Sewer	14,557	Rejected	
71	Concrete encase pipework		Rejected	
72				
73	Road Subgrade Replacement	29,002	Finalised	
140	Power Failure Alarm Circuit Modifications in Switch Boards	5,647	Finalised	
141	Drilled Holes for Raw Water Frame Footings	2,274	Approved	
142	Forklift access ramps to Chemical building	12,772	Approved	10
143	HL&LL Clear Water Pump mechanical seals	70,361	Approved	11
144	Chemical Building additional WAPs	9,059	Approved	13

The UGL project status report issued since the last Council meeting are attached.

• UGL Project Status report – January 2018



## **PROJECT STATUS REPORT**



## January 2018

PROJECT: Wagga Wagga WTP Upgrade

CLIENT: Riverina Water County Council

CONTRACT NO.: W195

UGL PROJECT NO.: 3200-0485

REPORT DATE: 10<sup>th</sup> February 2017

REPORT NO.: 29

PROJECT MANAGER: Doug Anderson

PREPARED BY: Doug Anderson



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### 1.0 SUMMARY

Project progress in January was focussed on the following activities:

Electrical works - raw water FTPs & lamella lighting; clearwater pump station cabling; clearwater storage lighting; test and quality documentation.

Raw Water Intake – All draft tubes installed and headstocks completed, Raw water piping has been fitted and welded out, air and potable water services are at 60%

Clearwater Pump Station Building – Erection of structure 95%, 1 x low and 1 x high level pumps have been removed from site for refurbishment.

Lamella Clarifiers – Relocation of poly dosing in train 2 to improve even distribution of floc, sealing of lamella troughs.

Filters – Supply of remaining coal for filters 1, 2 & 3, order placed with James Cumming, delivery is anticipated late Feb

Civil/plumbing - Civil has focussed on various drainage works; installation of lamella/filter hose reels and remediation of defects.

Safety performance across the site continues to be well managed.

### 2.0 SCOPE OF WORK

The project scope of works is to replace the Wagga Wagga Water Treatment Plant (WTP) to provide additional process capacity and asset reliability to produce up to 55ML/day of water for the residents of Wagga Wagga.

### 3.0 HSSE

The total hours worked on the project this month were 5043 hours. Subcontractor hours recorded on site were 3950. Total hours worked on the project to date is 231,306.

There were 2 near misses and one property damage incidents during the month:

- Near Miss 1 Qualified electrician (Kirk Industrial) was working in chemical building installing electrical equipment identification to electrical cable tray by securing the identification plate to a steel cover plate when the qualified electrician drilled a screw through the steel cover plate penetrating a live electrical cable (415volts). Causing the electrical equipment circuit breaker to activate and cut power to the cable & equipment the electrician was unable to isolate electrical system due to operational requirement of the Water Treatment Plant- air conditioning of the chemical rooms is required to be operating to keep the water treatment chemicals at the appropriate temperature. No injury occurred to electrician. Investigation recommended that the SWMS be revised to eliminate any chance of a similar incident occurring.
- Near Miss 2 Foster excavation personnel were operating UGL telehandler transferring class 3 rock material from material stockpile down to a stockpile on eastern crane pad (coffer dam). The operator has been VOC'd and operating on Wagga WTP site for 6 months. The telehandler operator attempted to boom out the telehandler bucket loaded with class 3 rock over the stockpile he was developing to tip the load of class 3 material on the opposite side of the developed stockpile, during the attempt to place the material over the stockpile the telehandler reached its tipping point and the bucket of the telehandler tipped forward causing the rear wheels of the telehandler to be raised off the ground. The telehandler safety system activated and the shut down the telehandler. Incident reported immediately to UGL. Work in area



- stopped, Franna crane was driven to telehandler location where appropriate lifting equipment was attached by a dogman. The Franna crane secured the telehandler and keep the telehandler stable while personnel shovelled material from the telehandler bucket to allow the telehandler to be lowered. The franna crane then lowered the rear of the telehandler to the ground when sufficient material was removed from the telehandler bucket. No damage/ no injury Utake 5 completed for retrieval works.
- Property Damage UGL site management was informed by site personnel that construction material could have been thrown in to the raw water draft tubes by persons unknown. UGL instructed site subcontractor DTD to start an investigation into the possible vandalism. DTD removed the Johnson screens in the raw water intake structure at to bottom of the draft tubes and placed a suction hose into the draft tube to remove most of the rain and washout water sitting at the low point of the draft tubes. DTD personnel & UGL HSSE performed a UGL confine space risk assessment and developed SWMS, work method, emergency retrieval plan and a UGL confine space permit was issued. DTD confined space trained personnel entered the draft tubes (3 mtrs in distance) and sucked the remaining water out with a small suction hose to reveal the material thrown into the draft tube. The material removed by DTD personnel were large and small rocks, small pieces of concrete, used nails and form ply, these items where large enough to possibly cause damage to an operating pump. Photos taken by DTD personnel to provide confirmation of the draft tube cleanliness, open end of draft tubes sealed.

Site inductions of 10 individuals have been undertaken with current total of 720 inductions completed not including visitor inductions and UGL HSSE pre-start meetings were conducted on all working days, also individual subcontractor pre-start meetings occurred on site daily. Looking towards Feb/March we will be focussed on the following:

- UGL Isolation procedure
- SWMS development by subcontractors
- Continuing training site personnel in UGL Utake 5 and HAZOB
- UGL Critical Risk Protocols all site personnel
- Continuing with Project Manager Monthly Safety Awards

The Safety Report for this month is contained in Appendix B.



## 4.0 RISK / CRITICAL ACTION AREAS

Summary of Top Risks at October: -

Risk Description	Potential Impact	Control Measures
Quality and specification	Impact to project efficiency and	Ensure incoming inspections are completed
issues	rate of completion	with due diligence
	Additional resources required	
	for investigation and remedy.	Engage with subcontractors & suppliers about
	Subcontractor	prompt rectification of issues
	Impact to Client Relations and	
	Perceptions	
Commissioning Program	Plant not ready for	Install temporary raw water supply to lamella
Overrun	performance trial by the	clarifier to provide a supplemental supply for
	required date.	summer demand
Raw Water Works	Constraint on commissioning	Plan and execute a temporary raw water
Construction overrun	activities	supply utilizing the existing RWCC river
		pumps
Exceptional Inclement	Delays associated with site	Use construction methodologies which
Weather	inundation due to additional	mitigate impacts.
	rainfall on site and rise in river	
	levels.	



## 5.0 CONTRACT/COMMERCIAL

## **5.1 Progress Claim**

The table below summarises the progress to the 31st January.

### **WAGGA WAGGA WATER TREATMENT PLANT**

Schedule of Prices	Total Cla	im to date
Provision of Preconstruction Activities	% complete	Claim Value
Preconstruction Activities subtotal (1)	100%	
Provision of Project Management and Site Running		
Activities		
Prooject Management Activities subtotal (2)	96%	
Complete all additional designs, where required		
Design and Documentation subtotal (2)	100%	
Intake Works		
Intake Works - General subtotal (3)	45%	
Raw Water Piping System		
Raw Water Piping subtotal (4)	81%	
Lamella & Rapid Mix Tank		
	100%	
·		
Filters		
Filters subtotal (7)	100%	
Filter Water Tank & Backwash		
	100%	
Machinery Room		
	99%	
, , , , , , , , , , , , , , , , , , , ,	20,0	
Clear Water Storage & Pumping System		
	98%	
	3370	
Aluminuium Dosing Plant		
Aluminium Dosing Plant subtotal (11)	99%	
	Provision of Preconstruction Activities Preconstruction Activities subtotal (1)  Provision of Project Management and Site Running Activities Prooject Management Activities subtotal (2)  Complete all additional designs, where required Design and Documentation subtotal (2)  Intake Works Intake Works - General subtotal (3)  Raw Water Piping System Raw Water Piping subtotal (4)  Lamella & Rapid Mix Tank Lamella & Rapid Mix Tank subtotal (5)  Filters Filters subtotal (7)  Filter Water Tank & Backwash Filter Water Tank & Backwash subtotal (8)  Machinery Room Machinery Room subtotal (9)  Clear Water Storage & Pumping System Clear Water subtotal (10)	Provision of Preconstruction Activities Preconstruction Activities subtotal (1)  Provision of Project Management and Site Running Activities Prooject Management Activities subtotal (2)  Complete all additional designs, where required Design and Documentation subtotal (2)  Intake Works Intake Works - General subtotal (3)  Raw Water Piping System Raw Water Piping subtotal (4)  Lamella & Rapid Mix Tank Lamella & Rapid Mix Tank subtotal (5)  Filters Filters Filters subtotal (7)  Filter Water Tank & Backwash Filter Water Tank & Backwash subtotal (8)  Machinery Room Machinery Room subtotal (9)  99%  Clear Water Storage & Pumping System Clear Water subtotal (10)  Aluminuium Dosing Plant



12	PACL Dosing Plant		
	PACL Dosing Plant subtotal (12)	99%	
13	Caustic Soda Dosing Plant Facilities		
	Caustic Soda Dosing Plant subtotal (13)	99%	
14	Sodium Hydrochlorite Dosing Plant		
	Sodium Hydrochlorite Dosing Subtotal (14)	100%	
15	Polymer Dosing Plant		
	Polymer Dosing Plant subtotal (15)	100%	
16	Fluoride Dosing Plant		
	Fluoride Dosing subtotal (16)	100%	
17	Other Items		
	Other Items subtotal (17)	88%	
18	Electrical Items		
	Electrical subtotal (18)	98%	
19	Testing Demonstration Commissioning		
	Testing Demonstation and Commissioning (19)	21%	
20	Post Process Proving		
	Post Process Proving (20)	24%	
21	Sludge Handling & Dewatering System		
	Sludge Handling subtotal (19)	98%	
22	Other Options Accepted		
	Options subtotal (20)	100%	
23	Variations		
	Variations Subtotal	77%	



# **5.2 Variations**

The table below provides a summary of the <u>approved</u> variations against the contract.

Variation No.	Title	Amount (\$ 000) Excl. GST	Status
VO01	Control System Design for fully networked plant	15	Approved
VO02	AC Road Surface	101	Approved
VO03	Future UV	21	Approved
VO04	Disabled Access	278	Approved
VO05	Aggressive Water Response	79	Approved
VO06	NSC02 – removal of Gyprock	5	Approved
VO07	Transformer supplied by principle	- 244	Approved
VO09	Chemical Dosing – Alum Storage	81	Approved
VO10	Switchboards additional spare capacity	8	Approved
VO11	Lamella plate capacity	45	Approved
VO12	Sewer pump station	5	Approved
VO13	Manual Penstocks on Clarifier Inlet	9	Approved
VO14	Increased bearing capacity in the filters	31	Approved
VO15	Waste in excavation NSC04 & NSC06	10	Approved
VO16	Asbestos in Levee	26	Approved
VO17	Warehouse Facility	- 18	Approved
VO18	Filter Gallery Trenches	41	Approved
VO19	Additional 25mm cover to Slab	8	Approved
VO20	Raw Water Intake	105 260	20A Approved 20B Approved
VO21	Material Compatibility Changes	- 17	Approved
VO23	Pits under existing centrifuge building - NSC10	8	Approved
VO24	Clear Water Pumps Mechanical Seal	1.5	Approved
VO25	Bomen Line	80	Approved
VO26	NSC11 Material Excavated under UGL Carpark	27	Approved
VO27	NSC12 Asbestos at Wash Water Holding Tank	3	Approved
VO29	Filter Water Overflow Changes	-80	Approved
VO30	Site Road Realignment	17	Approved
VO31	Roof Access Ladder to Centrifuge Building	14	Approved
VO33	Flowmeter Modbus Communications	22	Approved
VO34	Caustic Building Lighting Changes	3	Approved
VO36	Sludge Thickener Infill Slab	90	Approved
VO40	Street Light Fittings	9	Approved



VO43	S&I 4.8 to 9.6 Garnet Filter Media	86	Approved
VO44	Lamella Corrosion	-300	Approved
VO45	Concrete slab between filters and Lamella	1	Approved
VO46	NSC16 Remove Concrete Slab	4	Approved
VO49	Bore Water Pressure Line Changes	9	Approved
VO50	Filter Building Pop out Power Outlets	2	Approved
VO53	NSC17 Asbestos at A2 to A203	4	Approved
VO56	Rework External Chemical Delivery Pipework	15	Approved
VO73	Road Subgrade Replacement	26	Approved
VO140	Power Failure Alarm Modification	5	Approved
VO141	Raw Water Disassembly Frame Footings	2	Approved
VO142	Chemical Building Forklift Access Ramps	12	Approved
VO143	Conversion of Hi & Low Lift Pumps to Mechanical Seals	64	Approved

There are number of unresolved commercial issues some of which may have to be resolved by senior management

#### 6.0 FINANCE

The table below summarises the invoices and payment status.

Claim Description	Invoice no.	Amount	Claim/Invoice Status
W195 Progress Claim 1	Invoice # 1	\$ 879,128.59	Paid
W195 Progress Claim 2	Invoice # 2	\$ 1,428,346.00	Paid
W195 Progress Claim 3	Invoice # 3	\$ 1,246,918.00	Paid
W195 Progress Claim 4	Invoice # 4	\$ 2,341,562.00	Paid
W195 Progress Claim 5	Invoice # 5	\$ 2,269,089.00	Paid
W195 Progress Claim 6	Invoice #6	\$ 1,652,403.00	Paid
W195 Progress Claim 7	Invoice #7	\$ 2,039,696.00	Paid
W195 Progress Claim 8	Invoice #8	\$ 1,764,615.00	Paid
W195 Progress Claim 9	Invoice #9	\$ 2,037,494.00	Paid
W195 Progress Claim 10	Invoice #10	\$ 2,540,706.00	Paid
W195 Progress Claim 11	Invoice #11	\$ 3,296,966.00	Paid
W195 Progress Claim 12	Invoice #12	\$1,309,013.00	Paid
W195 Progress Claim 13	Invoice #13	\$1,208,270.00	Paid
W195 Progress Claim 14	Invoice #14	\$ 967,609.00	Paid
W195 Progress Claim 15	Invoice #15	\$ 714,741.00	Paid
W195 Progress Claim 16	Invoice #16	\$ 582,416.00	Paid
W195 Progress Claim 17	Invoice #17	\$ 723,083.00	Paid
W195 Progress Claim 18	Invoice #18	\$ 614,612.00	Paid
W195 Progress Claim 19	Invoice #19	\$ 502,532.00	Paid
W195 Progress Claim 20	Invoice #20	\$ 480,610.00	Paid
W195 Progress Claim 21	Invoice #21	\$ 327,361.10	Paid
W195 Progress Claim 22	Invoice #22	\$ 170,888.00	Paid
W195 Progress Claim 23	Invoice #23	\$ 304,322.00	Paid



W195 Progress Claim 24	Invoice #24	\$ 0.00	Paid
W195 Progress Claim 25	Invoice #25	\$ 0.00	Paid
W195 Progress Claim 26	Invoice #26	\$ 55,051.00	Paid
W195 Progress Claim 27	Invoice #27	\$ 303,036.00	Paid
W195 Progress Claim 28	Invoice #28	\$ 280,348.00	Paid
W195 Progress Claim 29	Invoice #29	\$ 341,270.00	Paid
W195 Progress Claim 29A	Invoice #29A	\$ 417,372.00	Paid
W195 Progress Claim 30	Invoice #30	\$ 252,965.00	Approved

#### 7.0 PROGRAMME

A revised programme has been produced which encompasses the remaining works and the most recent version is included in App C.

The version attached to this report (5/2/18) reflects the most recent change.

The programme has been constructed with Microsoft Project and will be managed by site, it will remain a live document which will be continually updated as circumstances dictate.

#### **Construction/Completion Summary**

- The plant has been producing potable water since early December 2017 at between 20 ML/D and 30 ML/D using the existing raw water RWCC pumps thru a temporary pipeline without any major issues.
- Raw Water pumps are expected to arrive onsite by mid Feb 2018
- The Raw Water Intake concrete work is complete within the cofferdam with all the draft tubes and headstocks completed. Rock revetment at the North wall is complete and placement of the revetment on the West and East sides has commenced. Placement of rocks and gabions will continue through until late March 2018 followed by riverbank rehabilitation that will be completed by the end of April.
- Mechanical installation within/on the inlet structure is 90% complete.
- Mechanical and electrical installation for the rest of the intake structure is scheduled for completion by the first week of March
- Commissioning of the Raw Water Pumps to commence late March with operations commencing in April 2018.
- Procurement, loading, washing & commissioning of the remaining filter coal will be completed by mid - March 2018
- Site roads will be completed by mid-March and general site landscaping by the end of April 2018
- All other miscellaneous works, footpaths, random slabs, additional drainage is targeted for completion by April 2018.
- It is the intention that the outstanding major defects (PLC wiring, isolation switches, electric motor replacement) will be completed during an 8 week period in winter, nominally from May to July 2018



#### 8.0 QUALITY

Production of Inspection and Test Reports (ITPs) continues for civil/structural, mechanical and electrical works across the site.

We continue to work through finalising the quality issues with some of fabricated equipment with many of the issues now closed out. In some instances, remedial works have been required to meet the aspects of the specification and we are working with suppliers as needed to remedy these.

#### 9.0 ENVIRONMENTAL

Project Construction Environmental Management Plan continues to be implemented.

The health of the flying fox colony near the Raw Water Intake is now monitored weekly by an ecologist from NGH Environmental

#### 10.0 INDUSTRIAL RELATIONS

No issues.

#### 11.0 DESIGN AND TECHNICAL

Design is 97% complete, misc mech & elec remain e.g. brackets & supports.

#### 12.0 COMMISSIONING

Temporary raw water supply & flowmeter 100%
Raw Water Pumps 0%
Lamella Clarifier – Train one 95%, train two 95%
Lamella Sludge Pumps 95%
PLC sequencing 90%
Instrument Wet Rack 95%
Sample Pumps 95%
Filters 75%
Backwash Pumps 95%
Washwater Pumps 95%
Process Water Pumps 95%
Chemical Dosing 90%
Clearwater Storage 95%
Clearwater Pumps 90%

The continuing focus of commissioning in the next month will be to optimize the plant operation.

#### 13.0 STAKEHOLDERS

The UGL site have continued to engage with other contractors on site as well RWCC staff and construction teams and no issues arising.



# **14.0 SITE PROGRESS**



Photo 1: Raw Water Intake



Photo 2: Raw Water Intake





Photo 3: Raw Water Intake



Photo 4: Raw Water Intake





Photo 5: Raw Water Intake



Photo 6: Raw Water Intake





Photo 7: Raw Water Intake



Photo 8: Raw Water Intake



#### APPENDIX A - SCOPE OF WORKS SUMMARY

The project scope of works is to replace the Wagga Wagga Water Treatment Plant (WTP) to provide additional process capacity and asset reliability to produce up to 55ML/day of water for the residents of Wagga Wagga.

The WTP shall be designed to operate at a treated water production rate anywhere between 60 ML/d (695 L/s) and 22 ML/d (255 L/s).

The main treatment process of the WTP shall include coagulation and flocculation, inclined plate clarification, dual media filtration, chlorination, and fluoridation. Process wastewater shall be managed using gravity thickening and mechanical dewatering.

Product water shall be produced to meet the quality requirements of the specification and shall treat the required quality. The project target completion periods are for a design and construction period of 60 weeks, followed by a 10 week commissioning and proving period.

The scope of on-site works for UGL Engineering and its subcontractors as described in the contract are limited to the following;

The new water treatment facility shall consist of the following elements for a new 60ML/d Water Treatment Plant:

- Raw water intake and pumping station. The intake would be constructed within the river. The
  pumping station would be built on Crown Land adjacent to the WTP on the bank of the
  Murrumbidgee River to supply raw water to the plant;
- Alum and polymer dosing systems;
- Inclined plate clarifiers (Lamella clarifiers);
- Six dual media filters including backwash pumps and air scour blowers;
- Chlorine storage and dosing system and channel-type static mixer for clear water storage;
- Fluoride dosing system;
- pH correction dosing systems:
- Dewatering building with two new centrifuges to dewater sludge material produced from clarification and filtration during the water treatment process.
- Backwash wastewater collection tank and pumping station for the wastewater produced from the clarification and filtration process;
- Clear water system upgrade including a new 3 ML clear water storage tank and low level and high level pumping stations each fitted with three pumps;
- Electrical works including switch-rooms, automation and control infrastructure, electrical substations and two new 1500kVA transformers;
- Filter wastewater collection sump and transfer pumps;
- Pipework and valves;
- Control room, water testing and analysing facilities;
- Internal access roads:

UGL is responsible for undertaking the detailed design, construction, commissioning, training and handover for aspects of the scope of works above.

UGL will also provide post completion technical support comprising, where necessary some site visits, to assist RWCC in operating and optimising the plant.



# **APPENDIX B – MONTHLY SAFETY REPORT**



# **UGL** Wagga Wagga Water Treatment Plant Project



# **HSSE Monthly Safety Report - January 2018**

#### 1.0 Overview Statistics

	January 2018	Total to Date
UGL Hours	1093	66,770
Subcontractor hours	3950	164,536
Total Site Hours	5043	231,306
LTIFR: Target <.50		4.2
TRIFR: Target 2.70	0	0
MTIFR:	0	0
Lost Time Injuries (LTI)	0	1
Days lost to LTI	0	71
Medical Treatment Injuries (MTI)	0	0
1 <sup>st</sup> Aid Injuries	0	6
Incidents:		
Injury	0	7
Damage/ Loss	0	25
Near Miss	2	50
Hazard	5	140
Report Only	0	11
Journey Incident	0	1
Non-work-related injury	0	0
Environmental	3	14
Safety Initiatives:	0	13
Workplace Safety Inspections		701
Environmental Inspections	3	90
Safety Conversations (UGL)		1,094

Utake 5 (UGL)	100	5708
Hazobs	5	531
Site audit (e.g. Plant pre-start)	2	92
SWMS reviews	5	358
Site inductions	10	720
Tool box meetings	2	89
Training hours	1	134
Plant delivery inspections	1	190
Checkit compliance (UGL)	100%	100%
UGL/ External Audits	0	3
Alcohol Breath tests	19	3646
Drug tests	0	176

#### 2.0 Incident Summary

#### The following incidents occurred on site in January 2018.

**Near Miss:** Qualified electrician (Kirk Industrial) was working in chemical building (Fluoride room) installing electrical equipment identification to electrical cable tray by securing the identification plate to a steel cover plate when the qualified electrician drilled a screw through steel cover plate penetrating an live electrical cable (415volts). Causing the electrical equipment circuit breaker to activate and cut power to the cable & equipment the electrician was unable to isolate electrical system due to operational requirement of the Water Treatment Plant- air conditioning of the chemical rooms is required to be operating to keep the water treatment chemicals at the appropriate temperature. No injury occurred to electrician

**Actions:** Electricians repairing cable- Incident investigation started - SWMS & method changed after review

**Near Miss:** Foster excavation personnel was operating UGL telehandler transferring class 3 rock material from material stockpile down to a stockpile on eastern crane pad (coffer dam). The operator has been VOCed and operating on Wagga WTP site for 6 months. The telehandler operator attempted to boomed the telehandler bucket loaded with class 3 rock over the stockpile he was developing to tip the load of class 3 material on the opposite side of the developed stockpile, during the attempt to place the material over the stockpile the telehandler reached its operating capacity and the bucket of the telehandler tipped forward causing the rear wheels of the telehandler to be raised off the ground. The

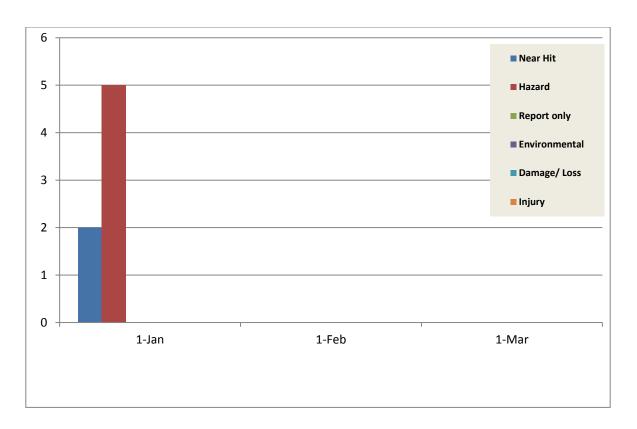
telehandler safety system activated and the shut down the telehandler. Incident reported immediately to UGL

**Actions:** Work in area stopped. Franna crane was driven to telehandler location where appropriate lifting equipment was attached by DTD dogman. The Franna crane secured the telehandler and keep the telehandler stable while personnel shoveled material from the telehandler bucket to allow the telehandler to be lowered. The franna crane then lowered the rear of the telehandler to the ground when sufficient material was removed from the telehandler bucket. No damage/ no injury Utake 5 completed for retrieval works.

**Damage:** UGL site management was informed by site personnel that construction material could have been thrown in to the raw water draft tubes by persons unknown. Vandalism by persons unknown

Actions; UGL instructed site subcontractor DTD to start investigation into the possible vandalism. DTD removed the Johnson screens in the raw water intake structure at to bottom of the draft tubes and placed a suction hose into the draft tube to majority of the rain water sitting in the base of the draft tube. DTD personnel & UGL HSSE performed a UGL confine space risk assessment and developed SWMS, work method, emergency retrieval plan and a UGL confine space permit. DTD confined space trained personnel entered the draft tubes (3 meters in distance) and sucked the remaining water out with a small suction hose to reveal the material thrown into the draft tube. The material identified, located and removed by DTD personnel where large and small rocks, small pieces of concrete, used nails, form work ply these items where large enough to cause damage to an operating pump. Photos taken by DTD personnel to provide evidence of the draft tube now free of material.

#### Wagga Wagga WTP Incident trends



- January 2018 10 Site inductions not including visitor's inductions
- Site wide training in UGL Isolation procedure
- Continuing education of local subcontractors regarding SWMS & Safety Culture Development/ Awareness
- Safety Award January 2018

#### 3.0 Project Safety Initiatives for February 2018

- Training:
- UGL Isolation procedure
- SWMS development by subcontractors
- Continuing training site personnel in UGL Utake 5 and HAZOB
- UGL new Critical Risk Protocols all site personnel
- Continuing with Project Manager Monthly Safety Awards

#### UGL Daily Pre-start meetings:

Daily site hazards, site hazard board updates, continuing discussion of subcontractor interfacing requirement to, site personnel consultation

> Subcontractor individual pre-start meetings conducted after site pre-start. Subcontractor individual work tasks & hazards involved

#### > UGL Weekly Toolbox meeting:

- Site incidents / actions, industry safety alerts, continuing discussion of site safety hazards, site personnel consultation. Update of the site notice board.
- Weekly supervisor/subcontractor HSE meeting discussing HSE initiatives for the project as well as subcontractor interfaces.

#### > Site Safety Inspections:

Continuing compliance with UGL WWWTP Project Safety Management Plan via:

- ✓ Site safety inspections
- ✓ UGL Safety conversations
- ✓ UGL UTake 5
- ✓ UGL Hazobs
- ✓ Plant operator pre-start inspection audits
- ✓ SWMS reviews, work permit audits

#### > Fitness for Work:

- Continuing Alcohol testing at pre-start meetings
- Drug testing as per Project Safety Management Plan
- Continuing Site Environmental inspections and education to subcontractors regarding environmental compliance.

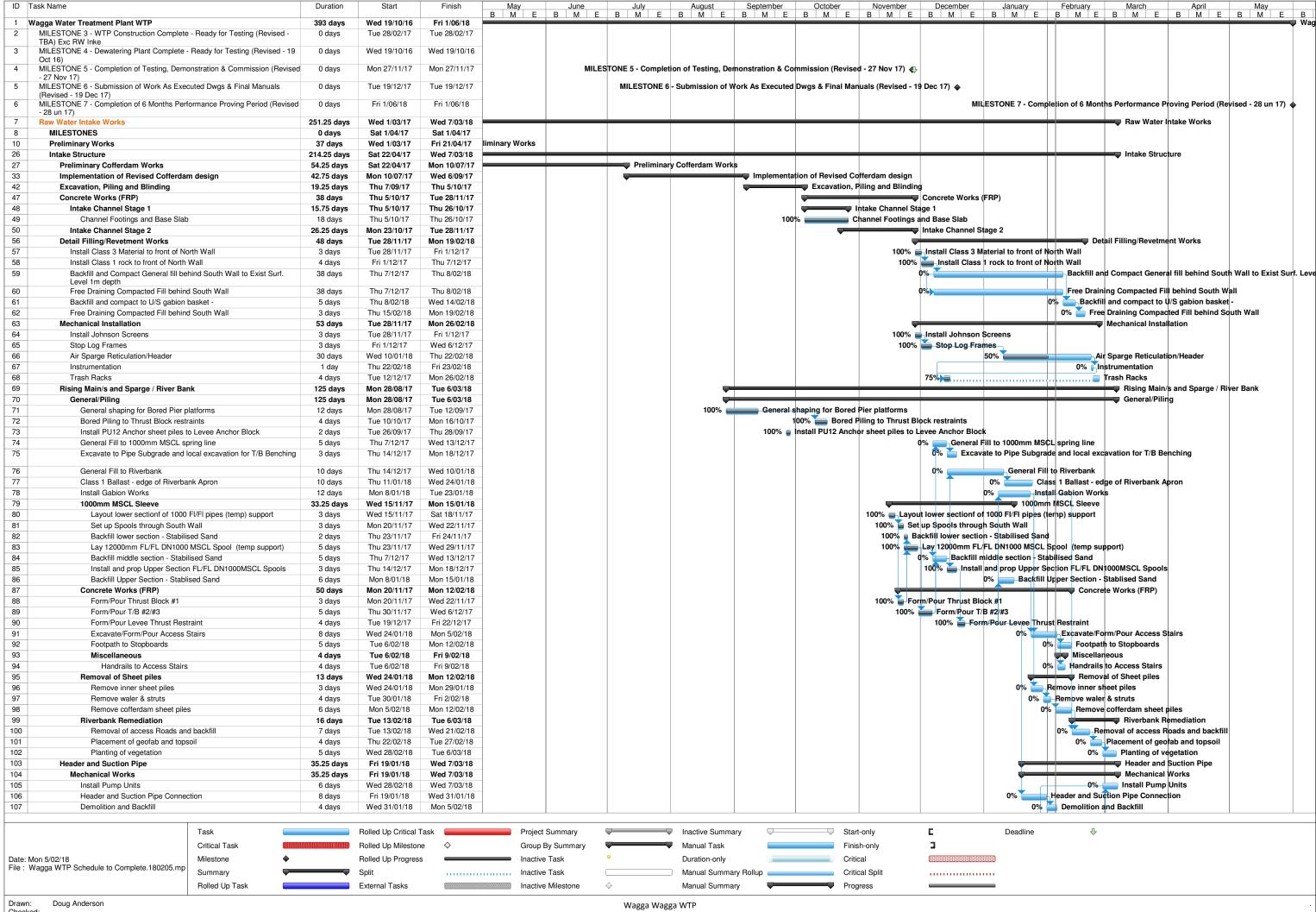
Mark Hunter

**UGL Safety Advisor** 

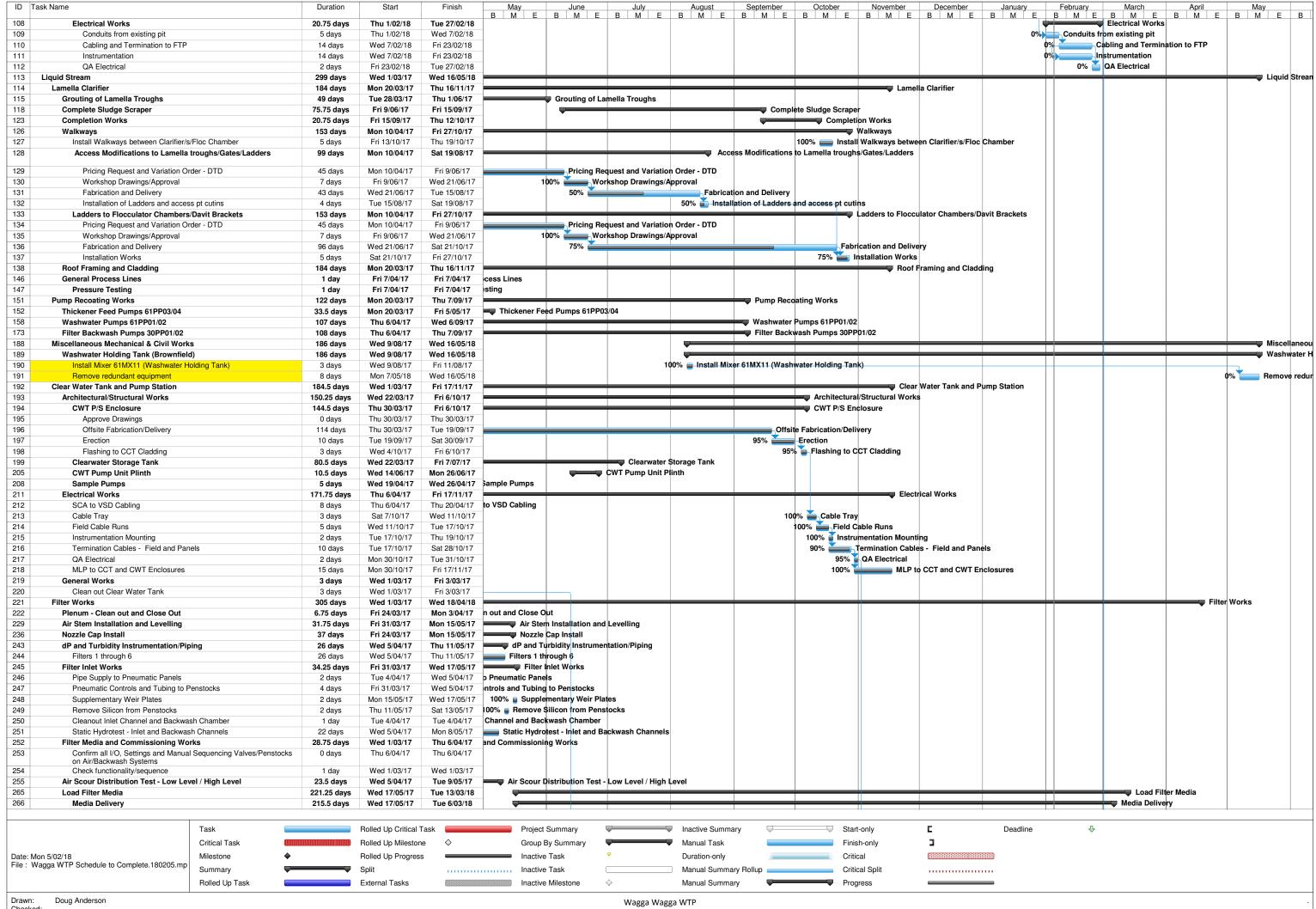


# APPENDIX C - PROJECT PROGRAMME

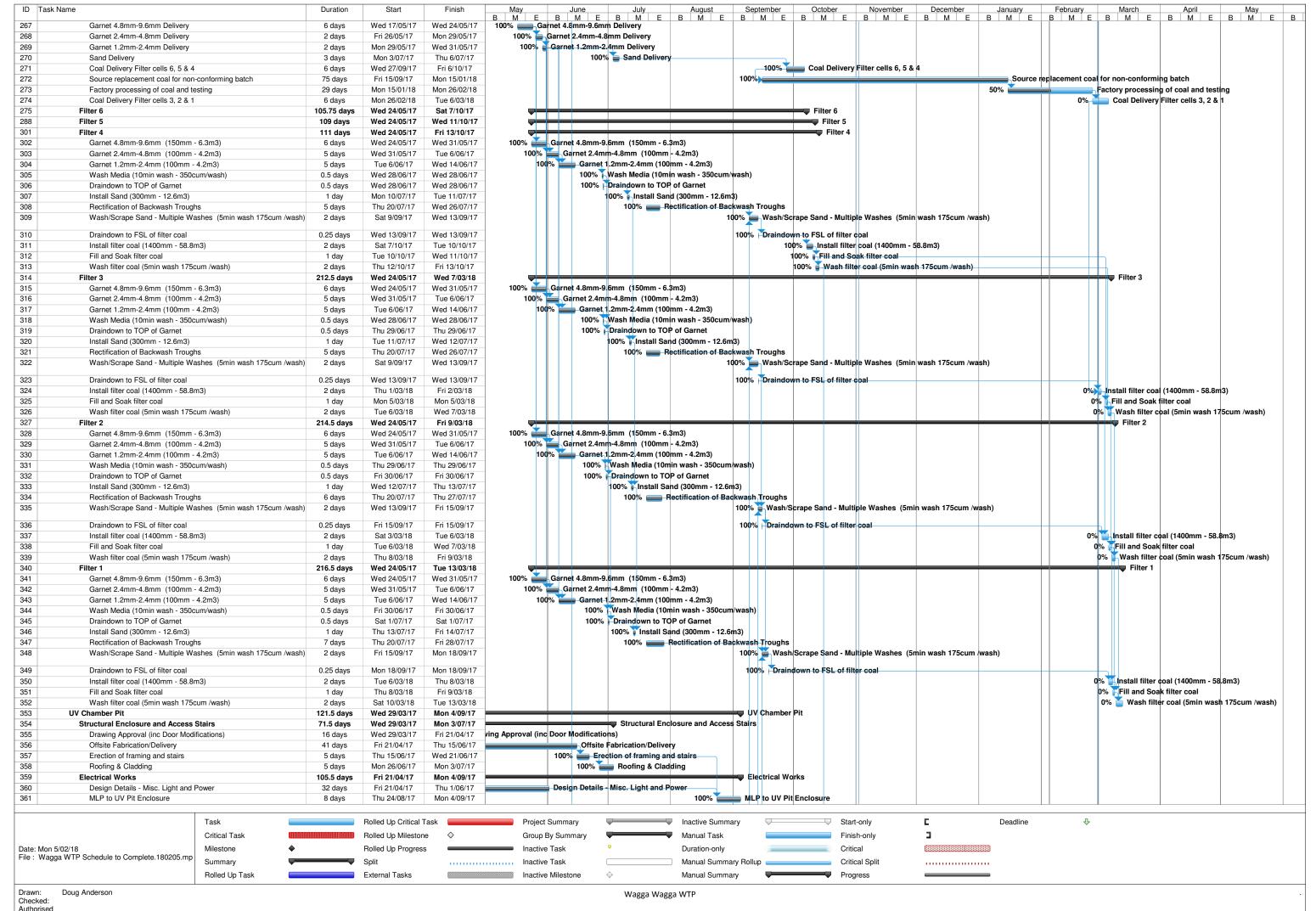
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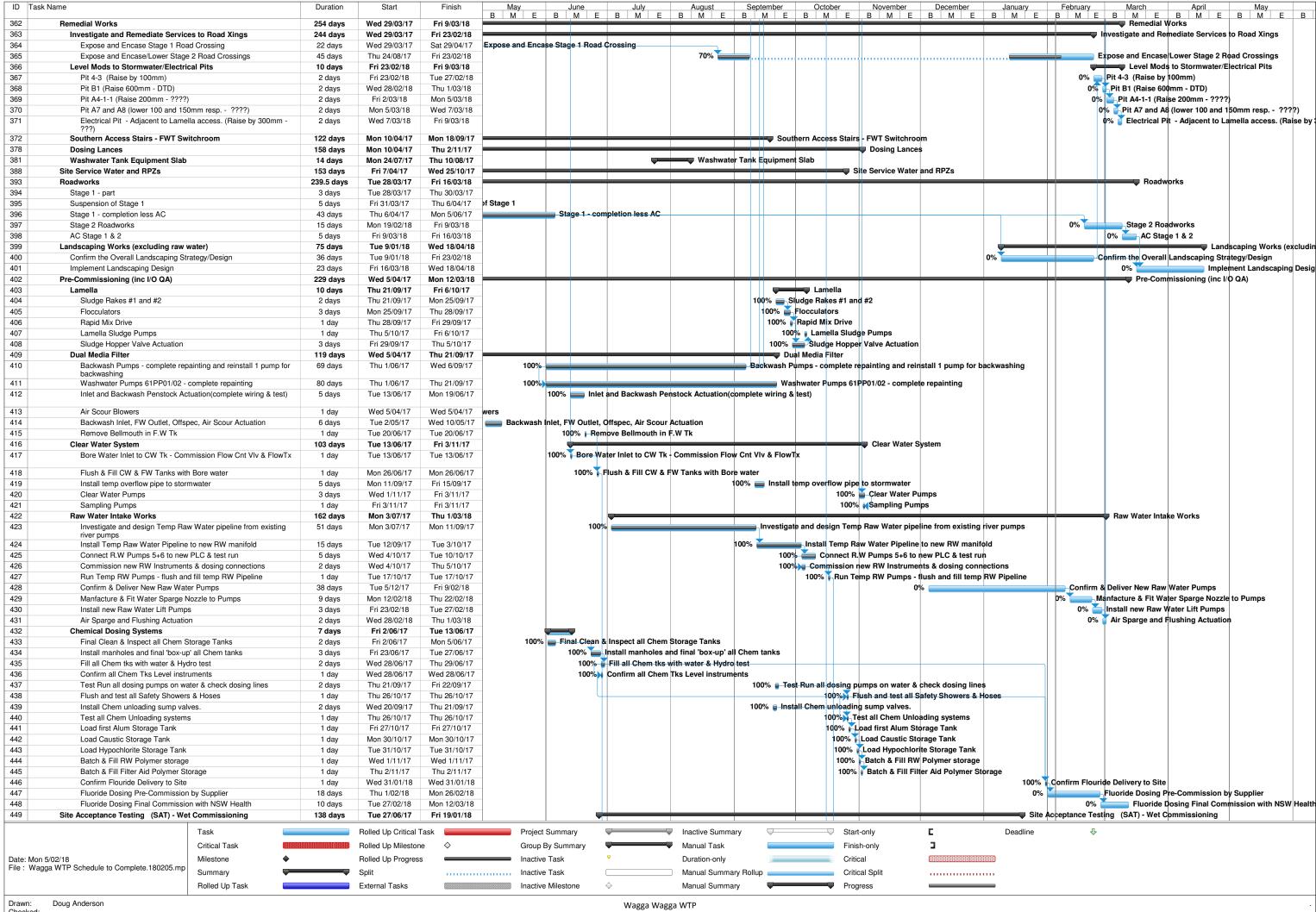


Checked: Authorised



Checked: Authorised





Checked:

ID	Task Name	Duration	Start	Finish	May June B M E B M E	July August B M E B M E	September Oct	ober	Nov	vember	Dece	ember	Janua	ary	February		March		April		May	_
450	Lamella	94 days	Tue 27/06/17	Mon 6/11/17	B M E B M E	B M E B M E	B M E B I	VI E		amella	В	VI E	BIM		BIMI		3 IVI		S IVI	E E	IVI	
451	Fill Lamella/Rapid Mix/Flocculators with Potable	2 days	Wed 18/10/17	Thu 19/10/17			100%	KFIII L	amella/R	Rapid Mix	/Flocculat	tors with	Potable									
452	Commission all Lamella Instruments	2 days	Fri 20/10/17	Mon 23/10/17			1009	% 👗 Co	mmissio	on all Lan	nella Instru	uments										
453	Test run Rapid Tk Mixer & all Flocc Tks Mixers	1 day	Fri 20/10/17	Fri 20/10/17			1009	% Test	run Rap	oid Tk Mix	cer & all Fl	locc Tks I	Mixers									
454	SAT/Sequence Testing of RW to Lamellas (o/f to WW Tk)	1 day	Fri 3/11/17	Fri 3/11/17	1			1009	% SAT/	/Sequenc	e Testing	of RW to	Lamellas (	o/f to W	V Tk)							
455	SAT/ Sequence Testing of Lamellas with Chemical dosing & set dose rates	2 days	Fri 3/11/17	Mon 6/11/17				1009		•		ng of Lam	ellas with (	Chemica	dosing & s	et dose	rates					
456	Dual Media Filter	90 days	Tue 27/06/17	Tue 31/10/17					🔷 Dual I	Media Fil	lter											
457	Sequence Testing - backwash	1 day	Tue 27/06/17	Tue 27/06/17	1	Sequence Testing - backwash																
458	SAT/Sequence Testing - backwash Garnite all filters	2 days	Wed 28/06/17	Thu 29/06/17	100%	SAT/Sequence Testing - backwash	l	L														
459	SAT/ Sequence Testing Filters Start/ Stop, etc	3 days	Mon 16/10/17	Wed 18/10/17			100%	SAT/	Sequenc	ce Testino	g Filters St	tart/ Stop	, etc									
460	Re-install FW Tk Bellmouth	1 day	Mon 30/10/17	Mon 30/10/17				100%	Re-inst	tall FW TI	k Bellmout	th										
461	Process Water Pump System	1 day	Tue 31/10/17	Tue 31/10/17				į.	Proce	ess Water	r Pump Sy	/stem										
464	Clear Water System	2 days	Tue 31/10/17	Wed 1/11/17				Į.	Clear	r Water S	system											
465	SAT/Sequence Testing of Level Controls	2 days	Tue 31/10/17	Wed 1/11/17				100%	SAT/S	Sequence	Testing o	of Level C	ontrols									
466	Raw Water System	1 day	Wed 18/10/17	Wed 18/10/17				Raw	Water S	ystem												
467	SAT/Sequence Testing of Temp RW System	1 day	Wed 18/10/17	Wed 18/10/17			100%	SAT/S	Sequence	e Testing	of Temp F	RW Syste	em									
468	Integrated Plant Operation Temp RW Supply	57 days	Thu 19/10/17	Fri 19/01/18					1				_	Integr	ated Plant C	Operatio	on Temp R	≀W Supp	ly			
469	SAT/Sequence Testing with temp RW Supply	7 days	Thu 19/10/17	Fri 27/10/17			100%	ه 🚤	SAT/Seq	uence Te	sting with	temp RV	V Supply									
470	Test Run & Operate Plant - fine tune & adjust (o/f to stormwater)	14 days	Mon 30/10/17	Thu 16/11/17				100%							t (o/f to stor		r)					
471	Drain CW Storage & final inspect (blank temp overflow)	2 days	Thu 16/11/17	Fri 17/11/17					100%	6 🙀 Drain	CW Stora	age & fina	al inspect (b	olank ten	p overflow)	)						
472	Chlorine disinfection of Filters, FW Tk, CW Tk & pipelines.	2 days	Mon 20/11/17	Tue 21/11/17					100	0% 🙀 Ch	lorine disi	infection	of Filters, F	W Tk, C	N Tk & pipe	lines.						
473	Operate Plant and commence post Chlorine and Flouride dosing, fine tune & Adjust - Fil CW Tk, sample & test water quality	2 days	Wed 22/11/17	Thu 23/11/17					10	00% 🙀 O	perate Pla	ant and co	mmence p	ost Chlo	rine and Flo	ouride d	losing, fin	e tune &	Adjust -	Fil CW TI	, sample	& test w
474	Test Run CW Pumps - HL & LW Pumps	2 days	Fri 24/11/17	Mon 27/11/17					1	100% 🍒	Test Run	CW Pum	ps - HL & L	.W Pump	s							
475	Confirm HL & LL Storage Tanks Level Signals & Controls	1 day	Fri 24/11/17	Fri 24/11/17	1				1	100% 🏋	Confirm HL	L & LL St	orage Tank	s Level S	ignals & Co	ontrols						
476	SAT/ Sequence Testing with CW Pumps on demand	3 days	Mon 27/11/17	Wed 29/11/17	1					100%	SAT/ See	quence T	esting with	CW Pur	nps on dem	and						
477	Demonstration Test & Commence Operation on demand, fine tune & adjust	7 days	Thu 30/11/17	Fri 8/12/17						100%	Dei	monstrat	ion Test &	Commen	ce Operatio	on on de	emand, fin	e tune &	adjust			
478	Operate Plant in Auto - monitor & adjust	20 days	Mon 11/12/17	Fri 19/01/18	1						100%			Operat	e Plant in A	uto   m	onitor & a	djust				



Drawn: Checked: Authorised Doug Anderson

Wagga Wagga WTP

#### 4. THE ROCK RESERVOIR

**RECOMMENDATION:** Council continue with the current strategic planning for a new reservoir for The Rock to allow construction to commence in-line with additional demand requirements.

#### **Background**

In October 2016 Council received a report regarding the 30 year plan for future growth at The Rock. The report recommended upgrading part of The Rock reticulation system and further investigating options for a new reservoir site. The recommendation was based on the demand of approximately 700 new connections at The Rock. The reticulation upgrade was completed in 2017 and Council's proposed CAPEX budget has \$50,000 allocated for reservoir investigation in 2018/19, with \$200,000 for earthworks in 2020/21 and \$2,000,000 for construction in 2025/26. The report outlined the need for a new reservoir based on the existing pressure levels within the town and the potential for significant growth over the next 30 years. Council's service level for pressure is to provide between 12m and 120m head at the water meter when the service has no flow (Operational Plan 2017/2018).

#### **Discussion**

In order to measure pressure levels throughout the township, data loggers were installed at five locations from 16 January 2018 to 24 January 2018. The three locations on the north side of The Rock have consistent pressure (1-2m variance) throughout the measurement period. The southern side of The Rock is connected to the Southern Trunk Main (STM) through a Pressure Reducing Valve (PRV) and is affected by pumping operations with pressure fluctuating up to ~35m at times. All of the sites measured are greater than the minimum service level. Extreme fluctuations in pressure appear to be due to construction works drawing water from the main. The results are shown below:

Location	Pressure level (m) (% of readings in range)
Piper Street	29 – 31 (100%)
Urana Street laneway	29 – 31 (100%)
End of Day Street	27 – 28 (100%)
Milne Street	32 – 45 (98%)
Olympic Hwy PRV	37 – 49 (98%)

Table 1 - Data logger results and locations

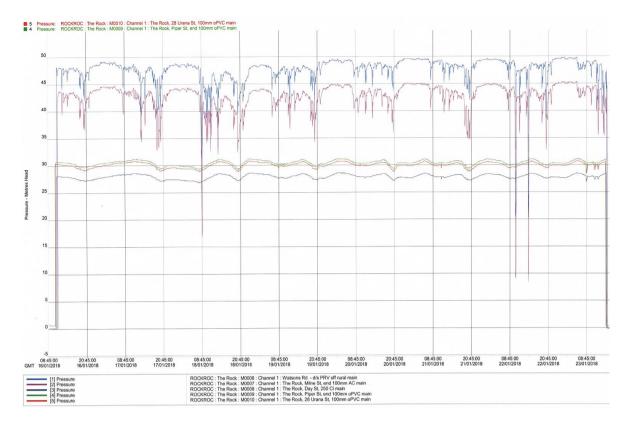


Figure 1 – Pressure log data



Figure 2 – Location of pressure loggers

The Top Water Level (TWL) of the existing reservoir is 241m with ground levels around 210m. This indicates that head losses are minimal and any capital works incorporating the existing reservoir are unlikely to see any improvement. Ultimately the only way to significantly increase pressure on the northern side of The Rock is to construct a new reservoir at a higher level. As stated earlier provision for this has been planned for in the ten year CAPEX budget and is an appropriate long-term solution.

#### Construct new reservoir once demand is required

Council's annual figures below show the number of new connections in The Rock.

Year	Number of new connections
2011/12	1
2012/13	-
2013/14	4
2014/15	1
2015/16	-
2016/17	2
2017/18	5

Table 2 - New connections at The Rock

The October 2016 report justified the need for a new reservoir based on an additional 700 new connections. This number of new connections cannot be serviced from the existing reservoir or the STM PRV. As with other council infrastructure, the development servicing charges associated with 700 new connections would be used to fund the construction of the new reservoir (700 connections @\$5053 = \$3.5M). In 2017/2018 five new properties were connected. At 5 connections per year, demand will require a new reservoir in 7 years, (approximately 2025). At 4 connections per year, demand will require a new reservoir in 8-9 years (approximately 2026 – 2027).

At the historic growth rate (over the last 5 years) of 2.5 connections per year, demand will require a new reservoir in 14 years (approximately 6 to meet the future growth. An expected timeline to meet that date would include construction in 2025, with investigation, land acquisition and project planning occurring before this. Prudent strategic planning could involve the concept investigation and the land matters being carried out within the next 2-3 years, ready for construction when necessary.

#### Construct new reservoir regardless of demand

The current pressure level of The Rock is above Council's minimum service levels, and is consistent with (or greater than) other towns within Riverina Water's service area, such as Yerong Creek, Urana, Lockhart, Boree Creek and Walla Walla. For example the TWL of Lockhart Reservoir is 19m above ground level, providing Lockhart with approximately 10m less head than is currently available at The Rock. The current reservoir can meet the existing capacity demand of the northern side of The Rock. A new reservoir at The Rock is not required at present based on either the current demand or pressure.

#### Connect The Rock to the Southern Trunk Main

An alternative short term option has been considered, to connect The Rock town reticulation to the STM. The pressure difference between the STM and The Rock means further PRV's would need to be installed and The Rock reservoir would be disconnected. PRV's are mechanical devices which can fail and may can cause high pressures to pass through the system. Notwithstanding a potential failure, The Rock reticulation varies in age from 1942, 1978 and the 2000s. As noted in the 2016 report, there are issues with old mains being introduced to higher pressures, particularly when coupled with high fluctuations in pressure, such as off the STM. The upgrade of pressure at Uranquinty is an example where significant replacement work had to be undertaken to prevent repeated failures of reticulation mains. In order to address the potential failures, funding will need to be allocated for mains replacement, once the timing of the reservoir has been confirmed, to occur before the reservoir is completed.

In addition to the potential for increased failures, the current and new rural reservoir supply from the STM was not designed to cater for The Rock township. The Rock has its own dedicated reservoir for this purpose. Disconnecting The Rock reservoir would mean any outage for service, maintenance or failure, would result in The Rock residents having no water until the issue is resolved or the work is finished. Having a dedicated reservoir for a township means that if there is any failure in pump operations, treatment or mains, the town can still be supplied with water for approximately 24 hours at peak demand.

A PRV connection to the STM is a higher risk option with respect to outages, than a replacement reservoir.

To summarise the options for The Rock;

- Continue with the proposed strategy (new reservoir @\$2M) once additional demand is required (earliest forecast 2026);
- Bring forward the proposed strategy (new reservoir @\$2M) regardless of additional demand;
- Connect The Rock reticulation to the STM (cost to be determined) and construct a new reservoir when additional demand is required.

With all of the above options, capital works to renew existing reticulation mains will be required, along with associated funding. This can be incorporated into the annual mains replacement program.

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Bede Spannagle
DIRECTOR OF ENGINEERING

# **QUESTIONS & STATEMENTS**

# CLOSURE OF MEETING TO THE PUBLIC (Confidential Reports)