



18 October 2017

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

on

WEDNESDAY, 25 OCTOBER 2017 at 9.00 am

Followed by lunch and General Manager Recruitment

and your attendance is requested accordingly.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Graeme Haley', is written over a light blue circular stamp.

Graeme Haley
GENERAL MANAGER

* AGENDA *

TABLE OF CONTENTS

APOLOGIES

DECLARATION OF PECUNIARY & NON-PECUNIARY INTEREST

CONFIRMATION OF MINUTES OF MEETING HELD 16TH AUGUST 2017

CORRESPONDENCE

GENERAL MANAGER'S REPORT TO THE COUNCIL	2
1. ELECTION OF CHAIRPERSON	2
2. ELECTION OF DEPUTY CHAIRPERSON	3
3. DELEGATION OF AUTHORITY TO CHAIRPERSON AND GENERAL MANAGER	3
4. FINANCIAL STATEMENTS 2016/2017	4
5. DISCLOSURE OF INTEREST RETURNS.....	4
6. MINUTES OF AUDIT AND RISK COMMITTEE MEETING HELD 25 SEPTEMBER 2017	5
7. EXTERNAL INVESTMENT REPORTS.....	6
8. QUARTERLY BUDGET REVIEW – PERIOD ENDED THE 30 SEPTEMBER 2017	7
9. OPERATIONAL PLAN – PERFORMANCE TARGETS.....	8
10. REQUEST FOR A REFUND OF WATER CONNECTION CHARGES – AUSTRALIAN CLAY TARGET ASSOCIATION.....	9
11. RESTRICTION STATISTICS	10
12. DRAFT HEALTH AND SAFETY COMMITTEE CONSTITUTION.....	11
13. POLICY 2.1 – BACKFLOW PREVENTION	12
14. COUNCIL RESOLUTION SHEET.....	13
DIRECTOR OF ENGINEERING'S REPORTS TO COUNCIL.....	16
1. WORKS REPORT COVERING AUGUST 2017	16
2. WORKS REPORT COVERING SEPTEMBER 2017	17
3. W.221 – TENDER FOR SUPPLY AND DELIVERY OF WATER SUPPLY PRESSURE PIPES	18
4. CONTRACT W.195 – WATER TREATMENT PLANT (WTP) PROGRESS REPORT	18
5. FEASIBILITY OF INCORPORATING THE GHSC WATER FUNCTION INTO RWCC OPERATIONS	19
QUESTIONS & STATEMENTS	24
CLOSURE OF MEETING TO THE PUBLIC (CONFIDENTIAL REPORTS).....	24
1. W.221 – TENDER FOR SUPPLY AND DELIVERY OF WATER SUPPLY PRESSURE PIPES	25

GENERAL MANAGER'S REPORT TO THE COUNCIL

18 October 2017

The Chairperson and Councillors:

1. ELECTION OF CHAIRPERSON

RECOMMENDATION

Returning Officer

- a) The General Manager is the Returning Officer.

Nomination

- b)
 - i) A Councillor may be nominated without notice for election as Chairperson.
 - ii) The nomination is to be made in writing by 2 or more Councillors (one of whom may be the nominee). The nomination is not valid unless the nominee has indicated consent to the nomination in writing.
 - iii) The nomination is to be delivered or sent to the Returning Officer.
 - iv) The Returning Officer is to announce the names of the nominees at the Council Meeting at which the election is to be held.

Election

- c)
 - i) If only one Councillor is nominated, the Councillor is elected.
 - ii) If more than one Councillor is nominated, the Council is to resolve whether the election is to proceed by preferential ballot, by ordinary ballot or by open voting.
 - iii) The election is to be held at the council meeting at which the council resolves on the method of voting.
 - iv) In this clause:
 - “ballot” has its normal meaning of secret ballot.
 - “open voting” means voting by a show of hands or similar means.

Count – 2 Candidates

- d)
 - i) At such a ballot, if there are only 2 candidates, the candidate with the higher number of votes is to be declared elected.
 - ii) If there are only 2 candidates and they are tied, the one to be declared elected is to be chosen by lot.

Count – 3 or more Candidates

- e)
 - i) At such a ballot, if there are 3 or more candidates, the one with the lowest

- number of votes is to be excluded.
- ii) If 3 or more candidates then remain, a further vote is to be taken of those candidates and the one with the lowest number of votes from that further vote is to be excluded.
- iii) If, after that, 3 or more candidates still remain, the procedure set out in subclause (ii) is to be repeated until only 2 candidates remain.
- iv) Clauses d) and f) of this Schedule, then apply to the determination of the election as if the 2 remaining candidates had been the only candidates.
- v) If at any stage during a count under this clause, 2 or more candidates are tied on the lowest number of votes, the one to be excluded is to be chosen by lot.

Choosing by Lot

- f) To choose by lot, the names of the candidates who have equal numbers of votes are written on similar slips of paper by the Returning Officer. The slips are then folded by the Returning Officer so as to prevent the names being seen. The slips are mixed and one is drawn at random by the Returning Officer and the candidate whose name is on the drawn slip is chosen.

Result

- g) The result of the election (including the name of the Candidate elected as Chairperson) is:-
 - (i) to be announced to the Councillors by the Returning Officer; and
 - (ii) to be sent to the Chief Executive, Office of Local Government and to the Chief Executive, Local Government NSW.
- (h) The term of office of the Chairperson remains at one year(Section 391(2)(LGA).

2. ELECTION OF DEPUTY CHAIRPERSON

The same procedure as for election of the Chairperson is to be followed.

3. DELEGATION OF AUTHORITY TO CHAIRPERSON AND GENERAL MANAGER

RECOMMENDED 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 Chairperson and General Manager.

With the election of a new Council it is appropriate for the Council to be reviewed. The delegations for the Chairperson and General Manager have been summarised in the attached Draft Register, and are submitted for Council's consideration.

Delegations of Authority

Riverina Water County Council

Adoption date

Resolution

Introduction

In accordance with Section 377 Local Government Act 1993 the Riverina County Council at a Meeting held on 25 October 2017 ratified and granted the delegations as set out in this Delegations of Authority Register to the Chairperson and General Manager.

THE CHAIRPERSON

1. General

That the Chairperson (being Cr.....) , or Deputy Chairperson (being Cr.....) when acting for the Chairperson , be delegated authority under section 377 of the Act to exercise and/perform on behalf of the Council the powers , authorities ,duties and functions as prescribed for the position of Chairperson under the Act , Schedules, Regulations , cognate Legislation , related Legislation , Councils own adopted Policies , Codes and Resolutions , provided that such delegations are not to be sub-delegated without specific approval by Council or as prescribed under the Act.

If, under any other Act, a function is conferred or imposed on the Chairperson of a County Council, the function is taken to be conferred or imposed on the Council and the Chairperson of the County Council will exercise and/or perform on behalf of the Council the powers, authorities, duties and functions as prescribed under that other Act.

2. Specific Delegations-Chairman

(a) Conferring Powers or Duties

To give effect to the provisions of the Act, including but not limited to Sections 225-231 of the Act and any other Act conferring powers or duties upon the Chairperson and to any resolution of direction given to the Chairperson by Council.

(b) Preside at Meetings of Council

To preside at all meetings of the Council , Committees , Community Committees and Public Meetings convened by the Council at which the Chairperson is present unless the Chairperson otherwise appoints another Councillor or person to perform this function.

(c) Negotiations on behalf of Council

The Chairperson in conjunction with the General Manager, to participate in negotiations on behalf of the Council with third parties in relation with any significant matter associated with the operations of Riverina Water County Council.

(d) Code of Conduct

To give direction to the Council, following consultation with the General Manager, in the application of the Code of Conduct as adopted by Council.

(e) Represent Council-Government and Other Forums

To represent the Council, in conjunction with the General Manager in deputations to government enquiries and other forums where it is appropriate that the Chairperson should present the Councils position.

(f) Sign and Execute Documents

To sign and execute documents under the Seal of Council in conjunction with the General Manager.

(g) Media Releases

To make Media Statements and issue Press Releases in respect of Councils Resolutions/Recommendations and decisions.

(h) Approval of Urgent Works

To authorise expenditure outside the Council approved budget and in consultation with the General Manager ,to undertake urgent works in order to reduce or eliminate a significant safety hazard or critical matter affecting the operation of the water supply system up to an amount of \$100,000 subject to the action being reported to the next meeting of Council.

End of Delegation

DELEGATIONS – THE GENERAL MANAGER

1. That the General Manager of Riverina Water County Council (being Graeme Haley) be delegated authority under section 377 of the Local Government Act 1993 (“Act”) to exercise and /or perform on behalf of Council the powers , authorities , duties and functions of Council as prescribed under the Act , Schedules Regulations , Cognate Legislation , and related legislation and including those powers , authorities , duties and functions as listed in the addendum to this delegation excepting those powers, authorities , duties and functions of the Council that are expressly prohibited from delegation as listed under Section 377 of the Act.
2. If, under any other Act a function is conferred or imposed on the General Manager of Council, the function is taken to be conferred or imposed on the Council and the General manager of the Council will exercise and /or perform on behalf of the Council, powers, authorities duties and functions as prescribed under the other Act pursuant to Section 381 of the Act.
3. For the purposes of Section 381 of the Act , the General Manager’s delegated authority to act on behalf of Council includes all functions and powers conferred or imposed by any legislation set out from time to time in Section 22 of the Act ,including but not limited to the following:

Conveyancing Act 1919	placing covenants on council land
Fluoridation of Public Water Supplies Act 1957	fluoridation of water supply by council
Public Health Act 1991	inspection of systems for purposes of microbial control
Roads Act 1993	roads

The exercise by a council of its functions under this Act may also be modified by the provisions of another Act. Some of those Acts and some of the modifications they affect include:

Government Information (Public Access) Act 2009	council required to publish certain information and to grant access to certain documents
Privacy and Personal Information Protection Act 1998	council required to amend certain records that are shown to be incomplete, incorrect, out of date or misleading
Unclaimed Money Act 1995	unclaimed money to be paid to the Chief Commissioner of Unclaimed Money

4. That in the absence of the General Manager that his nominee as Acting General Manager assume all power and delegations of the General Manager for the period only of his absence.
5. In addition to the delegated authority conferred or imposed upon the General Manager by legislation , the General Manager is empowered to carry out his functions in reliance upon Section 335 of the Act and in accordance , with the following delegated authorities , subject to any express limitations contained within this Register or restrictions imposed by Section 377 of the Act:

General Manager-Delegated Authorities

In accordance with section 5 of this delegation of authority the General Manager is also delegated the following functions and powers:

Part A Operational

1. To establish, review and authorise operational and management policies and procedures in line with strategic directions set by Council.
2. To implement any work , service or action provided for in the adopted budget without further reference to Council except for ;
 - (a) The acceptance of tenders which are required under the Local Government Act 1993 to be invited by the Council , and
 - (b) The determination of priorities where lump sum funding only has been provided.
3. To authorise destruction or disposal of any records of Riverina Water County Council, after the expiration of six (6) years from the last transaction thereon, other than those defined in the Regulation and Local Government Records Disposal schedule.
4. To negotiate arrangements for agencies and financial institution to collect payments relating to the operation of Riverina Water County Council.
5. To write proposals or submissions to other levels of government on behalf of Riverina Water County Council.
6. To deal with and determine applications for access to information under the Government Information (Public Access) Act and Regulation 2009.
7. To execute any form of instrument necessary for the creation of easements that will benefit Riverina Water County Council for access services , pipelines , structures and/or any other form of assistance essential in the performance of its objectives.
8. To sign all correspondence relating to Riverina Water County Council.
9. To approve the loan of Riverina Water County Council equipment to community groups in accordance with Council's Policy.
10. To impose water restrictions on fixed hoses and sprinklers and lift such restrictions when appropriate.

11. To restrict or cut off supply of water to a property due to non payment of water charges as provided under Clause 144 of the Local Government (General) Regulation 2005.
12. To sign certificates issued in accordance with the provisions of Sections 603 (Certificate as to Rates and Charges) & 735A (Certificate as to Notices) of the Local Government Act 1993.

Part B Finance

1. Obtain quotations and to authorise the purchase of and issue official orders for goods, works and services requiring the functioning of Council and to incur expenditure for such goods, works and services up to \$150,000 provided that provision has been made in the approved Budget for incurring of such expenditure. The delegation is limited in accordance with Section 377(1)(i) of the Act.
2. To certify that the prices and computations on vouchers have been checked and are correct in as far as he has been able to ascertain , are fair and reasonable and are in accordance with any quotation /contract under which the goods /services were supplied.
3. Authorise the payment of Councils Salaries and Wages
4. Approve final payment to contractors and/or direct creditors
5. To sign or countersign cheques drawn on Council's Bank accounts
6. Approve changes in Plant Hire Rate Charges for all council plant.
7. To authorise expenditure outside the approved Council budget to enable urgent works to be undertaken to reduce or eliminate a significant safety hazard or critical matter affecting the operation of the water supply system up to an amount of \$50,000 subject to the action being reported to the next meeting of Council.
8. The authority to require the lodgement of a cash bond or bank guarantee for work outstanding.
9. To negotiate Council overdraft limit.
10. To sell old materials, spoilt or obsolete equipment.
11. To authorise the writing off of uncollectible debts up to a maximum amount for a single debtor of \$2,000.
12. To arrange the investment of money that is not, for the time being, required by Council for any other purpose. Funds may only be invested in the following :
 - (a) In any security authorised by the Trustee Act ;
 - (b) In the form of investment notified by order of the Minister published in the Gazette.
 - (c) Investments shall also be managed in accordance with Councils Policy (Number 1.16)

Part C Legal

1. To approve and settle statements of claim and insurance matters up to the level of Riverina Water's excess amounts payable under the respective insurance policies.
2. To determine a response to approvals sought under Part 1, Division 3-making and determination of applications for approval-generally, under the Local Government Act 1993.
3. To issue Orders under Chapter 7, Part 2 (Orders) of the Local Government Act 1993.
4. To affix the Common Seal of the Council and execute any documents requiring the signature of the General Manager in the company of the Chairperson ,Deputy Chairperson , or other Councillor where Council has approved the documents intent
5. To authorise the institution of legal proceedings for the recovery of outstanding charges and other debts due to Riverina Water County Council and to take all necessary action to recover such charges and debts.
6. Under Section 687 (Appearance in Local Court) of the Local Government Act 1993, as amended, be authorised to represent Riverina Water County Council in all proceedings in any Local Court or before any justice in all respects as though he were the party concerned and to institute and carry on proceedings which Riverina Water is authorised to institute and carry out under the said Act and shall extend to any proceedings under all other Acts.
7. To accept service of legal documents on behalf of Riverina Water County Council.
8. Contracts;
 - (a) To terminate a contract where the conditions of the contract have been breached and provide for such action.
 - (b) To approve extensions of time to contractor schedules except contracts subject to a tendering arrangement.
 - (c) To issue Site instructions to the contractor and/or their staff.
 - (d) To call for an audit of a contract using either internal or external audit staff.
 - (e) To issue a Practical Completion Certificate for works or part thereof under a contract.
 - (f) To sign contracts that have been approved by Council.
9. To approve Power of Entry under the provisions of Sections 191-201 of the Local Government Act 1993 for the purpose of inspections, works, and other functions permitted under these sections. The power of entry is also granted for the purposes of inspecting premises under the Public Health Act 1991.
10. To approve closure of roads or parts thereof, temporarily for repairs or construction and to approve applications to install pipelines within road reserves.
11. To authorise action in regard to any complaints or requests received under Councils Internal Reporting Policy.

Part D Environmental / Planning Matters

1. To authorise all functions pursuant to Riverina Water County Council powers under the Environmental Planning & Assessment Act 1979 as amended in relation to development proposals including subdivisions.
2. In relation to subdivision proposals;
 - (a) To approve designs, plans and specifications for water supply works in subdivisions, subject to those designs, specifications and plans being in accordance with Council subdivision policies.
 - (b) To certify that bonded works have been completed to Riverina Water County Council's satisfaction and then release the relevant bond.
 - (c) To authorise the release of Certificates of Compliance for a subdivision when all conditions of relevant approvals relating to water supply have been met.
 - (d) To authorise signing of linen plans of subdivisions when all water supply conditions have been met.

Part E Staff

1. To authorise the appointment of new staff within the adopted organisation's staff structure.
2. To negotiate with staff and Unions in relation to all staffing matters.
3. Reclassify staff and adjust salaries in accordance with Riverina Water County Council Enterprise Award.
4. To determine all leave applications for all staff having regard to the proper functioning of the Council and maintenance of appropriate levels of service to customers.

End of Delegation

4. FINANCIAL STATEMENTS 2016/2017

RECOMMENDATION that the 2016/2017 Audited Financial Statements be received.

The Audit Office of NSW have completed their audit of the 2016/2017 Financial Statements. A representative will be attending the meeting to present the audit report.

- *Financial Statements 2016-17 – Separate document*

5. DISCLOSURE OF INTEREST RETURNS

RECOMMENDED that the information be received.

All returns in respect to Pecuniary Interest have been completed and returned to the General Manager and are now tabled.

6. MINUTES OF AUDIT AND RISK COMMITTEE MEETING HELD 25 SEPTEMBER 2017

RECOMMENDATION that the Minutes of the Audit & Risk Committee Meeting be noted.

The Audit and Risk Committee met on 25 September 2017. The purpose of the meeting was to consider Council's Annual Financial Statement for the year ending 30 June 2017.

MINUTES of the MEETING of AUDIT & RISK COMMITTEE
held at 91 HAMMOND AVENUE, WAGGA WAGGA,
on MONDAY, 25th SEPTEMBER 2017 at 9.30 am

PRESENT:

David Maxwell (Chairperson)
Clr. Yvonne Braid
Mr. Bryce McNair

IN ATTENDANCE:

General Manager	Graeme Haley
Manager Corporate Services	Michele Curran
Crowe Horwath	Brad Bohun

The meeting of the Audit and Risk Committee commenced at 9.36 am.

DECLARATIONS OF PECUNIARY INTEREST

Declaration by David Maxwell. Has an insignificant pecuniary interest in that he supplies software, handbooks and training to Councils.

FINANCIAL STATEMENTS 2016/2017

Recommendation:

On the motion of Bryce McNair and David Maxwell that Council management report to the Audit and Risk Committee on the future use and financial treatment of the old Wagga Wagga Water Treatment Plant following the completion of the new Wagga Wagga Water Treatment Plant.

CARRIED

On the motion of David Maxwell and Bryce McNair that the Committee report to Council:

1. that it has reviewed the 2016/17 General Purpose and Special Purpose Financial Statements and Special Schedules and asked such questions as it considered appropriate of Council's finance staff and auditors in attendance, and is satisfied with the responses received
2. that it has received and noted the external Auditor's draft Report on the Conduct of the Audit and draft Client Service Report
3. that it notes that the Council has executed the certificates required by section 413(2)(c) of the Local Government Act 1993 (as amended), and reports that the Committee is not aware of any matter that would require rescission of those certificates
4. that the Manager Corporate Services and staff be congratulated on the promptness, accuracy and presentation of the financial reports.

CARRIED

Next General Meeting: Monday 20th November 2017 at 9.30 am

Meeting Closed 11.18 am

7. EXTERNAL INVESTMENT REPORTS

RECOMMENDATION that the report detailing Council's external investments for the months of August and September 2017 be received.

In accordance with the provisions of Clause 19(3) of the Local Government (Financial Management) Regulation 1993, I report details of the Council's external investments as at 31 August 2017 and 30 September 2017.

- *Investment Report - August 2017*
- *Investment Report - September 2017*

Monthly Investment Report as at 31/8/17

a) Council's Investments as at 31/8/17

Investment	Inception Date	Term (Days)	Maturity Date	S&P Rating	Interest Rate (%)	Performance Benchmark	Benchmark Rate (%)	Percentage of Portfolio	Principal Value	Market Value
Term Deposits										
ME Bank	23/06/2017	90	21/09/17	A-2	2.52	BBSW	1.60	4.621%	\$1,000,000.00	\$1,000,000.00
Bank Australia	23/06/2017	90	21/09/17	A-2	2.65	BBSW	1.60	6.931%	\$1,500,000.00	\$1,500,000.00
Bank Australia	23/06/2017	90	21/09/17	A-2	2.65	BBSW	1.60	6.931%	\$1,500,000.00	\$1,500,000.00
ME Bank	13/07/2017	89	10/10/17	A-2	2.52	BBSW	1.60	6.931%	\$1,500,000.00	\$1,500,000.00
Beyond Bank	6/06/2017	90	04/09/17	A-2	2.65	BBSW	1.60	6.931%	\$1,500,000.00	\$1,500,000.00
ME Bank	20/06/2017	90	18/09/17	A-2	2.52	BBSW	1.60	4.621%	\$1,000,000.00	\$1,000,000.00
National Australia Bank	12/07/2017	90	10/10/17	A-1+	2.40	BBSW	1.60	4.621%	\$1,000,000.00	\$1,000,000.00
National Australia Bank	22/06/2017	90	20/09/17	A-1+	2.45	BBSW	1.60	9.242%	\$2,000,000.00	\$2,000,000.00
National Australia Bank	6/07/2017	91	05/10/17	A-1+	2.40	BBSW	1.60	9.242%	\$2,000,000.00	\$2,000,000.00
								60.07%	\$13,000,000.00	\$13,000,000.00
Cash Deposit Account										
T Corp				A-1+	2.26	Cash Rate	1.50	20.45%	\$4,426,610.14	\$4,426,610.14
AMP				A-1	2.05	Cash Rate	1.50	19.474%	\$4,214,319.72	\$4,214,319.72
								39.93%	\$8,640,929.86	\$8,640,929.86
TOTAL INVESTMENTS								100.00%	\$21,640,929.86	\$21,640,929.86
Cash at Bank										\$575,626.99
TOTAL FUNDS										\$22,216,556.85

b) Application of Investment Funds

Restricted Funds	Description	Value
Externally Restricted	LIRS Loan Funds	\$0.00
		<hr/>
		\$0.00
Internally Restricted		
	Employee Leave Entitlements (30% of ELE)	\$1,158,264.28
	Asset Replacement	\$1,934,535.96
	Loan Funds	\$0.00
	Sales Fluctuation	\$5,000,000.00
		<hr/>
		\$8,092,800.24
		<hr/>
Unrestricted Funds		\$14,123,756.61
TOTAL FUNDS		\$22,216,556.85

* 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. L. Curran

M Curran

MANAGER CORPORATE SERVICES

Monthly Investment Report as at 30/9/17

a) Council's Investments as at 30/9/17

Investment	Inception Date	Term (Days)	Maturity Date	S&P Rating	Interest Rate (%)	Performance Benchmark	Benchmark Rate (%)	Percentage of Portfolio	Principal Value	Market Value
Term Deposits										
ME Bank	21/09/2017	90	20/12/17	A-2	2.40	BBSW	1.60	4.619%	\$1,000,000.00	\$1,000,000.00
ME Bank	13/07/2017	89	10/10/17	A-2	2.52	BBSW	1.60	6.929%	\$1,500,000.00	\$1,500,000.00
ME Bank	5/09/2017	91	05/12/17	A-2	2.40	BBSW	1.60	6.929%	\$1,500,000.00	\$1,500,000.00
ME Bank	18/09/2017	87	14/12/17	A-2	2.40	BBSW	1.60	4.619%	\$1,000,000.00	\$1,000,000.00
ME Bank	22/09/2017	89	20/12/17	A-2	2.40	BBSW	1.60	6.929%	\$1,500,000.00	\$1,500,000.00
National Australia Bank	12/07/2017	90	10/10/17	A-1+	2.40	BBSW	1.60	4.619%	\$1,000,000.00	\$1,000,000.00
National Australia Bank	20/09/2017	90	19/12/17	A-1+	2.51	BBSW	1.60	9.239%	\$2,000,000.00	\$2,000,000.00
National Australia Bank	22/09/2017	89	20/12/17	A-1+	2.49	BBSW	1.60	6.929%	\$1,500,000.00	\$1,500,000.00
National Australia Bank	6/07/2017	91	05/10/17	A-1+	2.40	BBSW	1.60	9.239%	\$2,000,000.00	\$2,000,000.00
								60.05%	\$13,000,000.00	\$13,000,000.00
Cash Deposit Account										
T Corp				A-1+	2.24	Cash Rate	1.50	20.48%	\$4,433,435.47	\$4,433,435.47
AMP				A-1	2.05	Cash Rate	1.50	19.468%	\$4,214,319.72	\$4,214,319.72
								39.95%	\$8,647,755.19	\$8,647,755.19
TOTAL INVESTMENTS								100.00%	\$21,647,755.19	\$21,647,755.19
Cash at Bank										\$655,223.37
TOTAL FUNDS										\$22,302,978.56

b) Application of Investment Funds

Restricted Funds	Description	Value
Externally Restricted	LIRS Loan Funds	\$0.00
		<hr/>
		\$0.00
Internally Restricted	Employee Leave Entitlements (30% of ELE)	\$1,158,264.28
	Asset Replacement	\$1,934,535.96
	Loan Funds	\$0.00
	Sales Fluctuation	\$5,000,000.00
		<hr/>
		\$8,092,800.24
Unrestricted Funds		\$14,210,178.32
TOTAL FUNDS		\$22,302,978.56

* 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. L. Curran

M Curran

MANAGER CORPORATE SERVICES

8. QUARTERLY BUDGET REVIEW – PERIOD ENDED THE 30 SEPTEMBER 2017

RECOMMENDATION that the Quarterly Budget Review for the period ended 30 September 2017 be received and adopted.

The Quarterly Review of Council's Budget for the period ended 30 September 2017 is submitted for examination by the Council.

The anticipated Operating Result for 2017/2018 is a surplus of \$5,635,000. The Operating Result was originally budgeted for a surplus of \$4,412,000. The Capital Works expenditure budget is in addition to this amount and is covered in the following paragraph. Proposed September quarterly review operational adjustments relate to:

- \$150,000 increase in interest income due to higher than anticipated cash on hand at year end 2016/17
- \$30,000 additional revenue from a motor vehicle insurance claim – corresponding CAPEX purchase of a new vehicle
- \$43,000 reduction in loan interest due to a reduction in anticipated 2017/18 new borrowings after better than anticipated 2016/17 final results
- \$1,000,000 reduction in depreciation expense following finalisation of 2016/17 financial statements and associated asset revaluation calculations

Also included is a quarterly review of Capital Works Projects. The Proposed Capital Budget totals \$29,603,259. The original Capital Budget was \$23,523,500, with 2016/17 carry forward amounts of \$6,049,759. Proposed September quarterly review adjustments total \$30,000, including:

- \$30,000 motor vehicle replacement - corresponding insurance claim included in operating income
- \$30,000 reduction in control system upgrades – Bulgary WTP
- \$30,000 increase in switchboard upgrades – Bulgary Pump Station

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

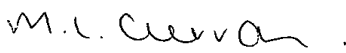
- *Quarterly Budget Review*

Table of Contents	page
1. Responsible Accounting Officer's Statement	1
2. Income & Expenses Budget Review Statement's	2
3. Capital Budget Review Statement	4
4. Cash & Investments Budget Review Statement	6
5. Key Performance Indicator (KPI) Budget Review Statement a. Council specific KPI's	8
6. Contracts & Other Expenses Budget Review Statement	10
7. Additional Statements	
- Operational Summary	12
- Balance Sheet	14
- Capital Expenditure Review	15

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 30/09/17 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: 

date: 16/10/2017

Ms Michele Curran
Responsible Accounting Officer

Income & Expenses Budget Review Statement

Budget review for the quarter ended 30 September 2017

						Current Year	Prior Year
(\$000's)	Original Budget 2017/18	Revised Budget 2017/18	Variations for this Sep Qtr	Notes	Projected Year End Result	Actual YTD figures	Actual YTD figures
Income							
Rates and Annual Charges	5,016	5,016			5,016	1,312	1,314
User Charges and Fees	20,901	20,901			20,901	3,455	3,452
Interest and Investment Revenues	200	200	150	2a	350	86	76
Other Revenues	125	125	30	2b	155	48	63
Grants & Contributions - Operating	207	207			207	12	2
Grants & Contributions - Capital	2,662	2,662			2,662	862	467
Total Income from Continuing Operations	29,111	29,111	180		29,291	5,775	5,374
Expenses							
Employee Costs	8,330	8,330			8,330	1,537	1,893
Borrowing Costs	745	745	(43)	2c	702	111	124
Materials & Contracts	3,489	3,489			3,489	563	476
Depreciation	7,120	7,120	(1,000)	2d	6,120	1,509	1,775
Other Expenses	5,015	5,015			5,015	802	781
Total Expenses from Continuing Operations	24,699	24,699	(1,043)		23,656	4,522	5,049
Net Operating Result from Continuing Operation	4,412	4,412	1,223		5,635	1,253	325
Net Operating Result before Capital Items	1,750	1,750	1,223		2,973	391	(142)

Income & Expenses Budget Review Statement
Recommended changes to revised budget

Budget Variations being recommended include the following material items:

Notes Details

2a	Additional interest income due to higher than anticipated cash on hand at year end 2016/17
----	--

2b	Insurance claim for vehicle accident - corresponding CAPEX entry for purchase of new vehicle
----	--

2c	Reduction in interest expense due to lower required borrowings
----	--

2d	Depreciation reduction following finalisation of 2016/17 financial statements and result of asset revaluation
----	---

Capital Budget Review Statement

Budget review for the quarter ended 30 September 2017

(\$000's)	Original Budget 2017/18	Approved Changes Carry Forwards	Revised Budget 2017/18	Variations for this Sep Qtr	Notes	Projected Year End Result	Current Year	Prior Year
							Actual YTD figures	Actual YTD figures
Capital Expenditure								
Plant & Equipment	759		759	30	3a	789	182	203
Office Equipment & IT	791	161	952	(30)	3b	922	62	92
Land & Buildings	1,675	240	1,915			1,915	45	49
Water Infrastructure	20,298	5,649	25,947	30	3c	25,977	1,201	4,032
Other Assets			-			-		
Loan Repayments (Principal)	1,626		1,626			1,626	387	367
Total Capital Expenditure	25,149	6,050	31,199	30		31,229	1,877	4,743
Capital Funding								
Rates & Other Untied Funding	19,149	6,050	25,199	4,030		29,229	1,877	4,743
New Loans	6,000		6,000	(4,000)	3d	2,000		-
Total Capital Funding	25,149	6,050	31,199	30		31,229	1,877	4,743
Net Capital Funding - Surplus/(Deficit)	-	-	-	-		-	-	-

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	Motor vehicle to be purchased with insurance payout - corresponding income item
----	---

3b	Transfer Bulgary WTP control system project to Bulgary Pump Station switchboard project
----	---

3c	Increase Bulgary Pump Station switchboard project as per 3b
----	---

3d	Reduction in required borrowings following finalisation of year end 2016/17 financial results
----	---

Cash & Investments Budget Review Statement

Budget review for the quarter ended 30 September 2017

(\$000's)	Original Budget 2017/18	Revised Budget 2017/18	Variations for this Sep 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	1,950
Sales Fluctuation	3,000	3,000			3,000	5,000
Total Internally Restricted	6,122	6,122	-		6,122	8,108
(2) Funds that Council has earmarked for a specific purpose						
Unrestricted (ie. available after the above Restrictions)	62	62	- 1,654	4a	(1,592)	14,195
Total Cash & Investments	6,184	6,184	(1,654)		4,530	22,303

Cash & Investments Budget Review Statement

Comment on Cash & Investments Position

Cash & Investment balance at the start of the financial year was slightly higher than anticipated after 2016/17 end of year final results, which has reduced the required borrowings to \$2M.

Investments

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

Cash

This Cash at Bank amount has been reconciled to Council's physical Bank Statements.
The date of completion of this bank reconciliation is 02/10/17

Reconciliation Status

The YTD Cash & Investment figure reconciles to the actual balances held as follows:		\$ 000's
Cash at Bank (as per bank statements)		948
Investments on Hand		21,648
less: Unpresented Cheques	(Timing Difference)	(307)
add: Undeposited Funds	(Timing Difference)	14
Reconciled Cash at Bank & Investments		22,303
Balance as per Review Statement:		22,303
Difference:		-

Recommended changes to revised budget

Budget Variations being recommended include the following material items:

Notes	Details
4a	Reduction in year end anticipated cash balance due to reduced anticipated borrowings and higher than anticipated actual 2016/17 year end cash on hand balance.

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

Budget review for the quarter ended 30 September 2017

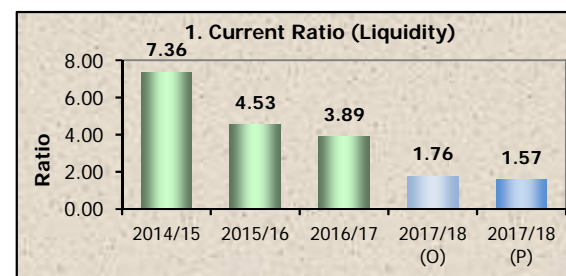
(\$000's)	Current Projection		Original Budget 17/18	Actuals	
	Amounts	Indicator		Prior Periods	
	17/18	17/18		16/17	15/16

The Council monitors the following Key Performance Indicators:

1. Current Ratio (Liquidity)

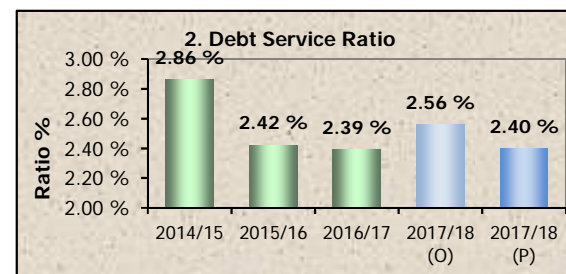
Current Assets	10143	1.57	1.76	3.89	4.53
Current Liabilities	6480				

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


2. Debt Service Ratio

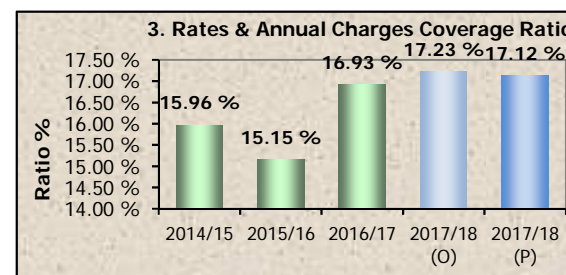
Debt Service Cost	703	2.40 %	2.56 %	2.39 %	2.42 %
Income from Continuing Operations	29291				

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	17.12 %	17.23 %	16.93 %	15.15 %
Income from Continuing Operations	29291				

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%)



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

Budget review for the quarter ended 30 September 2017

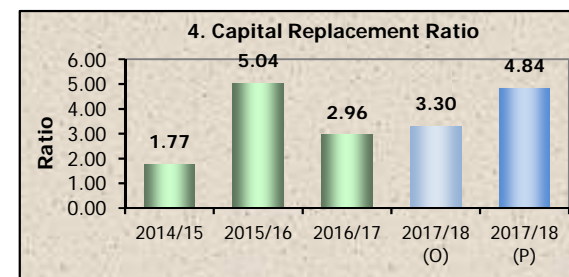
(\$000's)	Current Projection		Original Budget 17/18	Actuals	
	Amounts	Indicator		Prior Periods	
	17/18	17/18		16/17	15/16

The Council monitors the following Key Performance Indicators:

4. Capital Replacement Ratio

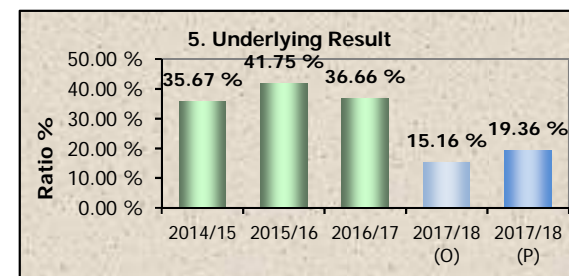
Infrastructure, Property, Plant & Equipment	29603	4.84	3.30	2.96	5.04
Depreciation	6120				

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	5635	19.36 %	15.16 %	36.66 %	41.75 %
Total Revenue	29111				

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%)



Contracts Budget Review Statement

Budget review for the quarter ended 30 September 2017

Part A - Contracts Listing - contracts entered into during the quarter

Contractor	Contract detail & purpose	Contract Value	Start Date	Duration of Contract	Budgeted (Y/N)	Notes
Ace Pty Ltd	5ML Reservoir, Roof & Access System Construction	1,356,825	21/08/2017	6 mths	Yes	
Stephen Shaw	Low Level Reservoir Replacement - Earthworks	390,000	4/07/2017	6 mths	Yes	
ICS Pty Ltd	Cleaning of Riverina Water Facilities	126,582	17/07/2017	24 mths	Yes	
Omega Chemicals	Supply & Delivery of Alum	120,000	30/08/2017	3 yrs	Yes	

Notes:

1. Minimum reporting level is 1% of estimated income from continuing operations of Council or \$50,000 - whichever is the lesser.
2. Contracts listed are those entered into during the quarter being reported and exclude contractors on Council's Preferred Supplier list.
3. Contracts for employment are not required to be included.
4. Monetary figures are GST exclusive

Consultancy & Legal Expenses Budget Review Statement

Consultancy & Legal Expenses Overview

Expense	YTD Expenditure (Actual Dollars)	Budgeted (Y/N)
Consultancies	-	Y
Legal Fees	9,293	Y

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

2017 - 2021 OPERATIONAL PLAN

OPERATING SUMMARY	YTD ACTUAL \$'000	CURRENT BUDGET \$'000	REMAINING \$'000	% AVAILABLE	2017/18 BUDGET \$'000	30/9/17 REVIEW ADJUSTMENT	REVISED BUDGET \$'000	REVIEW ADJUSTMENT COMMENT
OPERATING INCOME								
Access Charges								
Urban	1,045	4,053	3,008	74%	4,053		4,053	
Non-Urban	239	963	724	75%	963		963	
	1,284	5,016	3,732	74%	5,016	0	5,016	
User Charges								
Consumption Charges								
Urban	2,429	16,516	14,088	85%	16,516		16,516	
Non-Urban	548	3,542	2,994	85%	3,542		3,542	
	2,977	20,058	17,081	85%	20,058	0	20,058	
Extra Charges								
Urban	20	20	0	2%	20		20	
Non-Urban	4	20	16	0%	20		20	
	23	40	17	42%	40	0	40	
Other Income	180	888	708	80%	888	30	918	Insurance claim for vehicle accident
Interest	79	200	121	60%	200	150	350	Interest income due to higher than anticipated cash on hand
Operating Grants & Contributions	-193	207	400	193%	207		207	
Capital Grants & Contributions	862	2,662	1,800	68%	2,662	0	2,662	
Private Works Income	4	40	36	0%	40		40	
TOTAL OPERATING INCOME	5,281	29,111	23,830	82%	29,047	180	29,291	
OPERATING EXPENSES								
Management	1,522	8,603	7,080	82%	8,603	-43	8,560	Reduction in interest expense due to lower required borrowings
Operations & Maintenance								
Buildings & Grounds								
Urban	103	712	609	86%	712	0	712	
Non-Urban	25	49	24	49%	49	0	49	
	128	761	633	83%	761	0	761	

OPERATING SUMMARY	YTD ACTUAL \$'000	CURRENT BUDGET \$'000	REMAINING \$'000	% AVAILABLE	2017/18 BUDGET \$'000	30/9/17 REVIEW ADJUSTMENT	REVISED BUDGET \$'000	REVIEW ADJUSTMENT COMMENT
<i>Management - Operations</i>								
Urban	182	1,000	818	82%	1,000	0	1,000	
Non-Urban	64	350	286	82%	350	0	350	
	246	1,350	1,104	82%	1,350	0	1,350	
<i>Sources</i>								
Urban	128	1,366	1,238	91%	1,366	0	1,366	
Non-Urban	33	287	254	88%	287	0	287	
	161	1,653	1,492	90%	1,653	0	1,653	
<i>Pumping Stations</i>								
Urban	49	474	425	90%	474	0	474	
Non-Urban	43	386	343	89%	386	0	386	
	92	860	768	89%	860	0	860	
<i>Reservoirs</i>								
Urban	70	161	91	57%	161	0	161	
Non-Urban	37	65	28	43%	65	0	65	
	106	226	119	53%	226	0	226	
<i>Treatment Plant</i>								
Urban	252	2,118	1,867	88%	2,118	0	2,118	
Non-Urban	106	719	612	85%	719	0	719	
	358	2,837	2,479	87%	2,837	0	2,837	
<i>Mains & Services</i>								
Supervision	38	319	281	88%	319	0	319	
Urban	210	875	665	76%	875	0	875	
Non-Urban	105	501	396	79%	501	0	501	
	353	1,695	1,342	79%	1,695	0	1,695	
<i>Other Operations</i>	-32	-406	-373	92%	-406		-406	
Depreciation	1,509	7,120	5,611	79%	7,120	-1,000	6,120	Depreciation reduction following finalisation of 2016/17 accounts and result of asset revaluation
TOTAL OPERATING EXPENSES	4,444	24,699	20,255	82%	24,699	-1,043	23,656	
OPERATING RESULT	837	4,412			4,348	1,223	5,635	

Riverina Water County Council

BALANCE SHEET

	Actual 2016/17 \$'000	Projected 2017/18 \$'000
ASSETS		
Current Assets		
Cash & Cash Equivalents	21,246	4,530
Receivables	3,160	3,124
Inventories	2,383	2,489
Total Current Assets	26,789	10,143
Non-Current Assets		
Infrastructure, Property, Plant & Equipment	335,702	359,185
Intangible Assets	3,575	3,575
Total Non-Current Assets	339,277	362,760
TOTAL ASSETS	366,066	372,903
LIABILITIES		
Current Liabilities		
Payables	1,449	699
Borrowings	1,582	1,818
Provisions	3,861	3,963
Total Current Liabilities	6,892	6,480
Non-Current Liabilities		
Borrowings	10,680	10,827
Total Non-Current Liabilities	10,680	10,827
TOTAL LIABILITIES	17,572	17,307
Net Assets	348,494	355,597
EQUITY		
Retained Earnings	110,199	115,834
Revaluation Reserves	238,295	239,763
Council Equity Interest	348,494	355,597
Total Equity	348,494	355,597

30 SEPTEMBER 2017 CAPEX QUARTERLY BUDGET REVIEW

Description	Current Budget 2017/18	YTD Actual 2017/18	Budget Remaining	30/9/17 Review Adjustment	Revised Budget 2017/18	Comment
	\$	\$	\$	\$	\$	
MANAGEMENT						
LAND & BUILDINGS FOR ADMIN. DEPOTS AND WORKSHOPS						
Administration Office	37,600	697	36,903	0	37,600	
Depot Buildings	176,000	11,981	164,019	0	176,000	
Workshops	5,000	0	5,000	0	5,000	
Access, Parking and Landscaping	1,696,658	31,937	1,664,721	0	1,696,658	
SUB-TOTAL LAND & BUILDINGS FOR ADMIN, DEPOTS & WORKSHOPS	1,915,258	44,615	1,870,643	0	1,915,258	
PLANT & EQUIPMENT						
IT Equipment	182,500	44,293	138,207	0	182,500	
Office Furniture & Equipment	8,000	0	8,000	0	8,000	
Working Plant & Vehicle Purchases	739,000	182,331	556,669	30,000	769,000	Motor vehicle insurance payout - corresponding operating income item
Fixed Plant Tools & Equipment	20,000	0	20,000	0	20,000	
Telemetry & Control Systems Upgrade	335,613	656	334,957	-30,000	305,613	Tsfr Bulgary WTP Control System to Bulgary Pump Station Switchboard project
Radio Communications Upgrade/Replacements/Improvements	388,225	11,732	376,493	0	388,225	
RTUs - New/Additional	15,000	2,756	12,244	0	15,000	
Energy Efficiency & Cost Minimisation	20,000	0	20,000	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	243,929	1,466,409	0	1,710,338	
TOTAL MANAGEMENT	3,625,596	288,544	3,337,052	0	3,625,596	
SOURCES						
Bores-renew/refurbish/decommission	241,504	-26	241,530	0	241,504	
Source Works General Improvements	53,183	655	52,528	0	53,183	
Switchboards Improvements/Replacements	13,000	0	13,000	0	13,000	
TOTAL SOURCES	307,687	629	307,058	0	307,687	
TREATMENT PLANTS						
General Improvements	5,000	158	4,843	0	5,000	

Description	Current Budget 2017/18	YTD Actual 2017/18	Budget Remaining	30/9/17 Review Adjustment	Revised Budget 2017/18	Comment
	\$	\$	\$	\$	\$	
Aeration Tower Replacements	15,000	0	15,000	0	15,000	
Aeration Tower Covers	295,082	8,895	286,187	0	295,082	
Specific Treatment Plant improvements	45,000	0	45,000	0	45,000	
Treatment Plant refurbishments	11,509,062	159,977	11,349,085	0	11,509,062	
Laboratory Facilities Upgrade	0	1,294	-1,294	0	0	
Treatment Plant Switchboards/Control Systems Replacement/Upgrade	5,000	269	4,731	0	5,000	
TOTAL TREATMENT PLANTS	11,874,144	170,592	11,703,552	0	11,874,144	
PUMPING STATIONS						
General Improvements	22,000	4,070	17,930	0	22,000	
Magflow Replacements	10,000	0	10,000	0	10,000	
Pump Stations Renewal/Refurbish/Upgrade	216,731	13,684	203,047	0	216,731	
Pump & Motor Maintenance / Replacements	25,000	-5	25,005	0	25,000	
Pump Station Switchboards/Control Systems Replacement/Upgrade	45,000	22,248	22,752	30,000	75,000	Tsfr Bulgary WTP Control System to Bulgary Pump Station Switchboard project
TOTAL PUMPING STATIONS	318,731	39,996	278,735	30,000	348,731	
RESERVOIRS						
General Improvements	19,247	4,247	15,000	0	19,247	
New/Replacement Reservoirs	7,664,333	127,046	7,537,287	0	7,664,333	
Reservoirs - Refurbish	55,000	0	55,000	0	55,000	
Reservoirs - Upgrade Ladders and Access	28,610	3,693	24,917	0	28,610	
Reservoir Hatches Magflows	42,000	15,002	26,998	0	42,000	
TOTAL RESERVOIRS	7,809,190	149,988	7,659,202	0	7,809,190	
MAINS, SERVICES & METERS						
MAINS						
System Improvements	530,000	52,287	477,713	0	530,000	
Reticulation for Developers (including other extensions)	860,000	233,770	626,230	0	860,000	
Renew Reticulation Mains	860,000	134,011	725,989	0	860,000	
Renew Trunk Mains	2,227,911	210,855	2,017,056	0	2,227,911	
SUB-TOTAL MAINS	4,477,911	630,922	3,846,989	0	4,477,911	

Description	Current Budget 2017/18	YTD Actual 2017/18	Budget Remaining	30/9/17 Review Adjustment	Revised Budget 2017/18	Comment
	\$	\$	\$	\$	\$	
SERVICES						
Service Connections, new including Meters	550,000	149,665	400,335	0	550,000	
Renew Services	130,000	13,391	116,609	0	130,000	
SUB-TOTAL SERVICES	680,000	163,056	516,944	0	680,000	
METERS						
Water meters replacement	180,000	31,108	148,892	0	180,000	
Remote metering	275,000	15,009	259,991	0	275,000	
Water Filling Stations Upgrade	25,000	0	25,000	0	25,000	
SUB-TOTAL METERS	480,000	46,117	433,883	0	480,000	
TOTAL MAINS, SERVICES & METERS	5,637,911	840,095	4,797,816	0	5,637,911	
TOTALS	29,573,259	1,489,845	28,083,414	30,000	29,603,259	

9. OPERATIONAL PLAN – PERFORMANCE TARGETS

RECOMMENDATION: That the report detailing progress, as at 30 September 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 30 September 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 30 September 2017
Projects completed from Capital Works Program	>85%	N/A – Annual Measure (Refer DoE Report for Progress)

Demand Management

Measure	Key Performance Indicator	Progress to 30 September 2017
Peak Day Demand (weekly average)	<65 ML	34 ML

WHS

Objectives	Key Performance Indicator	Progress to 30 September 2017	
Number of days lost through injury	< previous period	June Qtr. 24	Sept Qtr. 4
Percentage of sick leave hours to ordinary hours worked	<3.5%	4.07%	6.92%
Total hours worked compared to time lost through injury & illness	< previous period	.63%	.127%

Environmental Protection

Key Performance Indicator	Key Performance Indicator	Progress to 30 September 2017	
Power used per ML of water produced KWh	< same period last year	Sept Qtr. 2016 830Wh	Sept Qtr. 2017 891KWh
Power used per ML of water produced \$	< same period last year	Ref. Rates \$199	Actual Energy 2017 \$209

Equal Employment Opportunity

Key Performance Indicator	Key Performance Indicator	Progress to 30 September 2017
Number of legitimate EEO complaints resolved	100%	Nil lodged
Percentage of staff returning from parental leave	100%	100%

Charges and Fees

Key Performance Indicator	Key Performance Indicator	Progress to 30 September 2017
Level of Water Charges overdue compared to water sales for previous 12 months	<5%	N/A – Annual Measure
Level of Sundry Debtor Accounts overdue compared to debtors raised for previous 12 months	<5%	N/A – Annual Measure

10. REQUEST FOR A REFUND OF WATER CONNECTION CHARGES – AUSTRALIAN CLAY TARGET ASSOCIATION

RECOMMENDATION that Council make a one-off contribution of \$53,516 to the Australian Clay Target Association.

The Australian Clay Target Association (ACTA), has written to Council requesting that Council waive or discount its water connection fees in relation to their proposed new Clubhouse/Function Centre at Copeland Street Wagga Wagga.

A copy of their letter is attached.

They advise that the ACTA is a not for profit organisation and state that they are bringing a great deal of economic benefit to Wagga Wagga and NSW with this development. The total cost of the development is in excess of seven million dollars, with every dollar counting in getting this project across the line within the timeframe required.

They request consideration of a refund of the costs associated with the development. They understand that there are costs in installing the service to the development, however, the long term benefits to Wagga Wagga and the Riverina will be substantially increased with the development.

The costs quoted to the Association are as follows:


Development Servicing Charges for a Club House and Function Centre.	\$53,516.00
Installation of a 100mm metered water service and a 100 mm Fire Service connection.	<u>\$14,352.00</u>
Total	<u>\$67,868.00</u>

- *ACTA request*

RECEIVED
- 7 SEP 2017

AUSTRALIAN CLAY TARGET ASSOCIATION INC.

ABN: 14 590 029 414 Registered No. A12282
PO Box 466, WAGGA WAGGA NSW 2650, Australia
T: 02 6938 2121. F: 02 6931 0125

Email: info@claytarget.com.au Website: www.claytarget.com.au  [claytargetaustralia](https://www.youtube.com/claytargetaustralia)



Monday, September 04, 2017

Mr. Graeme Haley
General Manager
Riverina Water

Via email: admin@rwcc.nsw.gov.au

President:
Robert Nugent

Vice President:
Robert Fox

Vice President:
Malcolm Dyson

Good afternoon Graeme,

The Australian Clay Target Association (ACTA) has recently been granted a water connection to LOT 10 DP 1163676 by Riverina Water for the ACTA new Clubhouse/Function centre.

The ACTA are a not for profit organization, we are bringing a great deal of economic benefit to Wagga Wagga and NSW with this development. As I am sure you are aware the cost of providing this facility is in excess of seven million dollars, with every dollar counting in getting this project across the line within the timeframes required.

On behalf of the ACTA we request consideration of a refund of costs associated with the development. We understand there are cost of installing the service to the development however the long term benefits to Wagga Wagga and the Riverina will be substantially increase with this development.

The money saved would be used for works on the development to ensure we have a fantastic facility at the end of the development.

Your consideration would be greatly appreciated, we would of course ensure Riverina Water was appropriately recognized.

Thank you in anticipation of your support

Yours Sincerely

Tony Turner
Australian Clay Target Association
Executive Officer



GM

32436
P

Ref: ID 32072

17 August 2017

GHD
Suite 3, 161-169 Baylis St
Wagga Wagga, NSW, 2650

To Caleb,

**RE: WATER SUPPLY – LOT 10 DP 1163676 – 72 TASMAN RD, EAST WAGGA
AUSTRALIAN CLAY TARGET ASSOCIATION CLUB HOUSE & FUNCTION CENTRE**

In response to a request for water supply works to the above mentioned development, I can advise you that under Riverina Water's Pricing Effective 1 July 2017 to 30 June 2018 the following costs will apply:

Development Servicing Charges for a Club House & Function Centre. 228m ² Food prep area @ 0.014 Equivalent Tenements per m ² of floor space, 57m ² Office space @ 0.007 Equivalent Tenements per m ² floor space and 24 Toilets & 1 Shower @ 0.28 Equivalent Tenements per Toilet/Shower @ \$5,053.00 per ET. (ET is based on RWCC fees and charges as well as Water Directorate Guidelines)	\$53,516.00
---	-------------

Installation of a 100mm metered water service and a 100mm Fire Service connection (including plant, labour and materials)*	\$14,352.00
---	-------------

*NB: Backflow prevention device/s **not** included

TOTAL: \$67,868.00

The costing detailed above is based on the plans and information provided for water supply to the newly proposed ACTA club house and function centre. This includes the installation of a new 100mm metered water service connection and a new 100mm fire service connection fronting Copland St.

It is the developers' responsibility to engage a suitably licensed plumber to supply and install the necessary backflow prevention device/s.

To proceed with a water connection to this development, please complete and return a signed copy of the Consent to Proceed letter attached to this statement and you will then be invoiced for the total amount as detailed above.

Please note that the cost is based on the following requirements:

- Direct pumping from RWCC's water main is **not** permitted
- At least 4 weeks' notice prior to construction is given to RWCC to allow for programming of resources.
- A plumbing permit is required prior to commencement of any water plumbing work on site.
- This statement remains valid until 30 June 2018.

For any further details regarding this matter, please contact RWCC on **02 6922 0628**.

Kind Regards



Aran Beckett
Asset Officer

All correspondence to:
General Manager
91 Hammond Avenue, Post Office Box 456
Wagga Wagga NSW 2650
Phone: (02) 6922 0608 Fax: (02) 6921 2241
Email: admin@rwcc.nsw.gov.au
ABN 52 084 883 210

11.RESTRICTION STATISTICS

RECOMMENDED that Council receive and note report on Restriction Debt Recovery Statistics.

A question was raised in the August 2017 Council meeting about the number of properties restricted by Riverina Water in Council's debt recovery processes. Following are statistics on the number of properties and outstanding account figures for the months of August and September 2017, for the information of Council.

Following restriction, on average, 80% of the restricted properties pay within 3 days of restriction.

It should be noted that customers have at least 2 ½ months to pay their account before their property will be restricted. If at any time the customer contacts Riverina Water to make a payment arrangement or submits a hardship application, debt recovery action is not taken.

	Aug-17		Sep-17	
	No. Customers	Outstanding A/C (\$)	No. Customers	Outstanding A/C (\$)
NOTICES ISSUED				
Reminder Notice	2148	324,654	1190	194,664
Restriction Notice	458	282,928	106	45,128
Restriction Warning Card	75	36,149	21	18,718
Physical Property Water Restriction	24	26,493	20	17,366
RESTRICTION DETAILS				
Properties Paid Prior to Restriction (after Warning Card)	7	8,795	3	1,486
Properties Unrestricted	15	7,500	12	13,027
Properties Remaining Restricted at Month End	34	90,208	42	102,181
Properties Referred to Debt Recovery Agent	1		1	

12. DRAFT HEALTH AND SAFETY COMMITTEE CONSTITUTION

RECOMMENDED that the draft constitution of the Health and Safety Committee be adopted

The Constitution of the Health and Safety Committee has been redrawn to reflect the changes to Council's workplace in a similar manner to the recent changes made to the Consultative Committee Constitution.

A copy of the draft constitution is attached for Council's consideration.

- *Draft HSC Constitution*



Health & Safety Committee CONSTITUTION



NAME: Riverina Water County Council Health & Safety Committee (HSC)

COMPOSITION:

The HSC shall comprise eight (8) members:

- Six (6) employee elected HSR's (Health & Safety Representatives);
- Two (2) employer appointed representatives.

The six (6) employee representatives shall comprise representatives from these workgroups;

- Two (2) from Operations (1 electrical / fitting & 1 Filtration Plant / Water Quality);
- Two (2) from the Water Depot / Mechanics / Welders / Builders / Meter Readers;
- One (1) from the Rural operations and Rural Works;
- One (1) from the Administration / Engineering;

In addition to the official members of the HSC, the WHS, HR and RTW Coordinators shall be required to attend meetings as advisors. Their role shall be to give advice, participate in discussions and provide information on injury statistics, legislative requirements or general safety information but they will not take part in any voting on committee issues.

ELECTIONS:

All committee representatives will be elected or appointed as per the NSW Work Health & Safety Legislation.

- The employee representatives shall elect one of their members to be Chairperson and convenor of the HSC.
- Every three (3) years all employee positions will be declared vacant and nominations called for to fill vacant positions.
- A new Chairperson shall be elected by the employee representatives.
- In the event of a casual vacancy of an employee representative, the Chairperson may appoint a person (from the same workgroup) to fill the vacancy for the balance of the predecessor's term on the committee.

MEETINGS:

The Chairperson will convene a meeting of the HSC:

- ❖ At least once every two (2) months and;
- ❖ Special or emergency meetings at any time the Chairperson so directs, or at the request of three (3) or more committee members.

- Meetings are to be conducted following the adopted HSC meeting procedure.
- A special or emergency meeting may be accepted to be in lieu of the regular meeting if a majority of HSC representatives so agree.
- An agenda and business paper for normal meetings is to be produced and circulated by the Chairperson, or the secretary, or the WHS Coordinator at least one (1) week prior to the meeting. The agenda must be authorised by the Chairperson prior to release.
- Items required for the business paper must be submitted to the Chairperson, or the secretary, or the WHS Coordinator at least ten (10) days prior to any scheduled regular meeting.
- Persons other than HSC representatives (excluding the RTW, HR and WHS Coordinators) shall require permission from the HSC Chairperson before attending any meeting, and may be invited to take part in discussions but not take part in decision making.
- The number of employer representatives at any meeting must not exceed the number of employee representatives.
- A minimum of 5 HSC members (minimum of 1 employer representative & 4 employee representatives) will be required to form a quorum at any meeting.
- A member of the committee shall be elected to act as a secretary. (A non-committee member will be permitted to sit in on the meetings in the role of secretary for taking minutes. Such person shall not take part in any decision-making procedures.)

RECORDS:

The secretary (or person acting in that position for minute recording) shall record and prepare an accurate report of the proceedings of each meeting.

- The secretary or chairperson will table the minutes for confirmation and acceptance at the next meeting.
- Should the minutes be accepted as a true record of the last meeting, they shall be signed by the Chairperson and filed by the WHS Coordinator. An electronic copy shall also be registered into the EDMS.
- Copies will be distributed to all HSC members within five (5) working days of the meeting and a copy will also be prominently displayed in the following locations;
 - Water Works lunchroom,
 - Administration office lunchroom,
 - Electrical/Fitter lunchroom,
 - The Rock Depot lunchroom,
 - Water Depot lunchroom,
 - Intranet (link to be emailed to all employees after each meeting).
- The minutes shall be available to any Riverina Water employee upon request.

AIMS & ACTIONS OF THE COMMITTEE:

A HSC has the following functions: (NSW Work Health & Safety Legislation)

The role of health and safety committees (HSCs) is to provide a forum for consultation on the management of health and safety across the whole workforce (i.e. not just one work group). HSCs should:

- *facilitate cooperation between the PCBU and the workers in instigating, developing and carrying out measures designed to ensure the health and safety of workers;*
- *assist in developing standards, rules and procedures relating to WHS.*

RWCC HSC functions will include, but are not limited to the following:

- Consult with the workgroups that they represent on health & safety issues.
- Assist in the promotion of a safe working environment and safe systems of work.
- Assist with the review of Health and Safety Policies, procedures and WHS management systems for the Council's place of work.
- To make recommendations to the Council as it thinks appropriate to ensure the health and safety of all employees, contractors, customers and any visitors who enter Council property.
- The HSC will assist with resolving matters of Health and Safety in the workplace.
- It may receive suggestions, complaints and reports from any employee, contractor or customer of the Council and consider such at the next regular meeting, unless the Chairperson considers that a special or emergency meeting is warranted (provided that reasonable attempts have been undertaken to resolve the safety issue within the relevant department prior to bringing to the committee),
- The HSC may investigate the circumstances of a workplace incident / accident, or may appoint a working group of its members or one of its members to investigate such circumstances.

TRAINING OF COMMITTEE MEMBERS:

It is not a legislative requirement for members of the HSC to undertake training. If any HSC member(s) request training Council must provide those members with appropriate training to undertake their role.

AMENDMENTS TO THE CONSTITUTION:

Any proposal to amend the constitution may be moved at a convened normal meeting. After discussion the proposal shall lay on the table until the end of the meeting agenda, when it can then be resolved.

THE CONSTITUTION SHALL BE REVIEWED EVERY THREE (3) YEARS

Definitions

<u>HSC</u> – Health & Safety Committee	<u>HSR</u> - Health & Safety Representatives
<u>WHS</u> – Work Health Safety	<u>HR</u> – Human Resources
<u>RTW</u> – Return to Work	<u>PCBU</u> - A 'person conducting a business or undertaking'

WHS Committee Chairperson

General Manager

13. POLICY 2.1 – BACKFLOW PREVENTION

RECOMMENDATION that Riverina Water County Council adopt Policy 2.1 – Backflow Prevention.

In June 2013 Riverina Water County Council adopted Policy 2.1 – Backflow Prevention. The Policy was reviewed in October 2015 with no changes made.

The policy has been again reviewed and is attached for Councillors' information.

Only minor changes are suggested for the Policy, such as updating references to Australian Standards.

This policy was developed to protect the quality of Riverina Water County Council water supply and deals with the risk of contamination by backflow from customers' connections back into Riverina Water's potable water distribution and reticulation systems.

- ***Policy 2.1 Backflow Prevention***

14. COUNCIL RESOLUTION SHEET

Council Resolution Sheet – Meeting held 25 October 2017				
Report Ref	Subject	Responsible Officer	Council Decision	Action Taken
Meeting held 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.
Meeting held 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 Contract let.
Meeting held 26 April 2017				
17/58	Local Government NSW – 2017 Water Management Conference	GM	That: a) Council be represented at the Local Government New South Wales 2017 Water Management Conference, b) Clr. Funnell to attend as Chairman's nominee (if available) as a delegate, c) Clrs. Braid and Quinn to attend., and d) the General Manager and Director of Engineering or their nominees attend as observers.	Delegates registered. Accommodation booked. Cr Braid to act in Chairpersons place at conference. (Cr Funnell unable to attend)

Meeting held 28 June 2017				
17/92	Local Government NSW 2017 Annual Conference	GM	That: a) Council be represented the Local Government NSW 2017 Annual Conference; b) Council delegate be the Chairman and the General Manager (observer); c) Nominations be invited from any other Councillor to attend as an observer. d) Council determine motions that it believes are of concern and should be discussed at the Conference. Cllrs. Braid OAM and Keenan nominated to attend the Local Government NSW 2017 Annual Conference	Accommodation booked. Registrations made.
17/108	Contract W221 – 1in100 Levee Review of Environmental Factors (REF)	DoE	That Council: 1) Adopt the updated REF completed by Hunter Water Australia and Nghenvironmental and, 2) Determine to proceed with the construction of 1 in 100 Levee	Noted. Levee to commence following completion of new WTP
17/109	Investigation into the Incorporation of GHSC Water Function into RWCC	DoE	That Council continue to investigate the option of incorporating all or part of GHSC's water operations into RWCC's operations	Investigations continuing
Meeting held 16 August 2017				
17/128	Financial Statements 2016/2017	GM	That: (i) Council's Draft Financial Statements be referred to audit by Council's auditors, Audit Office of New South Wales, (ii) Council make a resolution in accordance with section 413 (2c) that the annual financial report is in accordance with: - the Local Government Act 1993 (as amended) and the Regulations made there under, - the Australian Accounting Standards and professional pronouncements, - the Local Government Code of Accounting Practice and Financial Reporting, - presents fairly the councils operating results and financial position for the year, - accords with Council's accounting and other records, and - that Council is not aware of any matter that would render this report false or misleading in any way. (iii) That Council adopt the abovementioned Statement and that the Chairman, Councillor and General Manager be authorised to complete the "Statement by Members of the Council" in relation to Council's 2016/17 Financial Statements and Special Purpose Financial Reports and be attached thereto. (iv) That Council delegate to the General Manager the authority to "finalise the date" at which the Audit Report and Financial Statements are to be presented to the public.	<div>(i) Statement referred to Auditors</div> <div>(ii) Noted</div> <div>(iii) Noted</div> <div>(iv) Noted</div>

17/130	Revoted Budget 2016/2017	GM	That expenditure totalling \$1,627,800 be revoted and included in the 2017/2018 budget.	Budget amended.
17/135	Review of Code of Conduct	GM	That Riverina Water County Council adopted Draft Policy 1.1 Code of Conduct and Draft Policy 1.1a Procedures for the Administration of the Model Code of Conduct and that Council enter into an arrangement with Riverina Eastern Regional Organisation of Councils (REROC) to share a panel of conduct reviewers.	Policy on web page and intranet. Arrangements underway with REROC.
17/136	Policy 1.2 Code of Meeting Practice	GM	That Riverina Water County Council adopted Policy 1.2 Code of Meeting Practice.	Policy on web page and intranet.
17/137	Council Meeting Dates and Times	GM	That Council's December Council Meeting be held on Wednesday 13th December 2017 commencing at 9.30, followed by an end of year lunch at a venue to be advised.	Invitation forwarded to all councillors.
17/139	Verbal Update by Acting General Manager on Current and Past Issues on Water Supply Performance & Quality at Kapooka Road	DoE	That a personal visit be made to the customer concerned, and a letter to be forwarded to consumers along the trunk main affected by main breaks.	Email sent to customer requesting meeting.
17/141	Council Resolution Sheet	GM	That Council receive and note Council's Resolution Sheet, with amendment that Clr. Braid OAM assumes the Chairman's delegations in Clr. Funnell's absence.	Noted
17/145	Contract W195 – Water Treatment Plant Progress Report	DoE	that: i) Council receive and note this report, and ii) Council endorse the approved variations.	Noted

QUESTION TRACKING

Meeting held 16 August 2017

Clr Meyer OAM	Advised of issues with underground water in the street landscape in Henty. Wet underneath footpath where concrete was laid over. Original mains under railway line	Acting GM requested that GHSC contact.
Clr Conkey OAM	Requested advice as to what Council does to assist customers with bad debts.	Manager Corporate Services advised of arrangements.

Yours faithfully



Graeme Haley
GENERAL MANAGER

DIRECTOR OF ENGINEERING'S REPORTS TO COUNCIL

1. WORKS REPORT COVERING AUGUST 2017

RECOMMENDATION that this report be received and noted.

-
- *Works Report for August 2017*

DIRECTOR OF ENGINEERING'S REPORTS TO OCTOBER 2017 COUNCIL MEETING

4th October 2017

1 WORKS REPORT COVERING AUGUST 2017

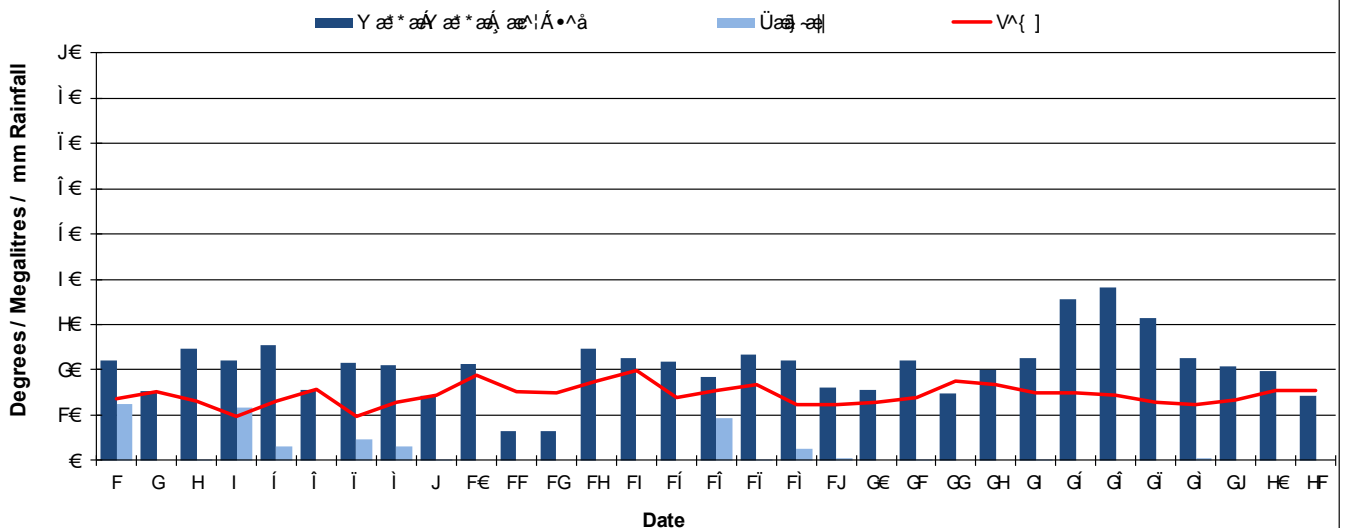
RECOMMENDATION: That this report be received and noted.

1.1 WATER SOURCED AND USED

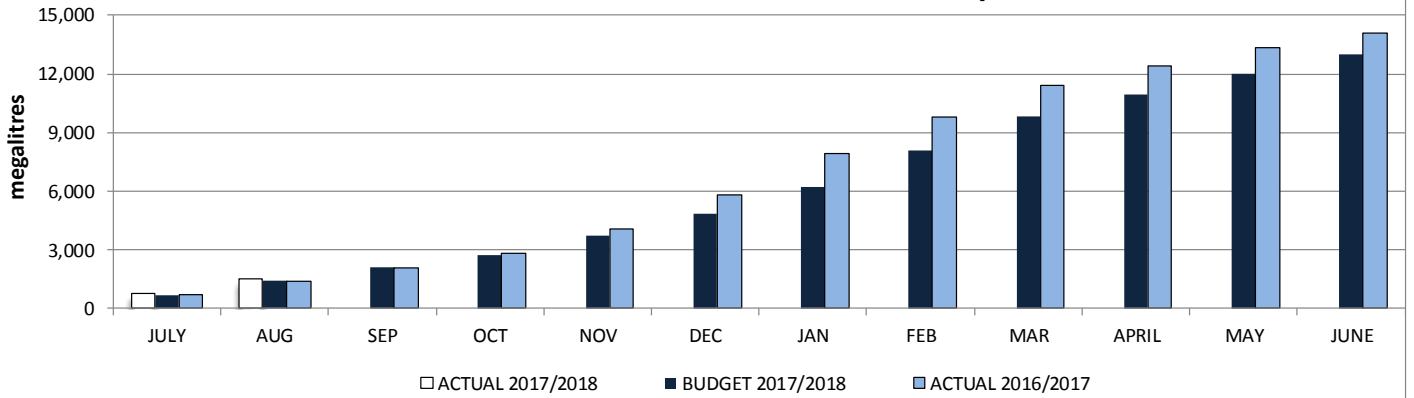
August	2015	2016	2017
Üæð æ	F€€€	ì H€	I J€€
Y ^oÖæ•	ì	€€	FI
WATER SOURCED August 2017 (MI)			
P[icÖY æ* æð[|^•	Fí F€F	FG € J	Fí F€H
Y ^•oY æ* æð[|^•	F€í €ì	Fì Ì €Í	H€ì €í
Òæ oY æ* æð[|^•	I Hì €Í	H€H€€	G J€Í
T^||{ àæ*^^Äü^!	€€€	€€€	€€€
SUB-TOTAL	707.75	627.54	719.15
Ó|^æ^ÁÜ|^•	Gí € G	H€í €	G€í í
WææÜ|^&^	€€€	€€€	€€€
Üæç|}æÜ|^•	Fí €F	FG€ €	FG€G
Y ææY ææÜ|^•	€€€	€€€	F€í
Ö[|a^} æ|a•Á æ^ÁÜ~]]|^Ár•c{	G€G	î €J	G€J
SUB-TOTAL	44.04	51.09	37.13
Y[[{ æ*æ æ	€€í	F€€G	€€í
P^{|^|æ	€€í G	€€í F	€€HG
Væ&ææ	G€í	F€í €	G€í
U^|æ	F€í I	F€í J	F€í J
Y æa^} a|æüæ a	G€G	G€€	F€í
T[|^}áæ@	€€í €	€€í F	€€íU
Ö[||ã^~||ã	H€í I	I €H	H€í €
SUB-TOTAL	11.61	12.06	10.49
TOTALS	763.40	690.69	766.77

WATER USED August 2017 (ML)			
	2015	2016	2017
Òæ òÁ { ^}	FJÈH	FJÈH	G ÈG
Ò• ò||æ	HÈF	H È	I HÈ
P[òÁ æ*æ	JÈ€	Í HÈ€	Î ÈI
Y æ*æY æ*æ ÁŠ, ÁŠÇ|	FG ÈÎ	FFHÈG	FH ÈI
Y æ*æY æ*æ ÁŠ @ŠÇ|	HFHÈH	G ÈÈ	GJHÈG
Y æ*æY æ*æ ÁŠ||^Ç^ ÁŠÇ|	HFÈÌ	HGGH	H ÈI
SUB-TOTAL	614.71	535.54	606.82
Šæ• { æÁ• ò•}	GÈJ	GÈH	HÈÍ
Ó~ & àæ ÁŠ&@ { ^	FGÈ€	FI ÈÍ	FHÈF
Ô||æ æ} æÁŠ&@ { ^	JÈJ	Ì ÈJ	Ì È
Û~|æ Á[~ òÁ[{ Á æ*æY æ*æ	Ì FÈH	Î ÈÎ	JGÈG
Û~|æ Á[{ Á æY æY æÁŠ |^	È€	È€	FÈ
Ó~|æ Á[{ Á æY æY æÁŠ |^	FHÈÍ	G ÈH	Ì ÈH
Ø[{ ÁŠ |^ ÁŠ \ ÁŠ ÁW æ æ æ ÁŠ æ æ æ	FFÈÍ	Ì ÈI	FGÈÍ
P[à[[\	FÍ ÈF	FGÈ€	FGÈG
SUB-TOTAL	137.32	135.21	151.84
Y [[{ æ*æ æ	ÈÈÌ	FÈG	ÈÈÌ
P~ { ~|æ	ÈÈG	ÈÈF	ÈÈG
Væ&æ	GÈÌ	FÈ€	GÈÌ
U~|æ	FÈI	FÈJ	FÈJ
Y æ~} à|æ æ æ æ	GÈG	GÈ€	FÈÍ
T [ |~} ææ@	ÈÈ€	ÈÈF	ÈÈU
Ô~||æ*~||æ	HÈI	I ÈH	HÈ€
SUB-TOTAL	11.61	12.06	10.49
TOTALS	763.64	682.81	769.15

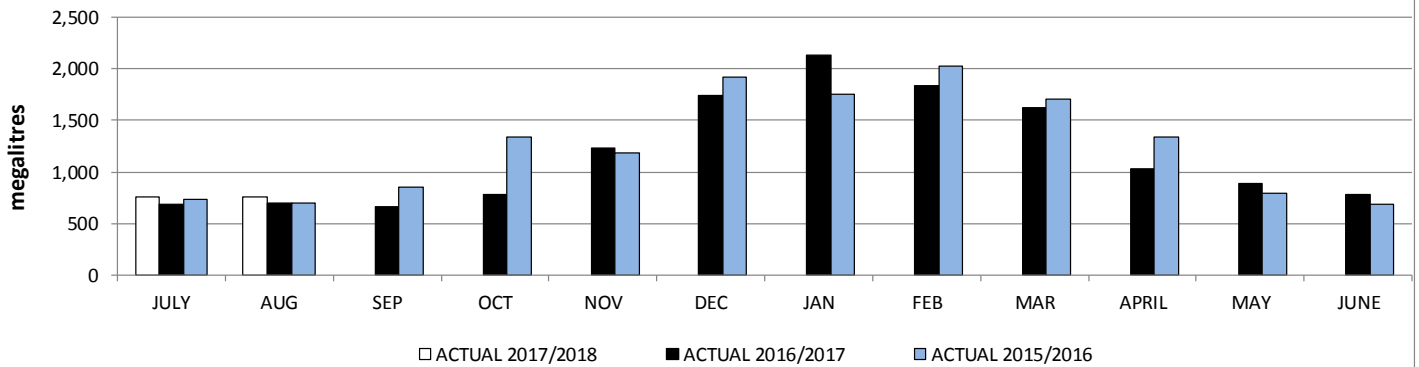
DAILY WATER USED, WAGGA WAGGA, August 2017



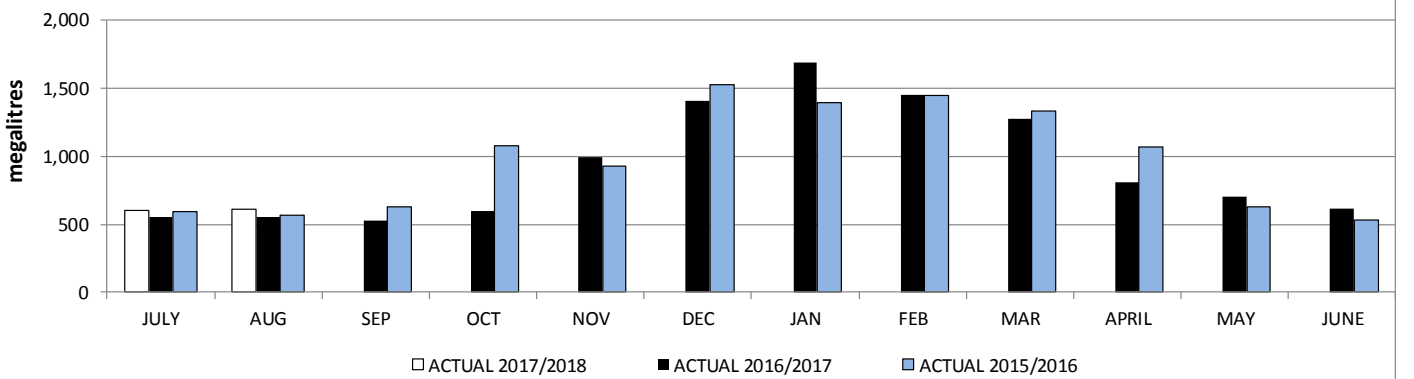
TOTAL CUMULATIVE WATER USED 2017/2018



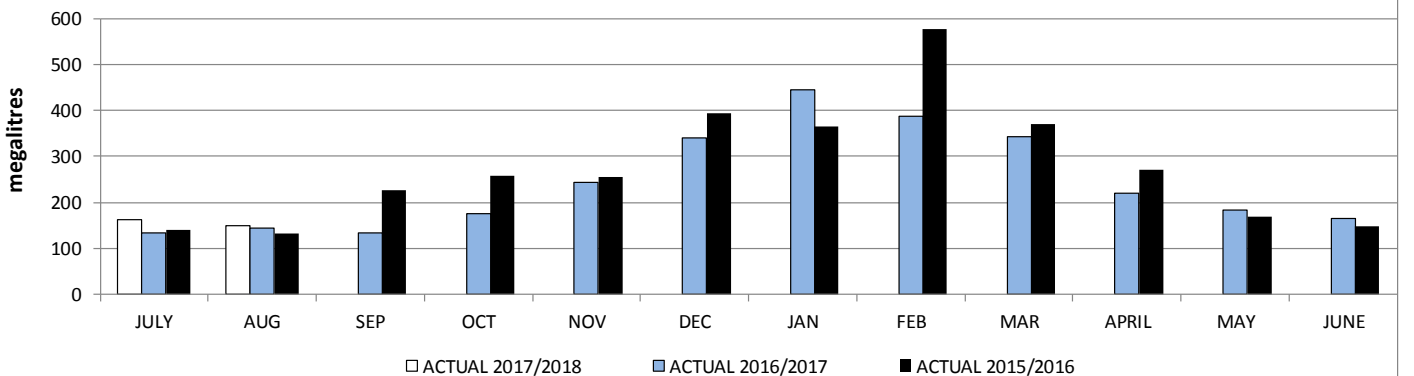
MONTHLY TOTAL WATER USED COMPARED TO PREVIOUS YEARS



MONTHLY WAGGA WATER USED COMPARED TO PREVIOUS YEARS



MONTHLY RURAL WATER USED COMPARED TO PREVIOUS YEARS



1.2 NEW SERVICE CONNECTIONS, REPAIRS, METERS, LOCATIONS & COMPLAINTS FOR THE MONTH OF AUGUST 2017

[illegible]

1.3 WATER SYSTEM REPAIRS

WAGGA WAGGA								
Öæ	Š &aj }	V[, }	T aaj	Ôæ•^	Šaj^	U' æš^	Ö•q { ^!•	Y æš!
			Á] ^		Ü] aaj	ÄÖ'! aaj }	ÄE-^&c^a	Š!•c
						Vä ^	G[Á~]]rD	Ä|
Î	Šæ^ÄÜ] aaj	Y æš* aaj	H€ÄÖQ	Üä ^Äöaj ^!ÄG[á	B[	Í K€		€
Î	R' } &aj } Á [q! /Q}	Ö @ [] c	HÍ ÁÖÖŠ	Üä ^Äöaj ^!ÄG[á	B[	FÍ KÍ		€
FH	Öajæ @ÄÜc^c	Y æš* aaj	F€ÄÖÖ	Üä ^Äöaj ^!ÄG[á	B[	GK€		FÍ
FÍ	Öajæ @ÄÜc	Y æš* aaj	F€ÄÖÖ	Üä ^Äöaj ^!ÄG[á	B[	FKÍ		€
FÍ	F€ÁT aaj ÄÜc^c	Y æš* aaj	F€ÄÖÖ	Üä ^Äöaj ^!ÄG[á	B[	HK€		€
FÍ	Šaj] ^ÄÜc^} ^ ^	Y æš* aaj	F€ÄÖÖ	Üä ^Äöaj ^!ÄG[á	B[	Í K€		€
GG	Ö] : Áææææ ÖÖ @ [] c	Y æš* aaj	G€ÄÖÖ	Üä ^Äöaj ^!ÄG[á	B[	HK€		€
TOTALS						HÍ K€		FÍ
				Ö^æ•Á^^aaj *		Ö^æ•Äe-^&aj *		
V[æšÖ^æ•ÁÄÍ				• @ á ~ÄÄ		&•q { ^!•Á F		

RURAL								
Öæ	Š &aj }	V[, }	T aaj	Ôæ•^	Šaj^	U' æš^	Ö•q { ^!•	Y æš!
			V] ^		Ü] aaj	Ö'! aaj }	ÖE-^&c^a	Š!•c
						Vä ^	G[Á~]]rD	Ä|
F	Ö] ^aa&Öc^} ^ ^	Üaj Äöaj] ^	FÍ €ÄÖ	Üä ^Äöaj ^!ÄG[á	B[	HK€		€
F	Y ^aj ^•Ä^	V@ÄÜ] &	F€Ä	Üä ^Äöaj ^!ÄG[á	B[	FK€		G€
Í	Baj a!Äc	Š & @æc	FÍ €ÄÖQ	Üä ^Äöaj ^!ÄG[á	B[	JK€		€
FI	Öaj à[^!} ^!Šaj ^	V@ÄÖaj	G ÄÜXÖ	Üä ^Äöaj ^!ÄG[á	B[	€K€		Í
FI	Ö[, }•æ^ÄÄ ÄÖaj ÁPajÄ	V@ÄÖaj	Í €ÄÜXÖ	Üä ^Äöaj ^!ÄG[á	B[	GK€		Í
FÍ	U[{] aÄ@ ^	Y^! [] *ÄÄ	GÍ €ÄÖQ	Üä ^Äöaj ^!ÄG[á	B[	Í K€		€
GG	Öaj &•ÄÜ] aaj	Ü^æææ cPaj•	HGÄÜXÖ	Üä ^Äöaj ^!ÄG[á	B[	FK€		F
GH	Ü[@aj •ÄÜa	Ö' | æ^	GG ÄÖÖŠ	Üä ^Äöaj ^!ÄG[á	B[	HK€		€
HE	Ü[@aj •ÄÜa	Ö' | æ^	GÍ €ÄÖQ	Üä ^Äöaj ^!ÄG[á	Y^•			€
TOTALS						F€JK€		HG
				Ö^æ•Á^^aaj *		Ö^æ•Äe-^&aj *		
V[æšÖ^æ•Á J				• @ á ~ÄÄ		&•q { ^!•Á I		

1.4 WATER QUALITY COMPLAINTS

Water quality complaints received during August 2017 were:

[illegible]

1.5 MAINS CONSTRUCTIONS

1.5.1 MAINS EXTENSIONS AND NEW WORKS

New water mains laid during August 2017 include:

LOCATION	PROJECT	100	150			200		450
		OPVC	DICL	OPVC	DICL	OPVC	DICL	OPVC
Ô: [[\^âÔ: ^^ \	▷^, Â~ àâãäå } æÛœ#^Á	|||		|| €				
Ó: [[[[{ æÛœ#^Á	▷^, Â~ àâãäå } Úá^Ø!Á^, Â^•					|Jì		
Ö } } • Û [æ								FHì
	VUVÖŠ	|||		|| €		|Jì		FHì

1.5.2 REPLACEMENT OF EXISTING MAINS

Mains replaced during August 2017 include:

LOCATION	PROJECT	100		150	150	375	
		OPVC	DICL	OPVC	DICL	OPVC	DICL
ÜÖŠ	T æ • ÄÜ^ | æ^ { ^ } c						đ ì
Q* | ä ÄÜc	T æ • ÄÜ^ | æ^ { ^ } c	ì |		í |			
Ô | || ä * ~ || ä	T æ • ÄÜ^ | æ^ { ^ } c	H Ì G	FF				
	TOTAL	ì î î	FF	í |			đ ì

1.6 OTHER CONSTRUCTION

Other construction works during August 2017 include:

LOCATION OR PROJECT	WORK DONE
P | | à | [ | \ Ä) c | ] | ä ^ ÄÜc ^ c	FEE { ÄÜ ^ ÄÜ ^ | c ä ^
Ö c | | ä Ü ^ ^ | c |	Ô ^ ä Ä ^ , Ä ^ ä Ä | , Ä ^ c |
V @ ÄÜ | & |	Ü ^ ^ , ÄÜ ^ | c ä ^

1.7 MAJOR REPAIRS / OVERHAULS

Major repairs/overhauls during August 2017 include:

LOCATION OR PROJECT	WORK DONE
F E Ä ÄÜ ^ ^ | c | ä	Ö : æ | B | æ | ä ä Ä ^ & | { { ä • ä }
F E Ä ÄÜ ^ ^ | c | ä	Ô ^ ä Ä c | : { Ä æ : Ä | æ
Y ^ • c Ä æ * æ | | ^ Ä |	Ü ^ | æ ä ÄÜ W
Y ^ • c Ä æ * æ | | ^ • Ä ä ä * Ä æ •	Ü & | ^ ä Ä Ä æ c
Ö | * æ Ä VÜ	Ü ^ | æ ä ÄÜ W Ä | , ^ | Ä ~ ] |

1.8 WATER FILLING STATION ACTIVITY

Water Filling Station activity during August 2017 include:

LOCATION	NUMBER OF FILLS
Ö { ^ } Ä ^ | ^ | | ä ÄÜc	í î
Ö c | | ä Ü ^ ^ | ÄÜä	GJ
Q | | ^ • c P | ÄÜ ä æ ^ c Ö c ^	I
Ô | ^ } - ä | ä Ü ^ ä P | ÄÜä	I J
P ^ } c ÄÜ | { } ä Ä æ	€
P | | à | [ | \ Ä ä , [ | ä ÄÜä	FG
S ä ^ ÄÜ ^ ^ | c | { } ÄÜä	GH
Š | & | ä c ä ä ä | ÄÜä	î
Ü ^ æ ä ä P | ÄÜ • Ä ä • [] ÄÜc	F
V @ ÄÜ | & |	F
Y ^ | { } * ÄÜ : ^ ^ | ä ä | ä s • [] ÄÜc	í

1.9 STAFF TRAINING & SAFETY

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

Training or Programme	Number of Staff
Via-3/0 } d[/AU VTU	J
Via-3/0 } d[/AU OU	F
Via-3/0 } d[/AU ae-3/0 } d[/	F
Qa•0aA~^• @! A/ae a *	H
Y [\ & c! Aa } & A/OU \ \ ac	G
O[} a^aAU] ae^A~^• @!	FF
O@{ O~! O@{ a@a/ae a *	H
O[} a^aAU] ae^A/OU \ \ O[~! •^	F
Qa/Oa SOU	F

1.10 FLEET DISPOSALS

Fleet disposals made during August 2017 are:

Vehicle Details					
Vehicle No	Description	Vehicle Type	Make & Model	Year	kms
H G	V@AU[&	Òc a@aA~^• @! a@a	QWZWÖE ÖY	GEF	
GJF	Ôa } ^ } c! •	Òc a@aA~^• @! a@a	Pa• a } PaçaaÖI €	GEFG	
HFJ	Qac! • A	Òc a@aA~^• @! a@a	QWZWÖE ÖY	GEFH	94370
HFG	U[{ aa *	O~ a@aA~^• @! a@a	UYAQ! aAUa *^!	GEFH	F@E I I
GEI	Ôa } ^ } c! •	Òc a@aA~^• @! a@a	UYAQ! aAUa *^! AU] ^! a@aA~^• @!	GEI	
HEF	O^&c a@a	O~ a@aA~^• @! a@a	UYAQ! aAUa *^!	GEFH	I GE €€
Disposal Details					
Vehicle No	Method		Price exc GST		
H G	CE &a } •		AGGE G GE		
GJF	CE &a } •		A@€€		
HFJ	CE &a } •		AFJ E I GE H		
HFG	CE &a } •		AGGE G		
GEI	CE &a } •		A€		
HEF	O@a^ } c		A€		

1.11 FLEET ACQUISITIONS

Fleet acquisitions made during August 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	\$30,248
378	7	Lieschke Motors	Dual Cab ute, hard cover	Holden Colorado	\$33,279
379	9	Lieschke Motors	Extra cab ute with canopy	Holden Colorado	\$36,897



Bede Spannagle
DIRECTOR OF ENGINEERING

2. WORKS REPORT COVERING SEPTEMBER 2017

RECOMMENDATION that this report be received and noted.

- *Works Report for September 2017*

DIRECTOR OF ENGINEERING'S REPORTS TO OCTOBER 2017 COUNCIL MEETING

13th October 2017

1 WORKS REPORT COVERING SEPTEMBER 2017

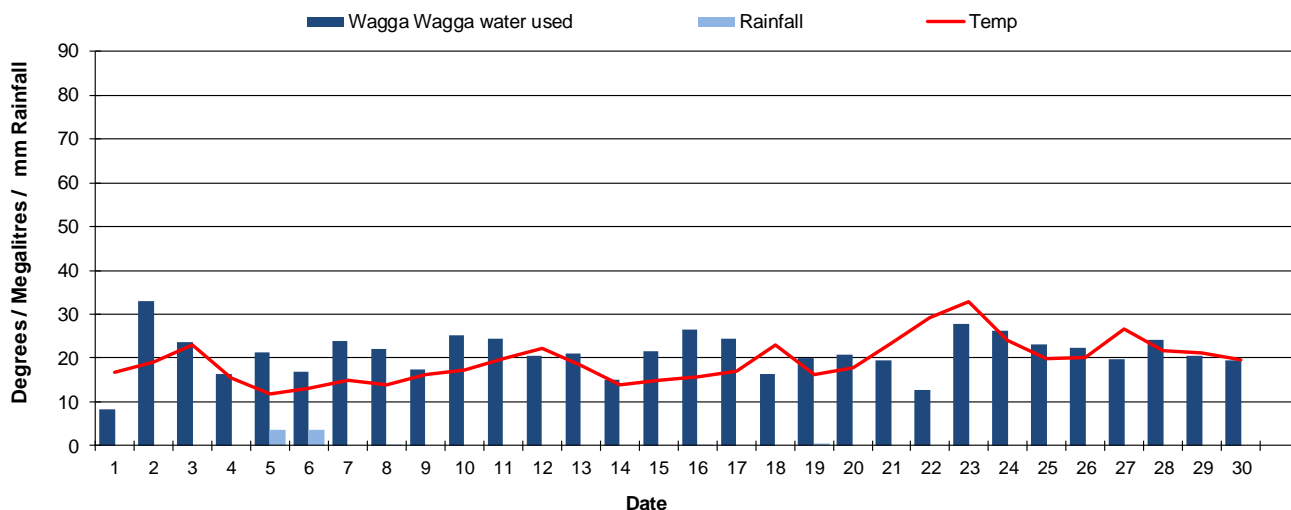
RECOMMENDATION: That this report be received and noted.

1.1 WATER SOURCED AND USED

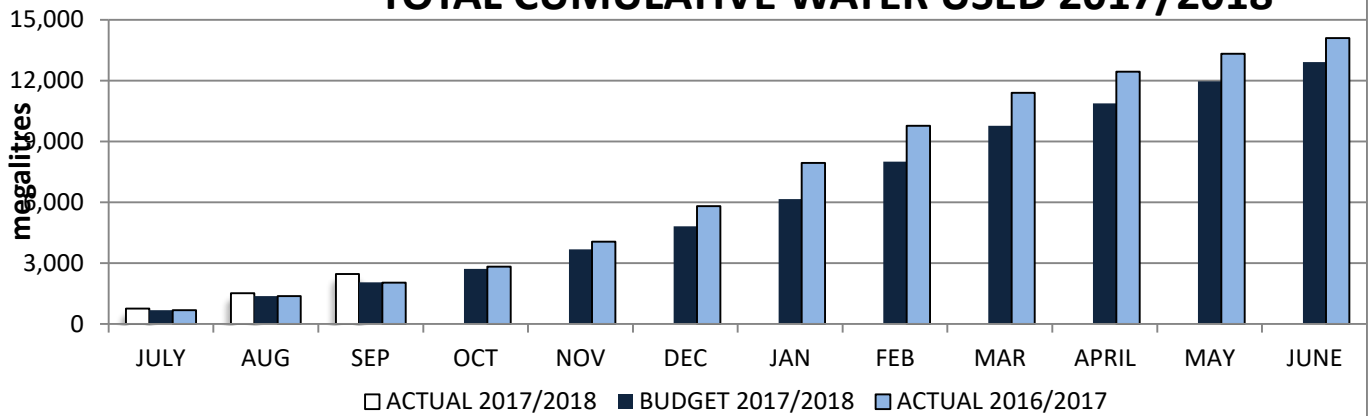
September	2015	2016	2017
Rainfall	100.0	83.4	8.0
Wet Days	8	20	4
WATER SOURCED September 2017 (MI)			
North Wagga bores	161.11	125.69	183.41
West Wagga bores	107.68	187.95	308.14
East Wagga bores	438.96	313.90	419.61
Murrumbidgee River	0.00	0.00	0.00
SUB-TOTAL	707.75	627.54	911.16
Bulgary Bores	25.52	32.60	27.59
Urana Source	0.00	0.00	0.02
Ralvona Bores	16.31	12.40	12.94
Walla Walla Bores	0.00	0.00	2.93
Goldenfields Water Supply System	2.21	6.09	2.40
SUB-TOTAL	44.04	51.09	45.88
Woomargama	0.77	1.02	0.94
Humula	0.52	0.51	0.50
Tarcutta	2.18	1.90	2.37
Oura	1.54	1.79	2.15
Walbundrie/Rand	2.26	2.20	2.13
Morundah	0.50	0.41	0.64
Collingullie	3.84	4.23	3.77
SUB-TOTAL	11.61	12.06	12.50
TOTALS	763.40	690.69	969.54

WATER USED September 2017 (MI)			
	2015	2016	2017
East Bomen	19.83	19.33	24.61
Estella	33.91	35.28	57.28
North Wagga	90.40	53.00	70.25
Wagga Wagga – Low Level	125.86	113.12	130.92
Wagga Wagga – High Level	313.13	282.58	426.24
Wagga Wagga – Bellevue Level	31.58	32.23	51.39
SUB-TOTAL	614.71	535.54	760.69
Ladysmith System	2.09	2.63	4.67
Brucedale Scheme	12.30	14.65	17.22
Currawarna Scheme	9.19	7.59	10.44
Rural south from Wagga Wagga	71.93	64.76	92.52
Rural from Walla Walla Bore	0.00	0.00	2.93
Bulgary, Lockhart and Boree Creek	13.55	24.34	14.93
From Boree Crk to Urana and Oaklands	11.95	8.84	13.22
Holbrook	16.31	12.40	12.94
SUB-TOTAL	137.32	135.21	168.87
Woomargama	0.77	1.02	0.94
Humula	0.52	0.51	0.50
Tarcutta	2.18	1.90	2.37
Oura	1.54	1.79	2.15
Walbundrie/Rand	2.26	2.20	2.13
Morundah	0.50	0.41	0.64
Collingullie	3.84	4.23	3.77
SUB-TOTAL	11.61	12.06	12.50
TOTALS	763.64	682.81	942.06

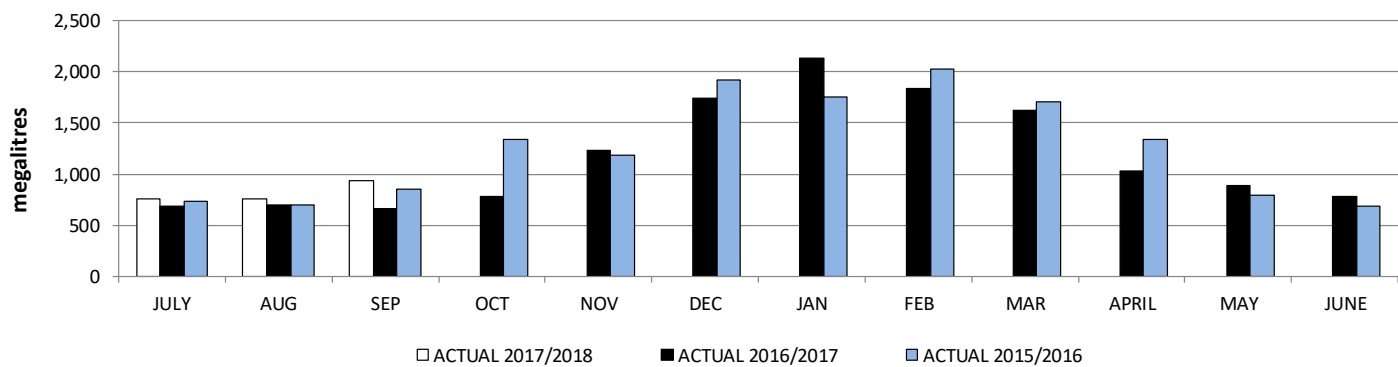
DAILY WATER USED, WAGGA WAGGA, September 2017



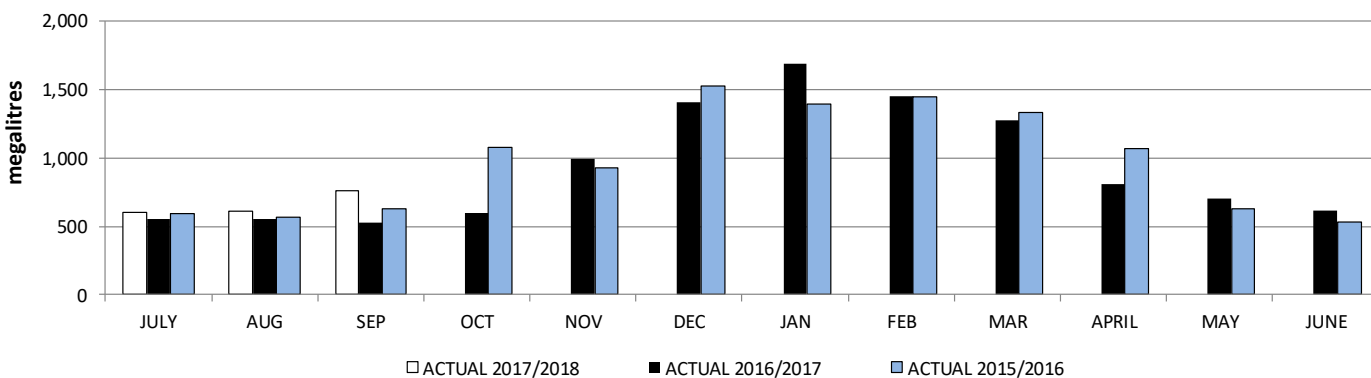
TOTAL CUMULATIVE WATER USED 2017/2018



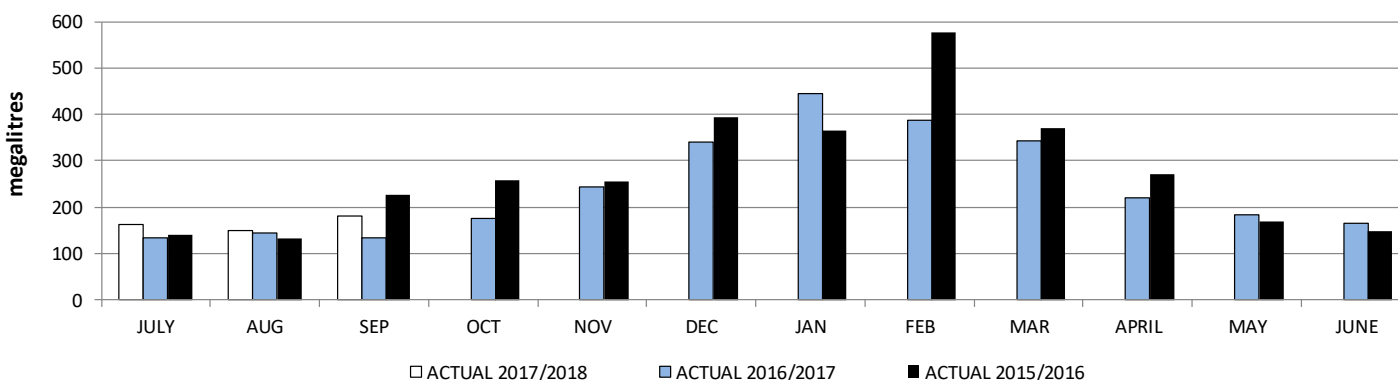
MONTHLY TOTAL WATER USED COMPARED TO PREVIOUS YEARS



MONTHLY WAGGA WATER USED COMPARED TO PREVIOUS YEARS



MONTHLY RURAL WATER USED COMPARED TO PREVIOUS YEARS



NEW SERVICE CONNECTIONS, REPAIRS, METERS, LOCATIONS & COMPLAINTS FOR

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	21	4	1	20	5	4				38	6	5
Brucedale				1								
Currawarna												
Euberta												
Humula										1		
Ladysmith										1		
Oura										1		
San Isidore												
Tarcutta					1					2		
The Gap						1				1		
Bulgary												1
Collingullie												
French Park												
Lockhart	1			3						1	1	1
Mangoplah										1		
Milbrulong						1						
Pleasant Hills												
The Rock	1					1				1		
Uranquinty				2								
Yerong Creek			1							1		
Culcairn										1		
Henty			1	1						1		
Holbrook										1		
Morven												
Walbundrie	1											
Walla Walla									1			
Woomargama												
Boree Creek												
Morundah												
Oaklands												
Rand												
Urana												
TOTAL	24	4	3	27	6	7	0	0	1	51	7	7

THE MONTH OF SEPTEMBER 2017

1.2 WATER SYSTEM REPAIRS

WAGGA WAGGA								
Date	Location	Town	Main Type	Cause	Live Repair	Outage Duration Time	Customers Affected (no supply)	Water Lost KI
13	14 Overdale Drive	Bourkelands	150	T/ Band	No	1:00	27	15
TOTALS						1:00	27	15
Total Breaks – 1			Breaks needing shut off -		1	Breaks affecting customers – 1		

RURAL								
Date	Location	Town	Main Type	Cause	Live Repair	Outage Duration Time	Customers Affected (no supply)	Water Lost KI
11	Napier st	Lockhart	150 CI	Pipe Failure -	No	4:00	0	97
19	Brookdale	Bulgary	225 DICL	Pipe Failure (not	No	3:30	0	0
27	Rohans Road	Bulgary	250 DICL	Corrosion	No	3:00	5	0
4	13 Linton st	Collingullie	100	Pipe Failure -	Yes		0	5
18	Rickers Ine	Milbrulong	32 PVC	Pipe Failure -	Yes		0	426
TOTALS						10:30	5	528
Total Breaks – 5			Breaks needing shut off -		3	Breaks affecting customers – 1		

1.1 WATER QUALITY COMPLAINTS

Water quality complaints received during September 2017 were:

Date	Location	Problem	Action Taken
5/09/2017	Mortimer Pl, Wagga	Dirty water	Flushed mains
6/09/2017	21 Girraween Mews, Glenfield	Stale, chemical taste	Dirty internal pipework. Flushed taps till all within ADWG & OK
18/09/2017	54 Kaloona Dr, Bourkelands	Dirty water	Flushed mains
20/09/2017	15 Bardwell St, Tarcutta	Dirty water	Flushed mains
22/09/2017	39 Undurra Dr, Glenfield	Low pressure & dirty water	Faulty meter changed
26/09/2017	Romanos & Duke pubs-Fitzmaurice St, Wagga	Dirty water	Flushed mains till <5NTU

1.1 MAINS CONSTRUCTIONS

1.1.1 MAINS EXTENSIONS AND NEW WORKS

New water mains laid during September 2017 include:

LOCATION	PROJECT	100	150		200		450
		OPVC	DICL	OPVC	DICL	OPVC	OPVC
Crooked Creek	New Subdivision	444		480			
Boorooma Stage 5	New Subdivision					498	
Dunns Road	PipeFor New Res						138
TOTAL		444		480		498	138

1.1.2 REPLACEMENT OF EXISTING MAINS

Mains replaced during September 2017 include:

LOCATION	PROJECT	100		150	150	375	
		OPVC	DICL	OPVC	DICL	OPVC	DICL
RIFL	Mains Replacement						258
Inglis St	Mains Replacement	84		54			
Collingullie	Mains Replacement	382	11				
	TOTAL	466	11	54			258

1.2 OTHER CONSTRUCTION

LOCATION OR PROJECT	WORK DONE
The Mill Wagga Wagga	150mm Fire Service
A-Mart Wagga Wagga	100mm Fire Service
Kapooka Pump House	Connect 200mm mag flow mater

1.2 MAJOR REPAIRS / OVERHAULS

Major repairs/overhauls during September 2017 include:

LOCATION OR PROJECT	WORK DONE
Walla Walla Bore #1	Install and commission new motor
Milbrulong Reservoir	Replace County Boundary road booster pump
Bulgary bores	Overhaul silica pump
West Wagga WTP	Overhaul silica pump
Rand Reservoirs	Drain and clean

1.3 WATER FILLING STATION ACTIVITY

Water Filling Station activity during September 2017 include:

LOCATION	NUMBER OF FILLS
Bomen Hereford	164
Estella Farrar Rd	91
Forest Hill Elizabeth Avenue	43
Glenfield Red Hill Road	124
Henty Olympic Way	6
Holbrook Millswood Rd	15
Lake Albert Plumpton Rd	24
Lockhart Napier Rd	11
Pleasant Hills Manson	13
The Rock	55
Yerong Creek	6

1.4 STAFF TRAINING & SAFETY

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

Training or Programme	Number of Staff
Chainsaw - Trim & cross out	4
Workcover Licence - EWP	1
Water Operator Training	3
Trenchless	1
Ad Dip LGP	1
First Aid Refresher	5
Workcover Licence - Forklift	6
MapInfo	1
Confined Space Refresher	9

1.5 FLEET DISPOSALS

Fleet disposals made during September 2017 are:

Vehicle Details					
Vehicle No	Description	Vehicle Type	Make & Model	Year	kms
291	Carpenters	Extra cab with tray	Nissan Navara D40	2012	96137
204	Carpenters	Extra cab with tray	Ford Ranger Supercab 3ltd 2wd	2007	
301	Electrician	Dual cab tray	PX Ford RANGER	2013	62,500
Disposal Details					
Vehicle No	Method		Price exc GST		
291	Auctions		\$19,090.91		
204	Auctions		\$0 (still have)		
301	Accident		\$28,182		

1.6 FLEET ACQUISITIONS

Fleet acquisitions made during September 2017 are:

New Vehicle Details					
Vehicle No	Tenders Received	Accepted Tenderer	Vehicle Type	Make & Model	Price exc GST
381	3	Hillis Ford	Extra cab with tray	Ford Ranger	\$30,691

1.6 MAJOR CAPITAL PROJECTS PROGRESS

	- On track
	- Behind Schedule
	- Unlikely this Financial Year

MAJOR PROJECTS 2016/17 (> Over \$100,000) - September 2017

Description	2017/18 Budget	Actual & Committed to Date	Comments
MANAGEMENT			
Land & Buildings for Admin, Depot & Workshops			
Access, Parking and Landscaping			
Levee protection stage 2 Hammond Ave - Urban	\$1,597,658	\$119,062	Linked to WTP construction, so delayed. Tenders for construction expected to be advertised in October.
PLANT & EQUIPMENT			
IT Equipment			
Corporate IT software upgrade/improvements - Urban	\$162,500	\$76,503	
Working Plant & Vehicle Purchases			
Routine plant & vehicle replacements	\$739,000	\$213,459	
Telemetry & Control Systems Upgrade			
West Wagga WTP & Bores Control System Upgrade	\$106,965	\$107,621	
Radio Telemetry SCADA Upgrade	\$168,648	\$3,648	
Radio Communications Upgrade/Replacements/Improvements			
Radio Communication	\$388,225	\$43,702	
SOURCES			

Bores-renew/refurbish/decommission			
Bores-renew/refurbish/decommission - Urban	\$61,504	\$61,478	
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	\$3,448,240	Commissioning anticipated in November 2017.
Urana WTP replacement - Non-Urban	\$1,500,000	\$17,688	Design commenced.
Woomagama WTP - Non-Urban			
RESERVOIRS			
New/Replacement Reservoirs			
Shires Reservoir Relocation - Non-Urban	\$2,560,333	\$118,632	Contract awarded and design commenced.
MAINS, SERVICES & METERS			
MAINS			
System Improvements			
System Improvements - Non Urban	\$200,000	\$13,992	
Reticulation for Developers (including other extensions)			
Reticulation for Developers - Urban	\$800,000	\$235,057	
Renew Reticulation Mains			
Renew Reticulation Mains - Non-Urban	\$200,000	\$0	
Renew Reticulation Mains - Urban	\$400,000	\$8,173	
Lake Albert Rd Replacement	\$0	\$2,163	Completed
The Gap / Brucedale System - Non-Urban	\$100,000	\$0	
Main St, Lake Albert - Urban	\$100,000	\$154,106	Completed
Angel St, Lake Albert - Urban	\$0	\$693	Completed
Beckwith St - Urban	\$0	\$0	Completed
Renew Trunk Mains			
Bomen Trunk Main B (north of river) - Urban	\$0	\$311	Completed
Southern Trunk - Highway to New Reservoir 1.8km 450mm DICL	\$400,000	\$202,428	Underway
Low & high Rising Mains from CWS	\$2,911	\$9,689	

<i>SERVICES</i>			
Service Connections, new including Meters			
Service Connections, new - Urban	\$500,000	\$137,574	
Renew Services			
Renew Services - Urban	\$100,000	\$7,640	
<i>METERS</i>			
Water Meters Replacement			
Water meters replacement - Urban	\$150,000	\$23,866	
Remote Metering			
Remote metering - Urban	\$250,000	\$0	

A handwritten signature in black ink, appearing to read 'Bede Spannagle', with a stylized, cursive script.

Bede Spannagle
DIRECTOR OF ENGINEERING

3. W.221 – TENDER FOR SUPPLY AND DELIVERY OF WATER SUPPLY PRESSURE PIPES

RECOMMENDATION: That Council consider the report “W.221 Tender for supply and delivery of water supply pressure pipes”, whilst the meeting is closed to the public, as it relates to commercial information the disclosure of which would prejudice the commercial position of the person who supplied it, as prescribed by Section 10A(2)(c) of the Local Government Act 1993.

4. CONTRACT W.195 – WATER TREATMENT PLANT (WTP) PROGRESS REPORT

RECOMMENDATION: that Council receive and note this report.

UGL have made significant progress on construction of the Raw Water Intake. The channel floor has been poured and blinding placed over the area inside the coffer dam.

Due to the delay in construction of the Raw Water Intake, a temporary pipeline has been constructed by UGL to allow raw water to be supplied to the new plant from the existing raw water pumps.

UGL have issued a position paper on the 17/10/2017 that outlines a proposal for an EOT to be awarded subject to the new WTP providing potable water by Milestone 5 date in November 2017. The temporary raw water supply will be used for this purpose.

There are a number of contractual implications associated with milestones and practical completion that need to be resolved.

Progress on Contract issues

UGL has advised that the VC20 part C and NOD23 are withdrawn. This variation was for the raw water intake and value claimed was \$2.5M with one year extension of time, a very good result for RWCC.

RWCC has now responded to all UGL variation claims.

The RWCC and UGL project managers are meeting weekly to work through any further disputes with variations.

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

- *UGL Project Status report – August 2017*
- *UGL Project Status report – September 2017*



PROJECT STATUS REPORT



August 2017

PROJECT:	Wagga Wagga WTP Upgrade
CLIENT:	Riverina Water County Council
CONTRACT NO.:	W195
UGL PROJECT NO.:	3200-0485
REPORT DATE:	14 th September 2017
REPORT NO.:	25
PROJECT MANAGER:	Doug Anderson
PREPARED BY:	Doug Anderson

TABLE OF CONTENTS

1.0	SUMMARY	3
2.0	SCOPE OF WORK	3
3.0	HSSE	3
4.0	RISK / CRITICAL ACTION AREAS	4
5.0	CONTRACT/COMMERCIAL	5
5.1	PROGRESS CLAIM	5
5.2	VARIATIONS	6
6.0	FINANCE	9
7.0	PROGRAMME	10
8.0	QUALITY	10
9.0	ENVIRONMENTAL	10
10.0	INDUSTRIAL RELATIONS	10
11.0	DESIGN AND TECHNICAL	10
12.0	COMMISSIONING	11
13.0	STAKEHOLDERS	11
14.0	SITE PROGRESS	12
	APPENDIX A – SCOPE OF WORKS SUMMARY	15
	APPENDIX B – MONTHLY SAFETY REPORT	16
	APPENDIX C – PROJECT PROGRAMME	17

1.0 SUMMARY

Project progress in August was focussed on the following activities:

Electrical works - punchlist items within the filter area & clearwater MCC; termination of lamella scraper drives; street light bases, conduit & cabling; instrumentation site wide; termination of AC units; test and quality documentation.

Raw Water Intake – The cofferdam inner sheet pile wall has been installed, well point dewatering installation commenced 28/8/17 and is expected to be functioning by the 1/9/17, excavation within the cofferdam will commence 4/9/17.

Lamella roof structure installed, replacement lamella scraper drives installed.

Remediation of backwash troughs continues

General Civil has focussed on various drainage works.

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 4881 hours. Subcontractor hours recorded on site were 3200. Total hours worked on the project to date is 198,468.

No lost time injuries (LTI) or MTI and no First Aid (FAI) were recorded during the month.

Site inductions of 14 individuals have been undertaken with current total of 636 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 Sep/Oct 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 August: -

Risk Description	Potential Impact	Control Measures
Quality and specification issues	Impact to project efficiency and rate of completion Additional resources required for investigation and remedy. Subcontractor Impact to Client Relations and Perceptions	Ensure incoming inspections are completed with due diligence Engage with subcontractors & suppliers about prompt rectification of issues
Commissioning Program Overrun	Plant not ready for performance trial by the required date.	Commission plant in stages and work with RWCC to optimise sign-off processes. Additional commissioning resources as needed. Install temporary raw water supply to lamella clarifier
Raw Water Works Construction overrun	Constraint on commissioning activities	Plan and execute a temporary raw water supply utilizing the existing RWCC river pumps
Exceptional Inclement Weather	Delays associated with site inundation due to additional rainfall on site and rise in river levels.	Use construction methodologies which mitigate impacts. Inlet structure works completed during low flows in the river. Insurance policies in place Ensure familiarity with RWCC flood response plan

5.0 CONTRACT/COMMERCIAL

5.1 Progress Claim

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

WAGGA WAGGA WATER TREATMENT PLANT

Month

Aug-17

Item No.	Schedule of Prices	Total Claim to date	
		% complete	Claim Value
1	Provision of Preconstruction Activities		
	Preconstruction Activities subtotal (1)	100%	
2	Provision of Project Management and Site Running Activities		
	Prooject Management Activities subtotal (2)	96%	
3	Complete all additional designs, where required		
	Design and Documentation subtotal (2)	100%	
4	Intake Works		
	Intake Works - General subtotal (3)	34%	
5	Raw Water Piping System		
	Raw Water Piping subtotal (4)	57%	
6	Lamella & Rapid Mix Tank		
	Lamella & Rapid Mix Tank subtotal (5)	98%	
7	Filters		
	Filters subtotal (7)	99%	
8	Filter Water Tank & Backwash		
	Filter Water Tank & Backwash subtotal (8)	100%	
9	Machinery Room		
	Machinery Room subtotal (9)	96%	
10	Clear Water Storage & Pumping System		
	Clear Water subtotal (10)	92%	
11	Aluminuium Dosing Plant		
	Aluminium Dosing Plant subtotal (11)	98%	

12	PACL Dosing Plant		
	PACL Dosing Plant subtotal (12)	95%	
13	Caustic Soda Dosing Plant Facilities		
	Caustic Soda Dosing Plant subtotal (13)	97%	
14	Sodium Hydrochlorite Dosing Plant		
	Sodium Hydrochlorite Dosing Subtotal (14)	98%	
15	Polymer Dosing Plant		
	Polymer Dosing Plant subtotal (15)	98%	
16	Fluoride Dosing Plant		
	Fluoride Dosing subtotal (16)	99%	
17	Other Items		
	Other Items subtotal (17)	81%	
18	Electrical Items		
	Electrical subtotal (18)	95%	
19	Testing Demonstration Commissioning		
	Testing Demonstration and Commissioning (19)	14%	
20	Post Process Proving		
	Post Process Proving (20)	0%	
21	Sludge Handling & Dewatering System		
	Sludge Handling subtotal (19)	97%	
22	Other Options Accepted		
	Options subtotal (20)	95%	
23	Variations		
	Variations Subtotal	87%	

5.2 Variations

The table below provides a summary of variations against the contract.

Variation No.	Title	Amount (\$ 000) Excl. GST	Status (May)
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
VO08	Existing Balance Tank Permanent Walkway	127	Not proceeding.
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
VO22	Non-relocation of Workshop Sewer	- 6	Submitted
VO23	Pits under existing centrifuge building - NSC10	8	Approved
VO24	Clear Water Pumps Mechanical Seal	78	Not Proceeding
VO25	Bomen Line	80	Approved at with agreed discount
VO26	NSC11 Material Excavated under UGL Carpark	27	Approved
VO27	NSC12 Asbestos at Wash Water Holding Tank	3	Rejected – UGL Issue NOI10
VO28	NSC13 Poor Ground at Sludge Thickener Tank	20	Submitted
VO29	Filter Water Overflow Changes	-80	Approved
VO30	Site Road Realignment	17	Submitted
VO31	Roof Access Ladder to Centrifuge Building	14	Approved
VO32	NSC14 Damage to Scour Line & Repair	11	Rejected – UGL Issue NOI06
VO33	Flowmeter Modbus Communications	22	Submitted

VO34	Caustic Building Lighting Changes	3	Submitted
VO35	Provision of Eave Linings to buildings	80	Rejected – UGL to Respond
VO36	Sludge Thickener Infill Slab	90	Approved
VO37	NSC15 Reinstall DICL	22	Rejected – UGL Issue NOI07
VO38	Modification to Filter Building Stair	38	Rejected – UGL Issue NOI08
VO39	Field Isolators	67	Rejected – UGL to Respond
VO40	Street Light Fittings	9	Approved
VO41	Offsite cleaning of SS Reo	26	Rejected – UGL to Respond
VO42	Design changes roads and gutters	0	Submitted
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	Not proceeding at \$35
VO46	NSC16 Remove Concrete Slab	4	Approved
VO47	Failed Pressure Test due to Existing Sludge Suction Valve	9	Submitted
VO48	Changes to Sludge Discharge Pipework	25	Rejected – UGL Issue NOI10
VO49	Bore Water Pressure Line Changes	63	Submitted
VO50	Filter Building Pop out Power Outlets	2	Approved
VO51	Centrate Pump Station Re-route to wash water holding	71	Submitted
VO52	Additional Landscaping & Footpaths	167	Rejected – UGL to Respond
VO53	NSC17 Asbestos at A2 to A203	4	Submitted
VO54	Buildings Roof Drainage Connection to Stormwater System	74	Submitted
VO55	High Low Lift Check Valves	24	Submitted
VO56	Rework External Chemical Delivery Pipework	15	Submitted
VO57	Rework of Sludge Thickener Riser	9	Submitted
VO58	Encase Stormwater A4_1 to A4_1_1	11	Submitted
VO59	Encase Stormwater A4_3 to A4_3_2	15	Submitted
VO60	Encase Wash Water under Roadway	42	Submitted
VO61	Raw Water Piping Hazop Changes	54	Submitted
VO62	Ancillary Pipework Material Changes	80	Submitted
VO63	Dewatering Controls Changes	7	Submitted
VO64	Control Room Joinery Changes	22	Submitted
VO65	Thickener Rake Bearing Flushing Line	16	Submitted
VO66	Power Monitor Comms with PLC	5	Submitted
VO67	Additional Reinforcement in WRS	313	Submitted

VO68	Additional Hydrotite Jointing to WRS	43	Submitted
VO69	Provision of Water Meters	12	Submitted
VO70	NSC18 Reroute and Extend Control Room Sewer	15	Submitted
VO71	Encase Stormwater A10 to A11	24	Rejected
VO73	Road Subgrade Replacement	56	Submitted
VO140	Power Failure Alarm Modification	5	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	Approved
W195 Progress Claim 25	Invoice #25	\$ 0.00	Approved
W195 Progress Claim 26	Invoice #26	\$ 55,051.00	Pending

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 reflects the most recent (13/9/17) changes regarding the media coal delivery.

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.

Key revised target construction dates for the month ahead are as follows:-

Activity	Target
Filter Media Loading and Washing	Early Oct 2017
Completion Lamella Installation	Late Sep 2017
Road Works Stage Two Completion	Early Dec 2017
Raw Water Intake Works	Jan 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.

Application to vary the CEMP for RWI works during summer has been submitted to DP&H, awaiting approval.

10.0 INDUSTRIAL RELATIONS

No issues

11.0 DESIGN AND TECHNICAL

Design is 97% complete, misc mech & elec remain e.g. brackets & supports.
Public Works RWI dwgs are to be revised re pipe centres and coordinates.

12.0 COMMISSIONING

Commissioning has been focused on confirming equipment operations in the lamella and filter areas and that communications are functioning. There has also been works to set-up instrumentation in field and confirm communications with the PLC. The filter waste water pumps and blowers were operated. The sludge handling facility has been partially commissioned to allow processing of the coffer dam water

The continuing focus of commissioning in the next month will be on the lamella area and filter area as part of filter media loading and washing.

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.

Outside of the interactions with Department of Planning and EPA, no other significant issues to report with External Stakeholders in the month.

14.0 SITE PROGRESS



Photo 1: Installation of Inner Sheet Pile Wall



Photo 2: Installation of Well Point Dewatering



Photo 3: Installation of Well Point Dewatering



Photo 4: Installation of Lamella Roof Structure



Photo 5: Installation of Lamella Roof Structure



Photo 6: Raw Water Manifold Assembled for Connection with the Temporary Raw Water Supply

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

HSSE Monthly Safety Report –August 2017

1.0 Overview Statistics

	August 2017	Total to Date
UGL Hours	1681	59,169
Subcontractor hours	3200	139,299
Total Site Hours	4881	198,468
LTIFR: Target <.50	0	0
TRIFR: Target 2.70	0	0
MTIFR:	0	0
Lost Time Injuries (LTI)	0	0
Days lost to LTI	0	0
Medical Treatment Injuries (MTI)	0	0
1 st Aid Injuries	0	5
Incidents:		
Injury	0	5
Damage/ Loss	1	21
Near Miss	1	46
Hazard	13	100
Report Only	0	8
Journey Incident	0	1
Non-work related injury	0	0
Environmental	1	10
Safety Initiatives:	0	13
Workplace Safety Inspections	21	633
Environmental Inspections	4	80
Safety Conversations (UGL)	14	1,031

Utake 5 (UGL)	120	5328
Hazobs	13	486
Site audit (e.g. Plant pre-start)	4	79
SWMS reviews	18	322
Site inductions	14	636
Tool box meetings	4	72
Training hours	0	133
Plant delivery inspections	6	166
Checkit compliance (UGL)	100%	100%
UGL/ External Audits	0	3
Alcohol Breath tests	73	3165
Drug tests	0	176

2.0 Incident Summary

The following incidents occurred on site in August 2017.

Near Miss: Blanket breath testing for alcohol occurred at pre-start meeting- a DTD personnel return a positive reading for alcohol on passive test, 1st standard test result at 7.00am was .003 second test result at 7.30 0.02. DTD personnel removed from site for the day and personnel driven to accommodation

Actions: Discuss UGL Drug & Alcohol policy at pre-start meeting 25/8/2017

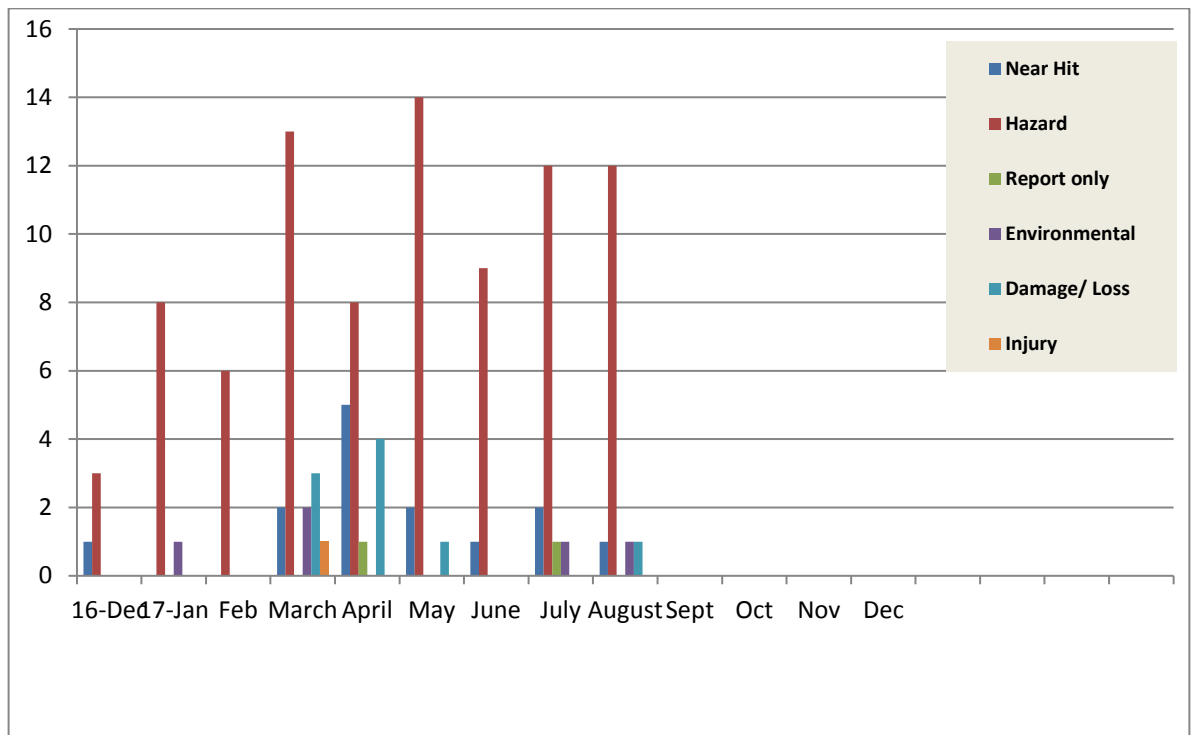
Environmental: PCT plumbing supervisor identified that RWCC(Client) bore water storage tank had overflowed and rang UGL construction manager. The overflowing bore water could not be handled by the RWCC upright pit which is connected to the site storm water system allowing bore water to cause erosion around the base of RWCC upright pit and allowing bore water to flood a section of new unsealed site road. The overflowing bore ran along the newly installed gutter system into the storm water through UGL sediment control covering site storm water pit.

Actions: Discussed incident with RWCC and it was identified that the RWCC overflow warning system had failed and failed contact RWCC water operators of the system failure. RWCC turned off bore water pumping system

Damage: DTD personnel was moving a EWP to towards the lamella tank next to the lamella sludge pumps & pie system to gain access to top of lamella tank to change sludge scarpers system electrical motor. While moving the EWP closer to the lamella tank the EWP boom base clipped the pressure release valve causing damage to the valve.

Actions: Work stopped incident accessed and DTD informed to use a spotter when moving plant around infrastructure, work continued with spotter in place. DTD to replace valve at DTD expense.

Wagga Wagga WTP Incident trends



- August 2017 Site inductions not including visitor's inductions
- Site wide training in UGL Isolation procedure
- Continuing education of local subcontractors in regards to SWMS & Safety Culture Development/ Awareness
- Safety Award September 2017

3.0 Project Safety Initiatives for September 2017

- **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 WWTP 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:**

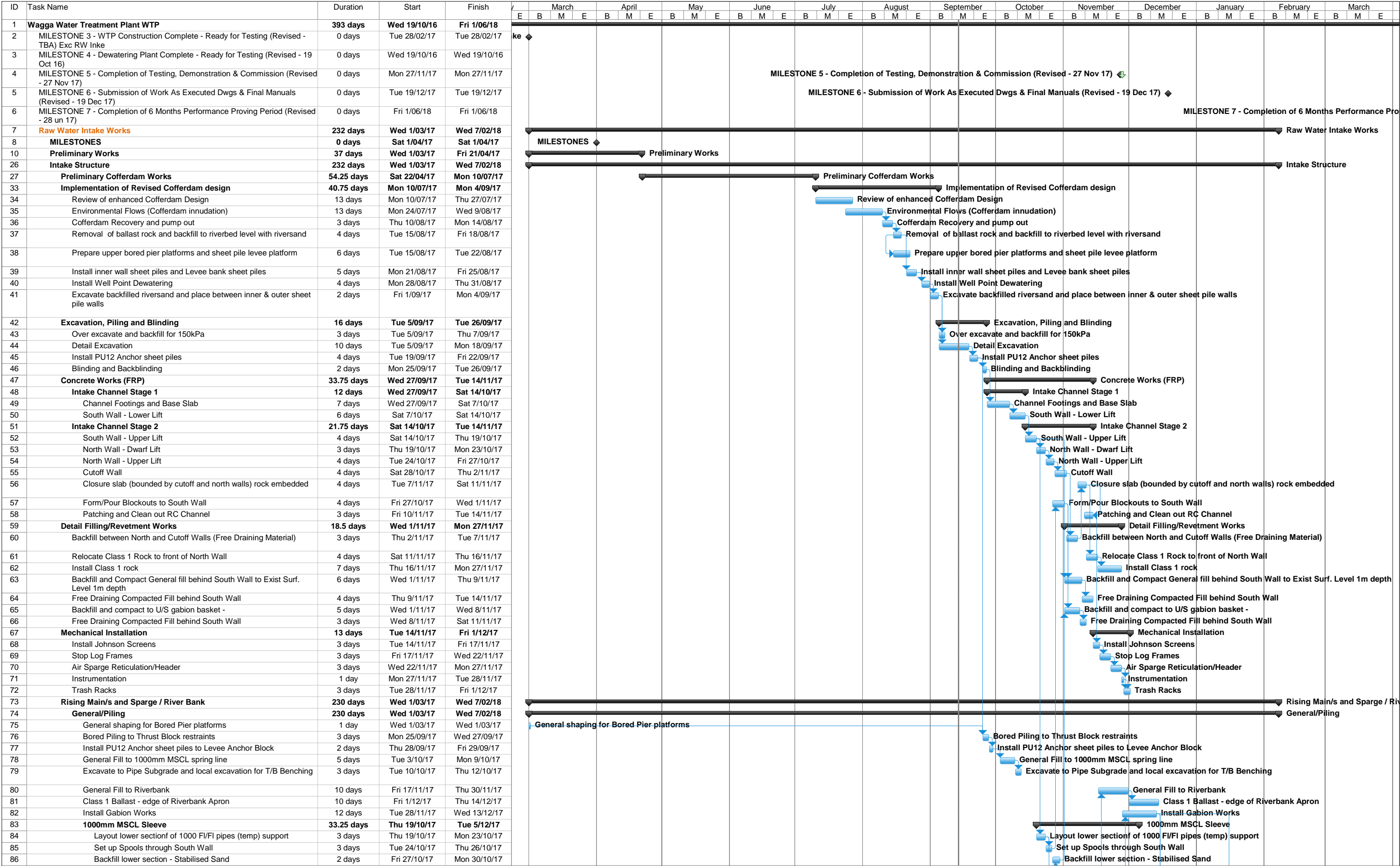
- Continuing Alcohol testing at pre-start meetings
- Drug testing as per Project Safety Management Plan

- Continuing Site Environmental inspections and education to subcontractors regarding environmental compliance.

Mark Hunter

UGL Safety Advisor

APPENDIX C – PROJECT PROGRAMME



Date: Thu 14/09/17
File : Wagga WTP Schedule to Complete.170914.mp

Task

Critical Task

Milestone

Summary

Rolled Up Task

Rolled Up Critical Task

Rolled Up Milestone

Rolled Up Progress

Split

External Tasks

Project Summary

Group By Summary

Inactive Task

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Critical

Critical Split

Progress

Deadline

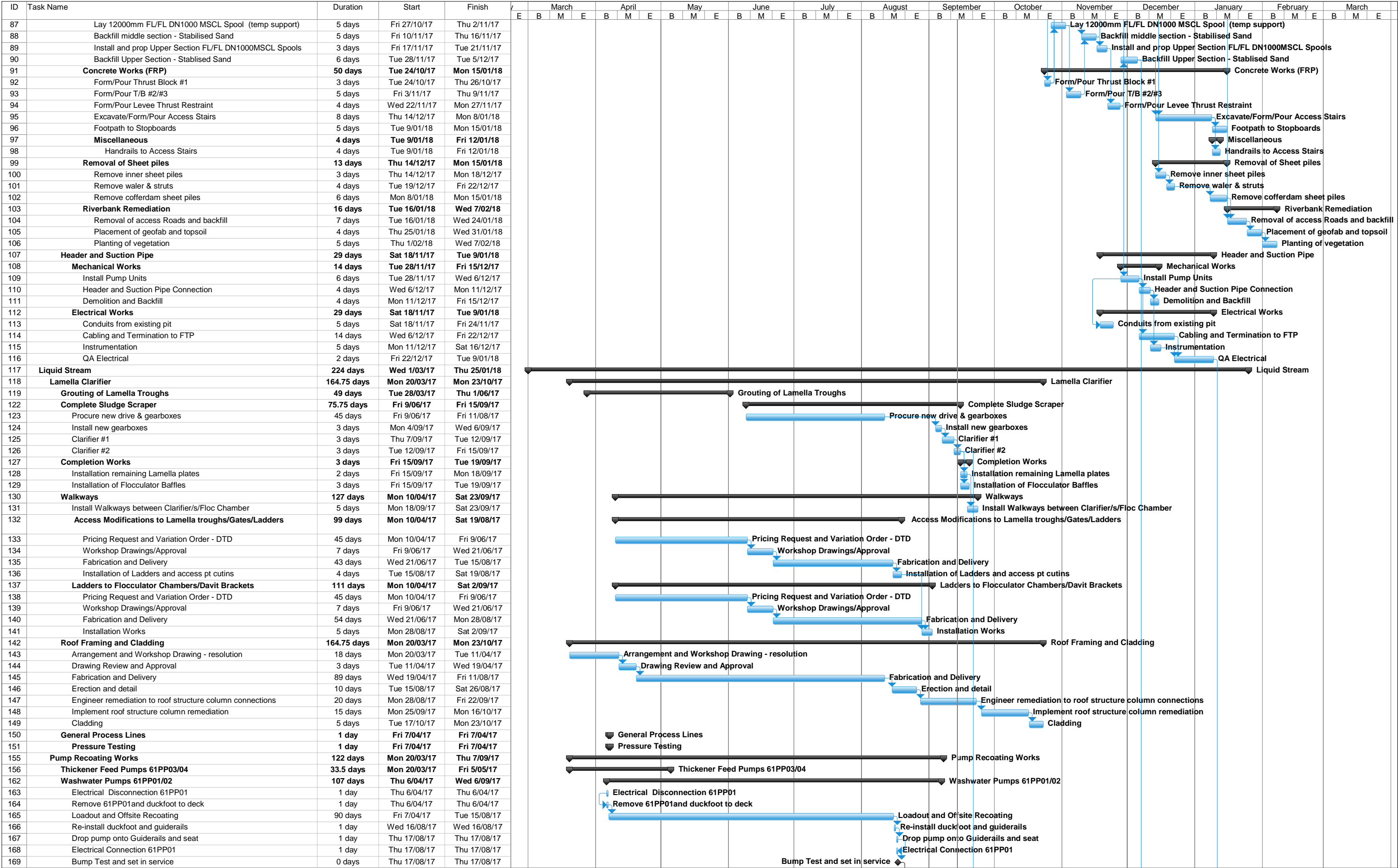
Drawn: Doug Anderson

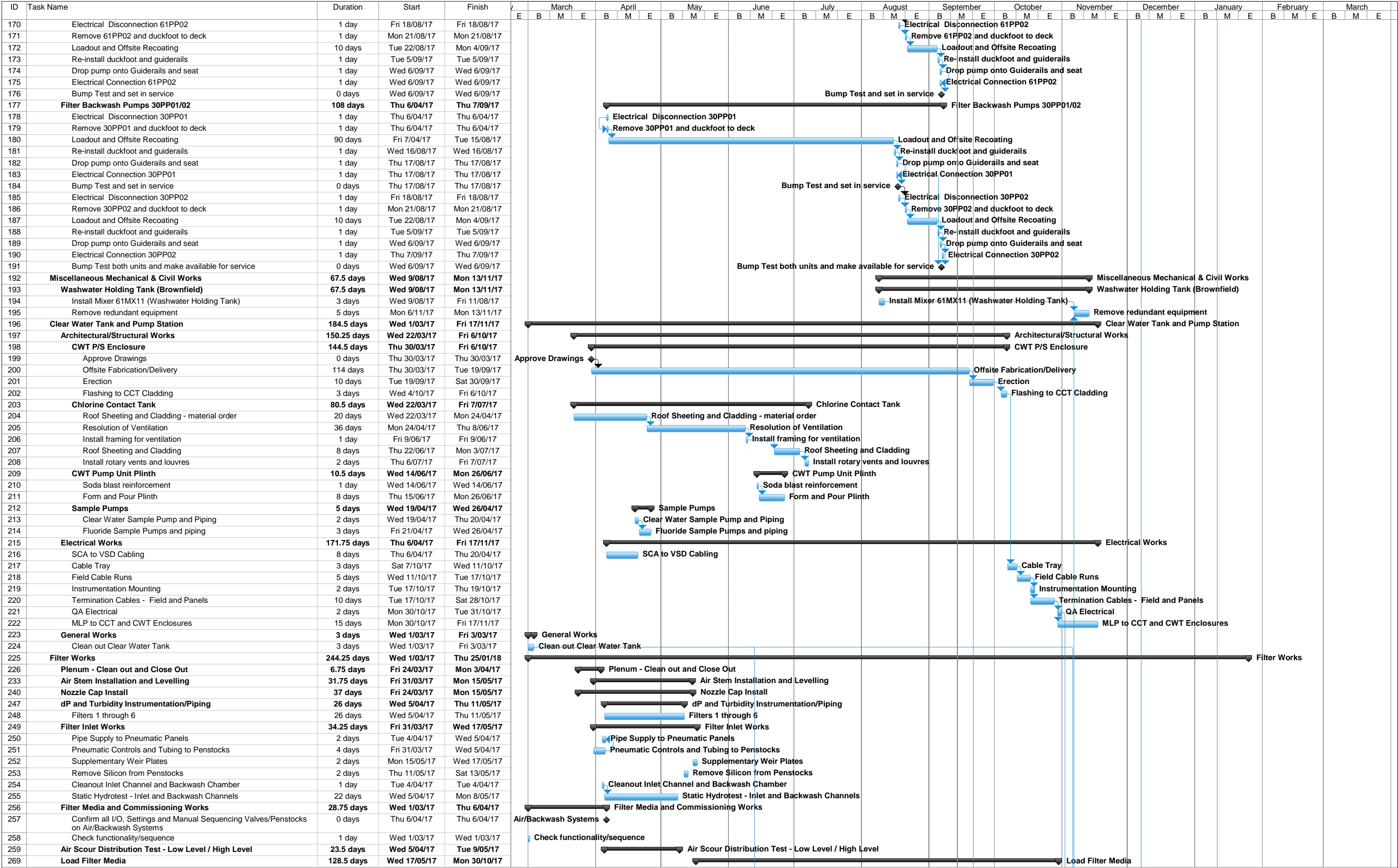
Checked:

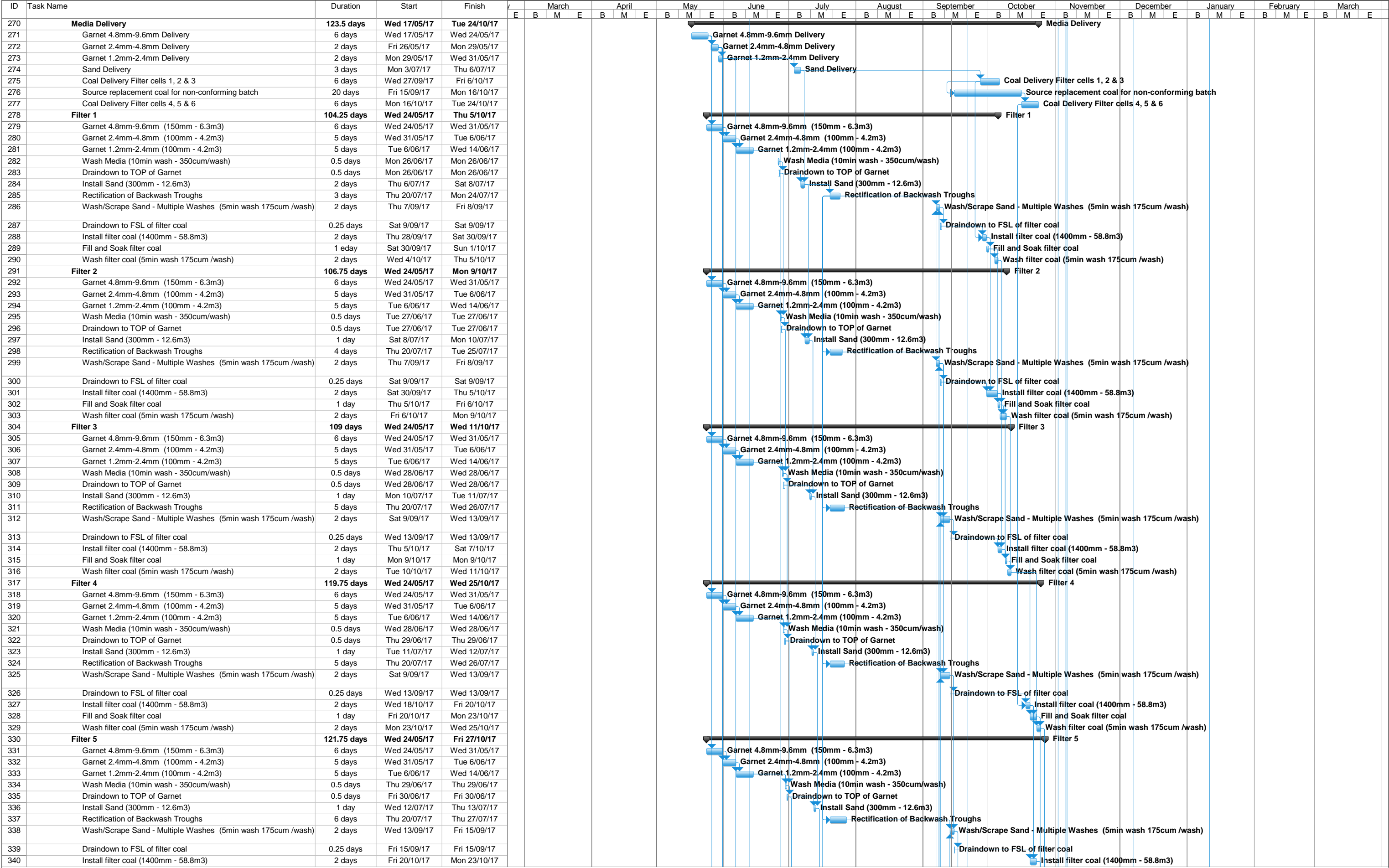
Authorised

Wagga Wagga WTP

Page 1 of 6







Date: Thu 14/09/17
File : Wagga WTP Schedule to Complete.170914.mp

Task

Critical Task

Milestone

Summary

Rolled Up Task

◆

Rolled Up Critical Task

Rolled Up Milestone

Rolled Up Progress

Split

External Tasks

Project Summary

Group By Summary

Inactive Task

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Critical

Critical Split

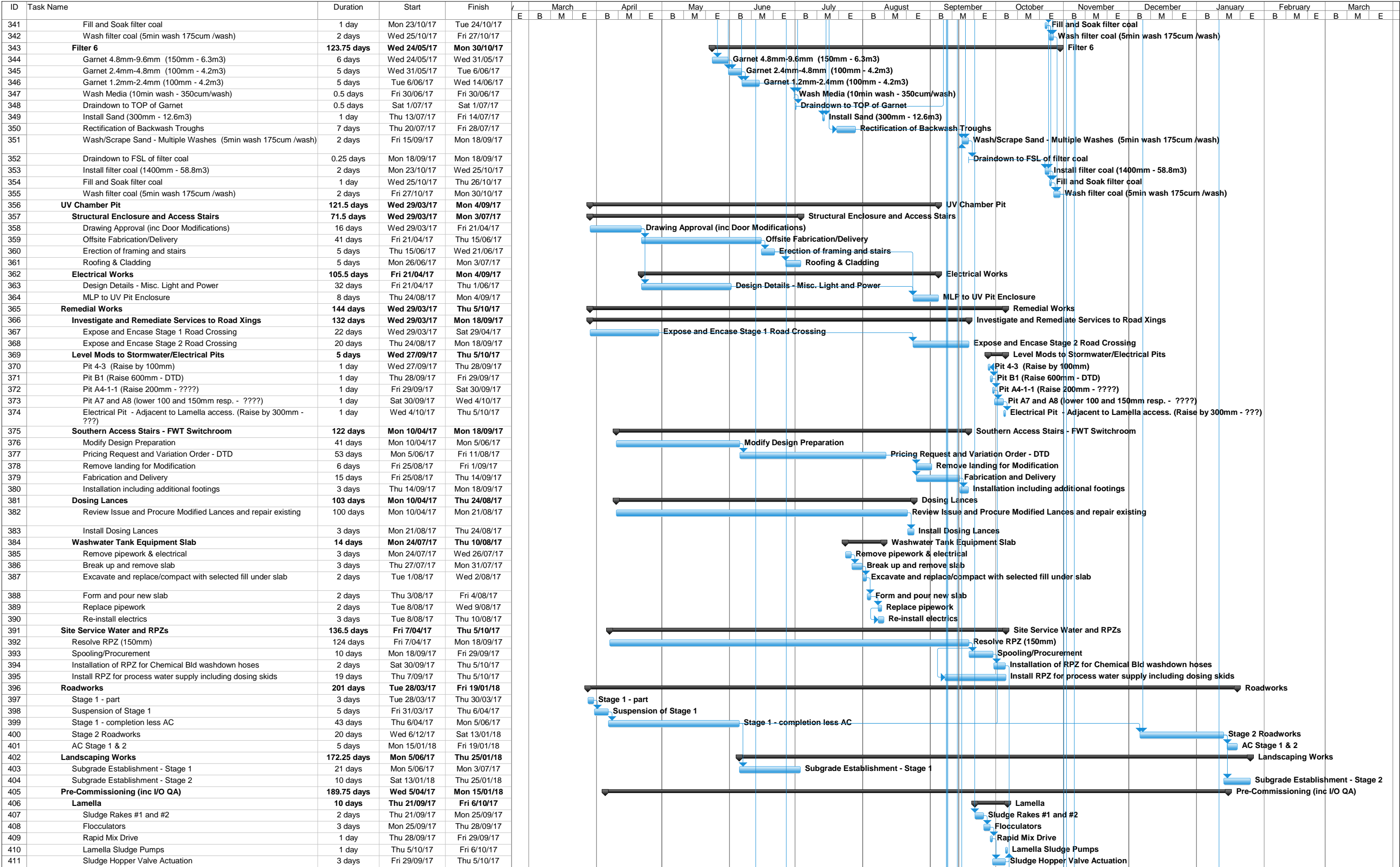
Progress

Deadline

Drawn: Doug Anderson
Checked:
Authorised

Wagga Wagga WTP

Page 4 of 6

 Inactive Summary Manual Task Duration-only Manual Summary Rollup Manual Summary Start-only Finish-only Critical Critical Split Progress Deadline

Drawn: Doug Anderson

Checked:

Authorised

Wagga Wagga WTP

Page 5 of 6

ID	Task Name	Duration	Start	Finish	March	April	May	June	July	August	September	October	November	December	January	February	March
412	Dual Media Filter	119 days	Wed 5/04/17	Thu 21/09/17	E	B	M	E	B	M	E	B	M	E	B	M	E
413	Backwash Pumps - complete repainting and reinstall 1 pump for backwashing	69 days	Thu 1/06/17	Wed 6/09/17													
414	Washwater Pumps 61PP01/02 - complete repainting	80 days	Thu 1/06/17	Thu 21/09/17													
415	Inlet and Backwash Penstock Actuation(complete wiring & test)	5 days	Tue 13/06/17	Mon 19/06/17													
416	Air Scour Blowers	1 day	Wed 5/04/17	Wed 5/04/17													
417	Backwash Inlet, FW Outlet, Offspec, Air Scour Actuation	6 days	Tue 2/05/17	Wed 10/05/17													
418	Remove Bellmouth in F.W Tk	1 day	Tue 20/06/17	Tue 20/06/17													
419	Clear Water System	103 days	Tue 13/06/17	Fri 3/11/17													
420	Bore Water Inlet to CW Tk - Commission Flow Cnt Vlv & FlowTx	1 day	Tue 13/06/17	Tue 13/06/17													
421	Flush & Fill CW & FW Tanks with Bore water	1 day	Mon 26/06/17	Mon 26/06/17													
422	Install temp overflow pipe to stormwater	5 days	Mon 11/09/17	Fri 15/09/17													
423	Clear Water Pumps	3 days	Wed 1/11/17	Fri 3/11/17													
424	Sampling Pumps	1 day	Fri 3/11/17	Fri 3/11/17													
425	Raw Water Intake Works	129.75 days	Mon 3/07/17	Mon 15/01/18													
426	Investigate and design Temp Raw Water pipeline from existing river pumps	51 days	Mon 3/07/17	Mon 11/09/17													
427	Install Temp Raw Water Pipeline to new RW manifold	15 days	Tue 12/09/17	Tue 3/10/17													
428	Connect R.W Pumps 5+6 to new PLC & test run	5 days	Wed 4/10/17	Tue 10/10/17													
429	Commission new RW Instruments & dosing connections	2 days	Wed 4/10/17	Thu 5/10/17													
430	Run Temp RW Pumps - flush and fill temp RW Pipeline	1 day	Fri 6/10/17	Fri 6/10/17													
431	Install new Raw Water Lift Pumps	3 days	Tue 9/01/18	Fri 12/01/18													
432	Air Sparge and Flushing Actuation	1 day	Fri 12/01/18	Mon 15/01/18													
433	Chemical Dosing Systems	7 days	Fri 2/06/17	Tue 13/06/17													
434	Final Clean & Inspect all Chem Storage Tanks	2 days	Fri 2/06/17	Mon 5/06/17													
435	Install manholes and final 'box-up' all Chem tanks	3 days	Fri 23/06/17	Tue 27/06/17													
436	Fill all Chem tks with water & Hydro test	2 days	Wed 28/06/17	Thu 29/06/17													
437	Confirm all Chem Tks Level instruments	1 day	Wed 28/06/17	Wed 28/06/17													
438	Test Run all dosing pumps on water & check dosing lines	2 days	Thu 21/09/17	Fri 22/09/17													
439	Flush and test all Safety Showers & Hoses	1 day	Thu 5/10/17	Fri 6/10/17													
440	Install Chem unloading sump valves.	2 days	Wed 20/09/17	Thu 21/09/17													
441	Test all Chem Unloading systems	1 day	Thu 5/10/17	Fri 6/10/17													
442	Load first Alum Storage Tank	1 day	Fri 6/10/17	Mon 9/10/17													
443	Load Caustic Storage Tank	1 day	Mon 9/10/17	Tue 10/10/17													
444	Load Hypochlorite Storage Tank	1 day	Tue 10/10/17	Wed 11/10/17													
445	Batch & Fill RW Polymer storage	1 day	Wed 11/10/17	Thu 12/10/17													
446	Batch & Fill Filter Aid Polymer Storage	1 day	Thu 12/10/17	Fri 13/10/17													
447	Commission and fill Flouride Storage	3 days	Fri 6/10/17	Wed 11/10/17													
448	Site Acceptance Testing (SAT) - Wet Commissioning	139 days	Tue 27/06/17	Mon 22/01/18													
449	Lamella	93.5 days	Tue 27/06/17	Mon 6/11/17													
450	Fill Lamella/Rapid Mix/Flocculators with Potable	2 days	Mon 9/10/17	Tue 10/10/17													
451	Commission all Lamella Instruments	2 days	Wed 11/10/17	Thu 12/10/17													
452	Test run Rapid Tk Mixer & all Flocc Tks Mixers	1 day	Wed 11/10/17	Wed 11/10/17													
453	SAT/Sequence Testing of RW to Lamellas (o/f to WW Tk)	1 day	Thu 12/10/17	Thu 12/10/17													
454	SAT/ Sequence Testing of Lamellas with Chemical dosing & set dose rates	2 days	Thu 12/10/17	Fri 13/10/17													
455	Dual Media Filter	93.5 days	Tue 27/06/17	Mon 6/11/17													
456	Sequence Testing - backwash	1 day	Tue 27/06/17	Tue 27/06/17													
457	SAT/Sequence Testing - backwash Garnite all filters	2 days	Wed 28/06/17	Thu 29/06/17													
458	SAT/ Sequence Testing Filters Start/ Stop, etc	2 days	Mon 30/10/17	Wed 1/11/17													
459	Re-install FW Tk Bellmouth	1 day	Wed 1/11/17	Thu 2/11/17													
460	Process Water Pump System	2 days	Thu 2/11/17	Mon 6/11/17													
461	Commission Process Water Pump System	2 days	Thu 2/11/17	Mon 6/11/17													
462	Flush and fill Process System & pressurise (isolate temp connection)	2 days	Thu 2/11/17	Mon 6/11/17													
463	Clear Water System	1 day	Mon 6/11/17	Mon 6/11/17													
464	SAT/Sequence Testing of Level Controls	1 day	Mon 6/11/17	Mon 6/11/17													
465	Raw Water System	2 days	Mon 9/10/17	Tue 10/10/17													
466	SAT/Sequence Testing of Temp RW System	2 days	Mon 9/10/17	Tue 10/10/17													
467	Integrated Plant Operation	45 days	Tue 7/11/17	Mon 22/01/18													
468	SAT/Sequence Testing with temp RW Supply	3 days	Tue 7/11/17	Thu 9/11/17													
469	Test Run & Operate Plant - fine tune & adjust (o/f to stormwater)	5 days	Fri 10/11/17	Thu 16/11/17													
470	Chlorine disinfection of Filters, FW Tk, CW Tk & pipelines.	2 days	Fri 17/11/17	Mon 20/11/17													
471	Drain CW Storage & final inspect (blank temp overflow)	2 days	Tue 21/11/17	Wed 22/11/17													
472	Operate Plant and commence post Chlorine and Flouride dosing, fine tune & Adjust - Fil CW Tk, sample & test water quality	2 days	Thu 23/11/17	Fri 24/11/17													
473	Test Run CW Pumps - HL & LW Pumps	2 days	Mon 27/11/17	Tue 28/11/17													
474	Confirm HL & LL Storage Tanks Level Signals & Controls	1 day	Mon 27/11/17	Mon 27/11/17													
475	SAT/ Sequence Testing with CW Pumps on demand	3 days	Tue 28/11/17	Thu 30/11/17													
476	Demonstration Test & Commence Operation on demand, fine tune & adjust	7 days	Fri 1/12/17	Mon 11/12/17													
477	Operate Plant in Auto - monitor & adjust	20 days	Tue 12/12/17	Mon 22/01/18													

Date: Thu 14/09/17
File : Wagga WTP Schedule to Complete.170914.mp

Task

Critical Task

Milestone

Summary

Rolled Up Task

Rolled Up Critical Task

Rolled Up Milestone

Rolled Up Progress

Split

External Tasks

Project Summary

Group By Summary

Inactive Task

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Critical

Critical Split

Progress

Deadline



PROJECT STATUS REPORT



September 2017

PROJECT:	Wagga Wagga WTP Upgrade
CLIENT:	Riverina Water County Council
CONTRACT NO.:	W195
UGL PROJECT NO.:	3200-0485
REPORT DATE:	14 th October 2017
REPORT NO.:	26
PROJECT MANAGER:	Doug Anderson
PREPARED BY:	Doug Anderson

TABLE OF CONTENTS

1.0	SUMMARY	3
2.0	SCOPE OF WORK	3
3.0	HSSE	3
4.0	RISK / CRITICAL ACTION AREAS	4
5.0	CONTRACT/COMMERCIAL	5
5.1	PROGRESS CLAIM	5
5.2	VARIATIONS	6
6.0	FINANCE	9
7.0	PROGRAMME	10
8.0	QUALITY	10
9.0	ENVIRONMENTAL	10
10.0	INDUSTRIAL RELATIONS	10
11.0	DESIGN AND TECHNICAL	10
12.0	COMMISSIONING	11
13.0	STAKEHOLDERS	11
14.0	SITE PROGRESS	12
	APPENDIX A – SCOPE OF WORKS SUMMARY	15
	APPENDIX B – MONTHLY SAFETY REPORT	17
	APPENDIX C – PROJECT PROGRAMME	18

1.0 SUMMARY

Project progress in September was focussed on the following activities:

Electrical works - punchlist items within the filter & lamella area; termination of lamella scraper drives; street light poles; instrumentation site wide; preparation for clearwater pump station cabling; test and quality documentation.

Raw Water Intake – Excavation in cofferdam to required level, permanent sheetpiles installed, additional temporary sheetpiles for crane pads installed. Concrete capping installed between inner & outer sheetpile walls to increase structure integrity, blinding & backblinding completed in preparation for base pour scheduled 13/10/17.

Temporary Raw Water Pipe – pipe from e4xisting river pumps to the raw water manifold now complete.

Clearwater Pump Station Building – Erection of structure commenced.

Lamella roof structure – Issue with column attachment area cracking, additional support bracket to be added, awaiting design from structural engineer.

Filters - Remediation of backwash troughs complete. Load scrape sand and load coal in filters 4, 5 & 6

Civil/plumbing - Civil has focussed on various drainage works; commissioning of safety showers in the chemical building

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 6530 hours. Subcontractor hours recorded on site were 4850. Total hours worked on the project to date is 204,998.

No lost time injuries (LTI) or MTI and no First Aid (FAI) were recorded during the month. A subcontractor sustained a serious finger injury on the 28/9/17, most likely an LTI, this will be included in next month's statistics.

Site inductions of 21 individuals have been undertaken with current total of 657 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 Oct/Nov 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 September: -

Risk Description	Potential Impact	Control Measures
Quality and specification issues	Impact to project efficiency and rate of completion Additional resources required for investigation and remedy. Subcontractor Impact to Client Relations and Perceptions	Ensure incoming inspections are completed with due diligence Engage with subcontractors & suppliers about prompt rectification of issues
Commissioning Program Overrun	Plant not ready for performance trial by the required date.	Commission plant in stages and work with RWCC to optimise sign-off processes. Additional commissioning resources as needed. Install temporary raw water supply to lamella clarifier
Raw Water Works Construction overrun	Constraint on commissioning activities	Plan and execute a temporary raw water supply utilizing the existing RWCC river pumps
Exceptional Inclement Weather	Delays associated with site inundation due to additional rainfall on site and rise in river levels.	Use construction methodologies which mitigate impacts. Inlet structure works completed during low flows in the river. Insurance policies in place Ensure familiarity with RWCC flood response plan

5.0 CONTRACT/COMMERCIAL

5.1 Progress Claim

The table below summarises the progress to the 30th September.

WAGGA WAGGA WATER TREATMENT PLANT

Month

Sep-17

Item No.	Schedule of Prices	Total Claim to date	
		% complete	Claim Value
1	Provision of Preconstruction Activities		
	Preconstruction Activities subtotal (1)	100%	
2	Provision of Project Management and Site Running Activities		
	Prooject Management Activities subtotal (2)	96%	
3	Complete all additional designs, where required		
	Design and Documentation subtotal (2)	100%	
4	Intake Works		
	Intake Works - General subtotal (3)	34%	
5	Raw Water Piping System		
	Raw Water Piping subtotal (4)	57%	
6	Lamella & Rapid Mix Tank		
	Lamella & Rapid Mix Tank subtotal (5)	98%	
7	Filters		
	Filters subtotal (7)	99%	
8	Filter Water Tank & Backwash		
	Filter Water Tank & Backwash subtotal (8)	100%	
9	Machinery Room		
	Machinery Room subtotal (9)	96%	
10	Clear Water Storage & Pumping System		
	Clear Water subtotal (10)	92%	
11	Aluminuium Dosing Plant		
	Aluminium Dosing Plant subtotal (11)	98%	

12	PACL Dosing Plant		
	PACL Dosing Plant subtotal (12)	95%	
13	Caustic Soda Dosing Plant Facilities		
	Caustic Soda Dosing Plant subtotal (13)	97%	
14	Sodium Hydrochlorite Dosing Plant		
	Sodium Hydrochlorite Dosing Subtotal (14)	98%	
15	Polymer Dosing Plant		
	Polymer Dosing Plant subtotal (15)	98%	
16	Fluoride Dosing Plant		
	Fluoride Dosing subtotal (16)	99%	
17	Other Items		
	Other Items subtotal (17)	81%	
18	Electrical Items		
	Electrical subtotal (18)	95%	
19	Testing Demonstration Commissioning		
	Testing Demonstration and Commissioning (19)	14%	
20	Post Process Proving		
	Post Process Proving (20)	0%	
21	Sludge Handling & Dewatering System		
	Sludge Handling subtotal (19)	97%	
22	Other Options Accepted		
	Options subtotal (20)	95%	
23	Variations		
	Variations Subtotal	87%	

5.2 Variations

The table below provides a summary of variations against the contract.

Variation No.	Title	Amount (\$ 000) Excl. GST	Status (May)
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
VO08	Existing Balance Tank Permanent Walkway	127	Not proceeding.
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
VO22	Non-relocation of Workshop Sewer	- 6	Submitted
VO23	Pits under existing centrifuge building - NSC10	8	Approved
VO24	Clear Water Pumps Mechanical Seal	78	Not Proceeding
VO25	Bomen Line	80	Approved at with agreed discount
VO26	NSC11 Material Excavated under UGL Carpark	27	Approved
VO27	NSC12 Asbestos at Wash Water Holding Tank	3	Rejected – UGL Issue NOI10
VO28	NSC13 Poor Ground at Sludge Thickener Tank	20	Submitted
VO29	Filter Water Overflow Changes	-80	Approved
VO30	Site Road Realignment	17	Submitted
VO31	Roof Access Ladder to Centrifuge Building	14	Approved
VO32	NSC14 Damage to Scour Line & Repair	11	Rejected – UGL Issue NOI06
VO33	Flowmeter Modbus Communications	22	Submitted

VO34	Caustic Building Lighting Changes	3	Submitted
VO35	Provision of Eave Linings to buildings	80	Rejected – UGL to Respond
VO36	Sludge Thickener Infill Slab	90	Approved
VO37	NSC15 Reinstall DICL	22	Rejected – UGL Issue NOI07
VO38	Modification to Filter Building Stair	38	Rejected – UGL Issue NOI08
VO39	Field Isolators	67	Rejected – UGL to Respond
VO40	Street Light Fittings	9	Approved
VO41	Offsite cleaning of SS Reo	26	Rejected – UGL to Respond
VO42	Design changes roads and gutters	0	Submitted
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	Not proceeding at \$35
VO46	NSC16 Remove Concrete Slab	4	Approved
VO47	Failed Pressure Test due to Existing Sludge Suction Valve	9	Submitted
VO48	Changes to Sludge Discharge Pipework	25	Rejected – UGL Issue NOI10
VO49	Bore Water Pressure Line Changes	63	Submitted
VO50	Filter Building Pop out Power Outlets	2	Approved
VO51	Centrate Pump Station Re-route to wash water holding	71	Submitted
VO52	Additional Landscaping & Footpaths	167	Rejected – UGL to Respond
VO53	NSC17 Asbestos at A2 to A203	4	Submitted
VO54	Buildings Roof Drainage Connection to Stormwater System	74	Submitted
VO55	High Low Lift Check Valves	24	Submitted
VO56	Rework External Chemical Delivery Pipework	15	Submitted
VO57	Rework of Sludge Thickener Riser	9	Submitted
VO58	Encase Stormwater A4_1 to A4_1_1	11	Submitted
VO59	Encase Stormwater A4_3 to A4_3_2	15	Submitted
VO60	Encase Wash Water under Roadway	42	Submitted
VO61	Raw Water Piping Hazop Changes	54	Submitted
VO62	Ancillary Pipework Material Changes	80	Submitted
VO63	Dewatering Controls Changes	7	Submitted
VO64	Control Room Joinery Changes	22	Submitted
VO65	Thickener Rake Bearing Flushing Line	16	Submitted
VO66	Power Monitor Comms with PLC	5	Submitted
VO67	Additional Reinforcement in WRS	313	Submitted

VO68	Additional Hydrotite Jointing to WRS	43	Submitted
VO69	Provision of Water Meters	12	Submitted
VO70	NSC18 Reroute and Extend Control Room Sewer	15	Submitted
VO71	Encase Stormwater A10 to A11	24	Rejected
VO73	Road Subgrade Replacement	56	Submitted
VO140	Power Failure Alarm Modification	5	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	Approved
W195 Progress Claim 27	Invoice #27	\$ 303,036.00	Pending

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 (16/10/17) 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.

Key revised target construction dates for the month ahead are as follows:-

Activity	Target
Filter Media Loading and Washing	Late Oct 2017
Completion Lamella Installation	Late Oct 2017
Road Works Stage Two Completion	Early Dec 2017
Raw Water Intake Works	Jan 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.

Application to vary the CEMP for RWI works during summer has been submitted to DP&H, awaiting approval.

10.0 INDUSTRIAL RELATIONS

No issues

11.0 DESIGN AND TECHNICAL

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

Public Works RWI dwgs are to be revised re pipe centres and coordinates.

12.0 COMMISSIONING

Commissioning has been focused on confirming equipment operations in the lamella and filter areas and that communications are functioning. There has also been works to set-up instrumentation in field and confirm communications with the PLC.

The sludge handling facility has been partially commissioned to allow processing of the coffer dam water

Filter area is at 75%

Chemical area progressing to allow chemical deliveries mid Oct.

The continuing focus of commissioning in the next month will be to achieve production of spec water.

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.

Outside of the interactions with Department of Planning and EPA, no other significant issues to report with External Stakeholders in the month.

14.0 SITE PROGRESS



Photo 1: Temporary Raw Water Pipeline



Photo 2: Installation of Permanent Sheetpiles



Photo 3: Permanent Sheetpiles and blinding concrete



Photo 4: Installation of concrete capping between inner & outer sheetpile wall



Photo 5: Backblinding and additional blinding



Photo 6: Backblinding and additional blinding



Photo 7: Backblinding and additional blinding

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

HSSE Monthly Safety Report –September 2017

1.0 Overview Statistics

	September 2017	Total to Date
UGL Hours	1680	60,849
Subcontractor hours	4850	144,149
Total Site Hours	6530	204,998
LTIFR: Target <.50	0	0
TRIFR: Target 2.70	0	0
MTIFR:	0	0
Lost Time Injuries (LTI)	0	0
Days lost to LTI	0	0
Medical Treatment Injuries (MTI)	0	0
1 st Aid Injuries	0	5
Incidents:		
Injury	1	6
Damage/ Loss	0	21
Near Miss	00	46
Hazard	9	109
Report Only	1	9
Journey Incident	0	1
Non-work related injury	0	0
Environmental	1	11
Safety Initiatives:	0	13
Workplace Safety Inspections	18	651
Environmental Inspections	4	80
Safety Conversations (UGL)	16	1,047

Utake 5 (UGL)	140	5468
Hazobs	9	495
Site audit (e.g. Plant pre-start)	4	83
SWMS reviews	5	327
Site inductions	21	657
Tool box meetings	4	76
Training hours	0	133
Plant delivery inspections	9	175
Checkit compliance (UGL)	100%	100%
UGL/ External Audits	0	3
Alcohol Breath tests	143	3308
Drug tests	0	176

2.0 Incident Summary

The following incidents occurred on site in September 2017.

Environmental: Fosters Excavation are excavating the footing for new raw water intake at Wagga WTP with the earth and gravel material been excavated from the river and transported to local football ground for disposal (Wagga City council approval) approx. 2.5Km from site by Robbo's Truck Hire, at approx. 4pm during a load been transported by Robbo's truck hire it appears the tail gate of the truck opened and a load of river gravel and wet earth material spilt from the truck at approx. 2 km from site on Koorringal road. At this stage, it is believed the truck driver did not install the trucks rear tail gate pins. A statement from the truck driver is still been requested.

Actions: UGL HSSE inspected the incident location at 4.30 pm and rang Fosters Excavation Owner R Foster and informed him to arrange the following: clean-up of the spill on Koorringal road install warning signage for motorists inform Wagga City council of the spill. These instructions where complied with by Fosters excavation. UGL informed client RWCC of spill at 5.05 pm Fosters Excavations & Robbo Truck hire arranged for the spill of gravel and earth material to clean up & Fosters excavation informed UGL that Wagga City Council cleaned location after peak hour traffic 13/9/2017. UGL HSSE inspected the location at 7.20 am 14/9/2017 and spill had been cleaned up Incident discussed at pre-start 14/9/2017

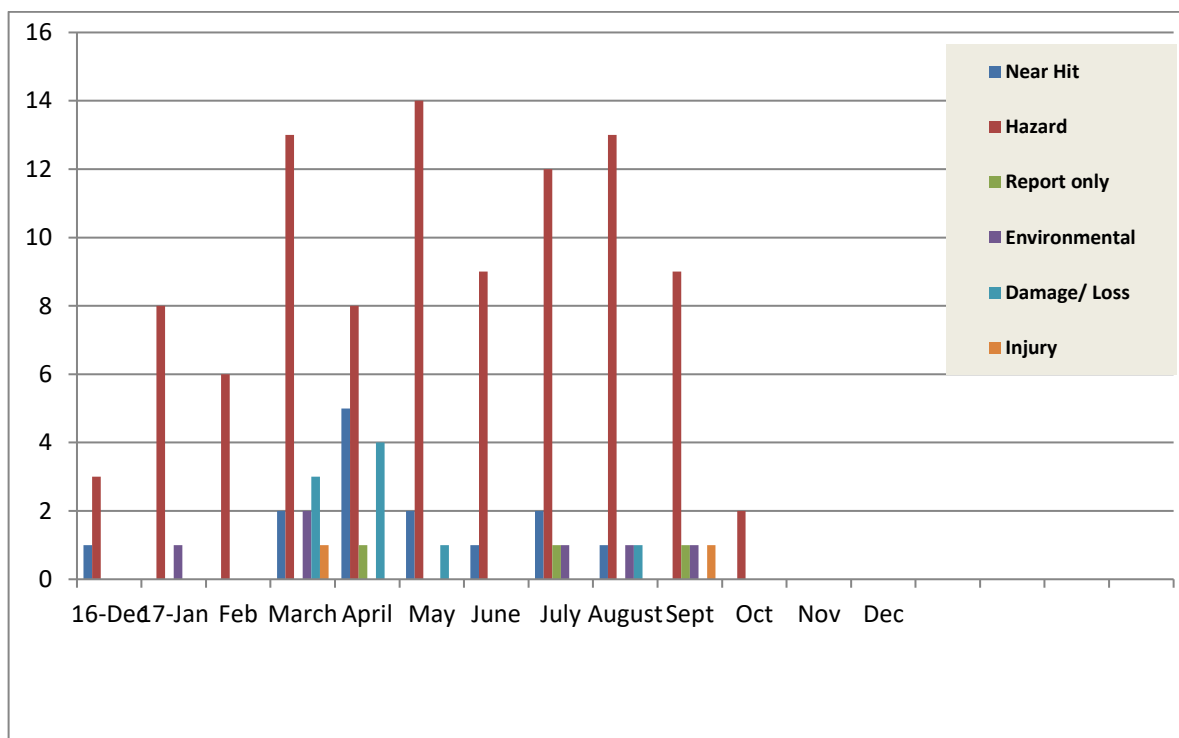
Report Only: During routine water testing of discharge points by Client it was observed when tests returned from the laboratory that an exceedance to the Clients licence requirement had occurred. Multiple work fronts which included UGL were in the vicinity of the area

Actions: Client requested Work to stop immediately in the area- action taken by UGL (lime added) to improve water quality to enable UGL to resume pumping

Injury: DTD rigger working in lamella tank reported injury to ring finger left hand

Actions: Personnel taken for medical treatment- additional information regarding injury to follow as investigation has just started and injured personnel is at medical assessment- information from initial medical assessment in NOTES section of event notification

Wagga Wagga WTP Incident trends



- September 2017 21 Site inductions not including visitor's inductions
- Site wide training in UGL Isolation procedure
- Continuing education of local subcontractors in regards to SWMS & Safety Culture Development/ Awareness
- Safety Award September 2017 Jason Grovenor PCT- Jason DuPont fosters Excavation

3.0 Project Safety Initiatives for October 2017

- **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 WWTP 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:**

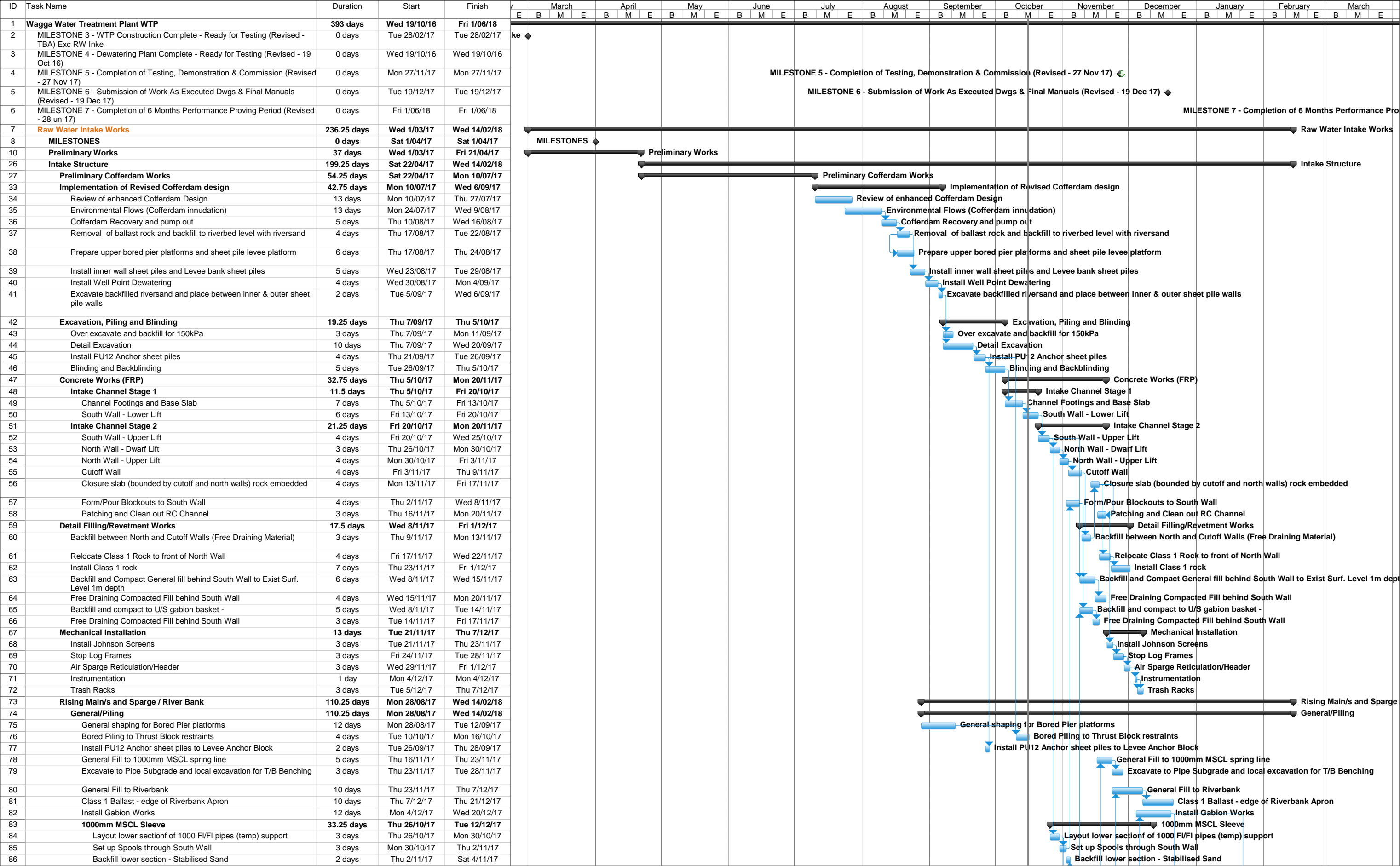
- Continuing Alcohol testing at pre-start meetings
- Drug testing as per Project Safety Management Plan

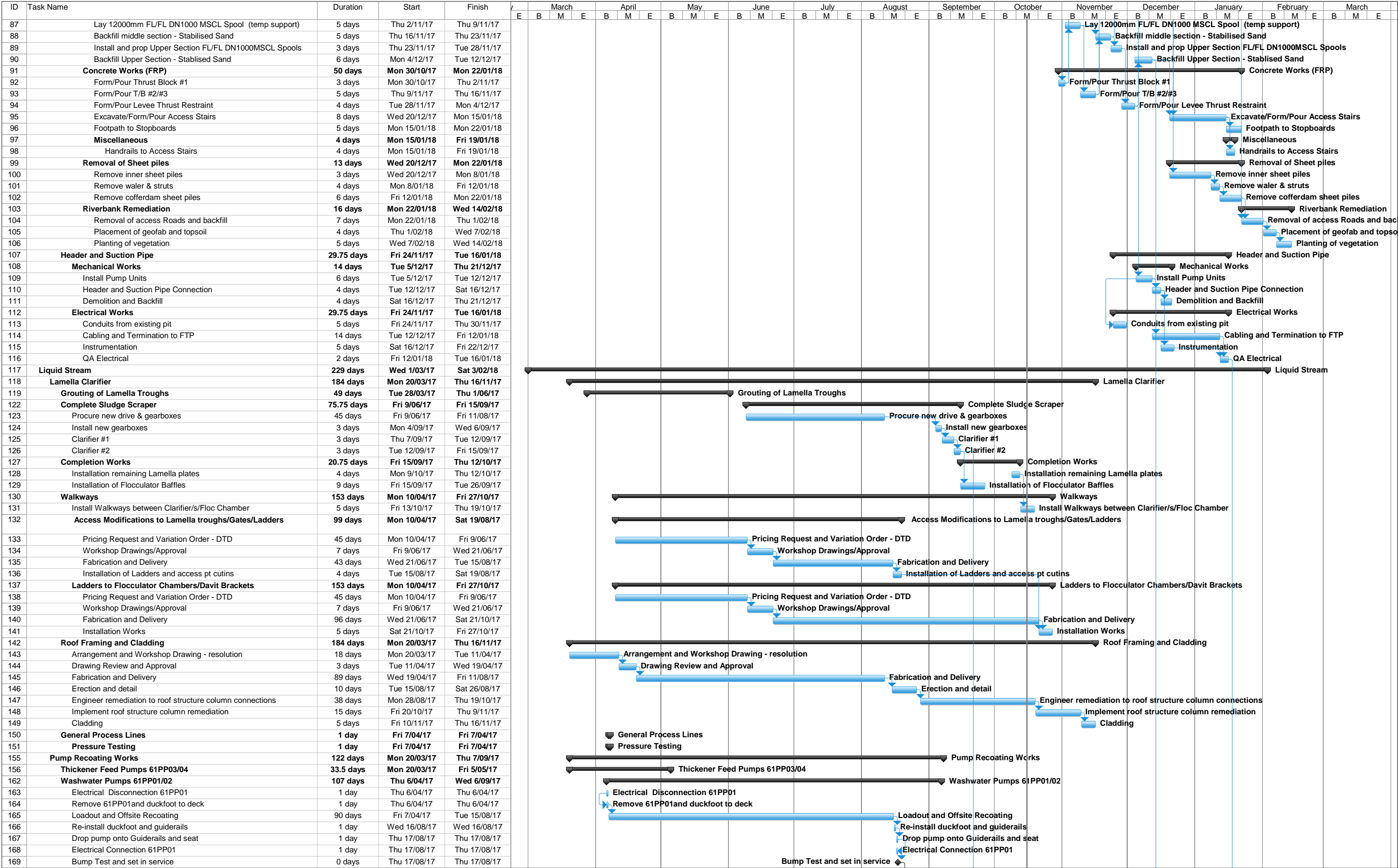
- Continuing Site Environmental inspections and education to subcontractors regarding environmental compliance.

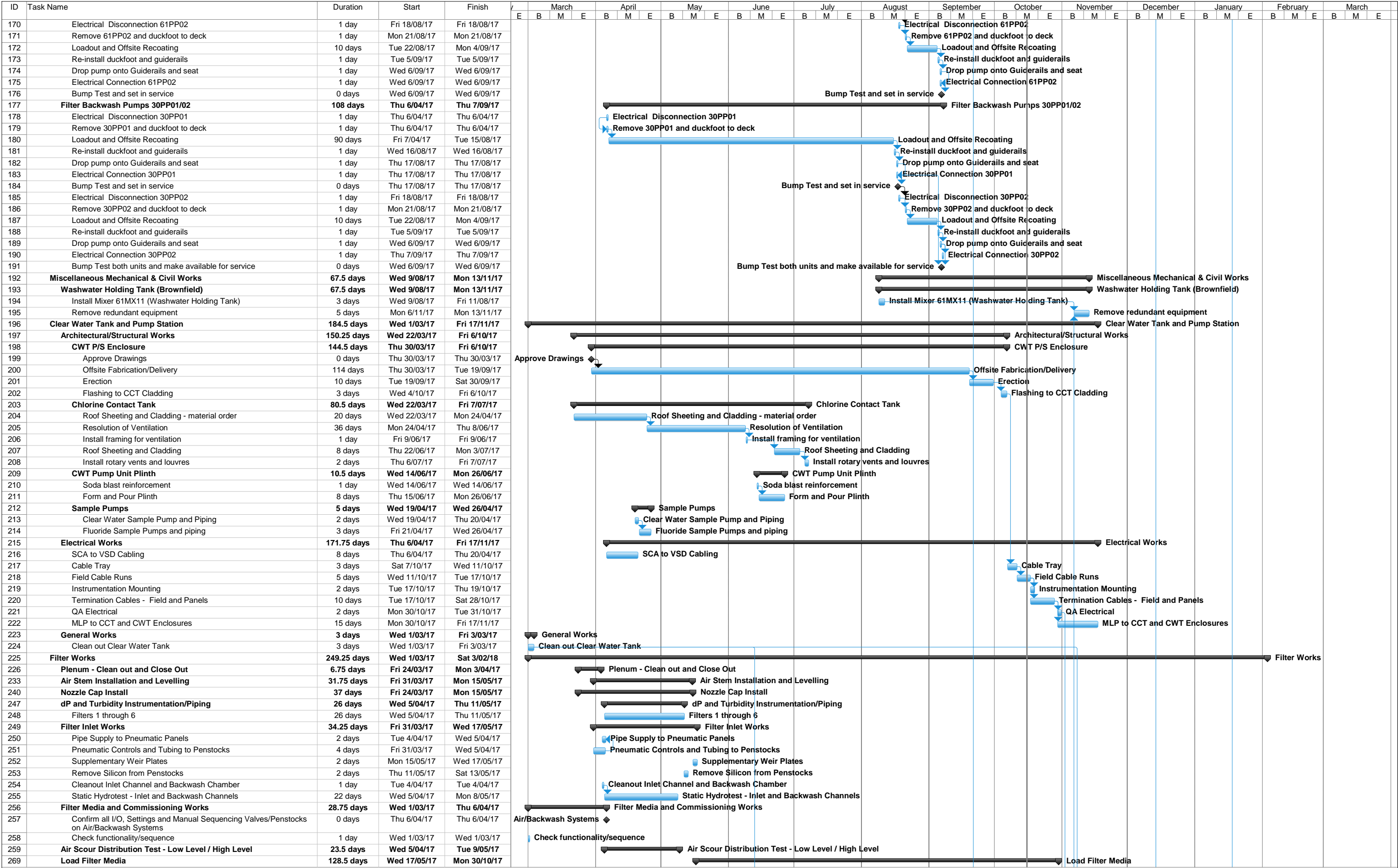
Mark Hunter

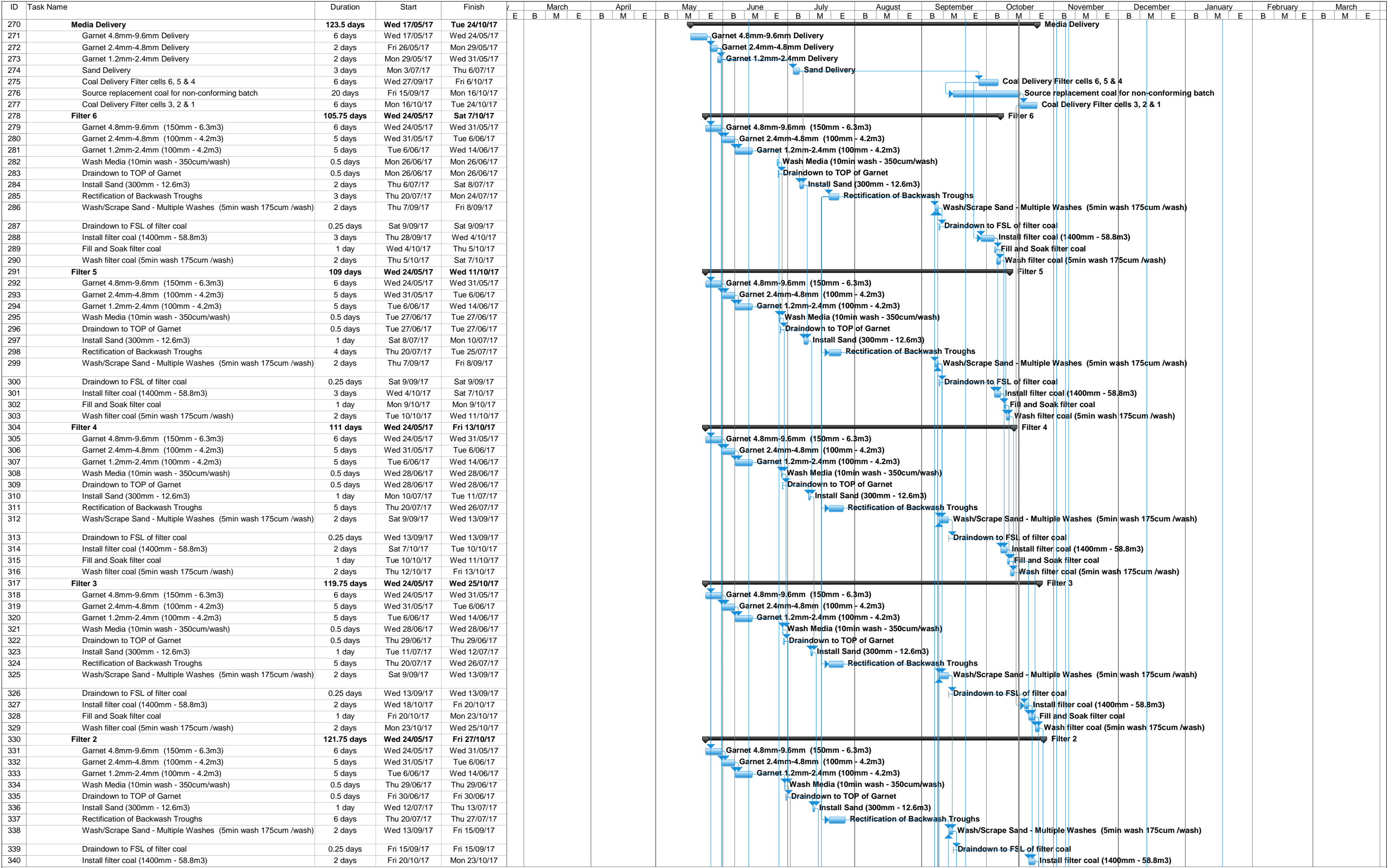
UGL Safety Advisor

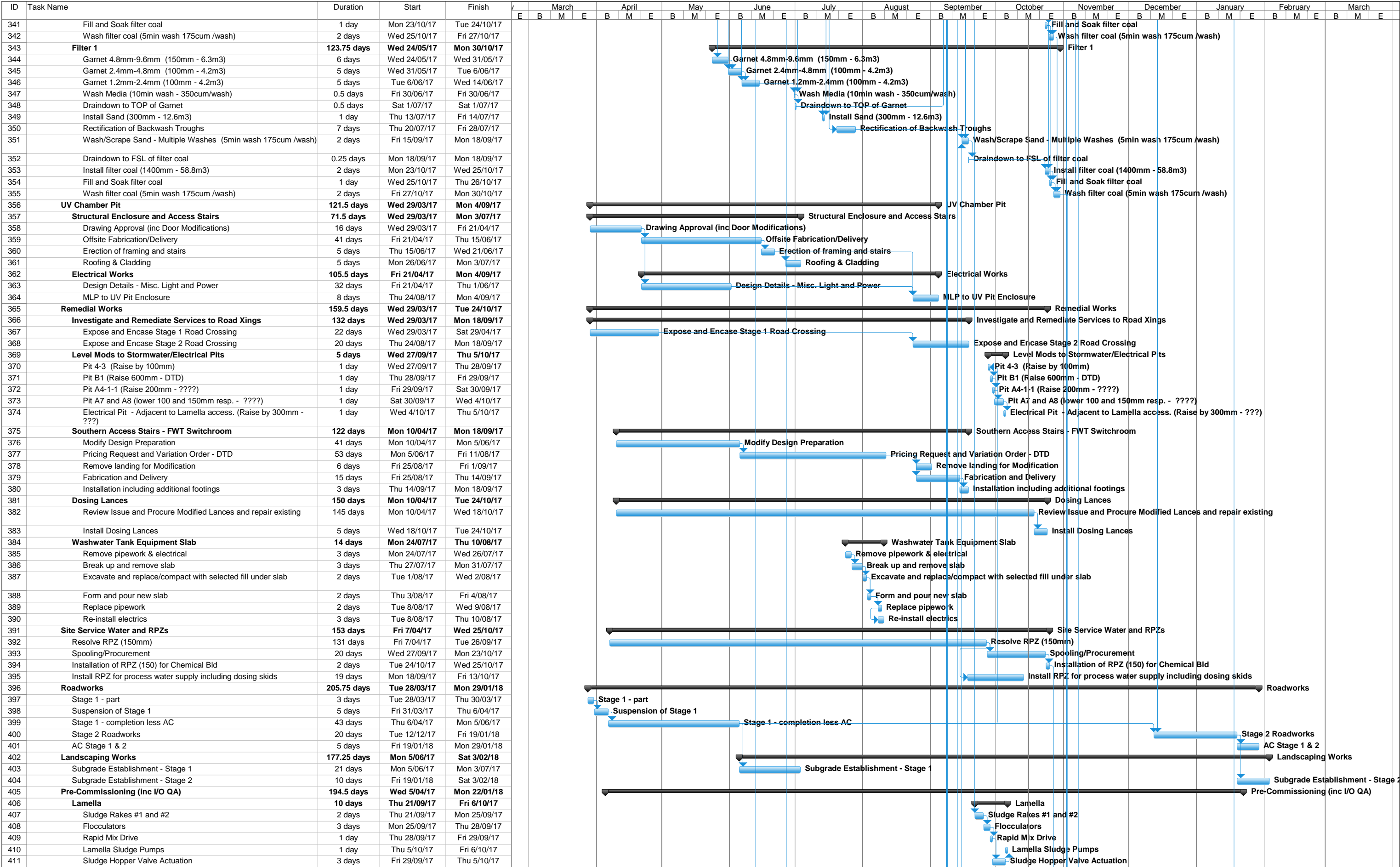
APPENDIX C – PROJECT PROGRAMME











ID	Task Name	Duration	Start	Finish	March	April	May	June	July	August	September	October	November	December	January	February	March
412	Dual Media Filter	119 days	Wed 5/04/17	Thu 21/09/17	E	B	M	E	B	M	E	B	M	E	B	M	E
413	Backwash Pumps - complete repainting and reinstall 1 pump for backwashing	69 days	Thu 1/06/17	Wed 6/09/17													
414	Washwater Pumps 61PP01/02 - complete repainting	80 days	Thu 1/06/17	Thu 21/09/17													
415	Inlet and Backwash Penstock Actuation(complete wiring & test)	5 days	Tue 13/06/17	Mon 19/06/17													
416	Air Scour Blowers	1 day	Wed 5/04/17	Wed 5/04/17													
417	Backwash Inlet, FW Outlet, Offspec, Air Scour Actuation	6 days	Tue 2/05/17	Wed 10/05/17													
418	Remove Bellmouth in F.W Tk	1 day	Tue 20/06/17	Tue 20/06/17													
419	Clear Water System	103 days	Tue 13/06/17	Fri 3/11/17													
420	Bore Water Inlet to CW Tk - Commission Flow Cnt Vlv & FlowTx	1 day	Tue 13/06/17	Tue 13/06/17													
421	Flush & Fill CW & FW Tanks with Bore water	1 day	Mon 26/06/17	Mon 26/06/17													
422	Install temp overflow pipe to stormwater	5 days	Mon 11/09/17	Fri 15/09/17													
423	Clear Water Pumps	3 days	Wed 1/11/17	Fri 3/11/17													
424	Sampling Pumps	1 day	Fri 3/11/17	Fri 3/11/17													
425	Raw Water Intake Works	134.5 days	Mon 3/07/17	Mon 22/01/18													
426	Investigate and design Temp Raw Water pipeline from existing river pumps	51 days	Mon 3/07/17	Mon 11/09/17													
427	Install Temp Raw Water Pipeline to new RW manifold	15 days	Tue 12/09/17	Tue 3/10/17													
428	Connect R.W Pumps 5+6 to new PLC & test run	5 days	Wed 4/10/17	Tue 10/10/17													
429	Commission new RW Instruments & dosing connections	2 days	Wed 4/10/17	Thu 5/10/17													
430	Run Temp RW Pumps - flush and fill temp RW Pipeline	1 day	Tue 17/10/17	Tue 17/10/17													
431	Install new Raw Water Lift Pumps	3 days	Tue 16/01/18	Fri 19/01/18													
432	Air Sparge and Flushing Actuation	1 day	Fri 19/01/18	Mon 22/01/18													
433	Chemical Dosing Systems	7 days	Fri 2/06/17	Tue 13/06/17													
434	Final Clean & Inspect all Chem Storage Tanks	2 days	Fri 2/06/17	Mon 5/06/17													
435	Install manholes and final 'box-up' all Chem tanks	3 days	Fri 23/06/17	Tue 27/06/17													
436	Fill all Chem tks with water & Hydro test	2 days	Wed 28/06/17	Thu 29/06/17													
437	Confirm all Chem Tks Level instruments	1 day	Wed 28/06/17	Wed 28/06/17													
438	Test Run all dosing pumps on water & check dosing lines	2 days	Thu 21/09/17	Fri 22/09/17													
439	Flush and test all Safety Showers & Hoses	1 day	Thu 26/10/17	Thu 26/10/17													
440	Install Chem unloading sump valves.	2 days	Wed 20/09/17	Thu 21/09/17													
441	Test all Chem Unloading systems	1 day	Thu 26/10/17	Thu 26/10/17													
442	Load first Alum Storage Tank	1 day	Fri 27/10/17	Fri 27/10/17													
443	Load Caustic Storage Tank	1 day	Mon 30/10/17	Mon 30/10/17													
444	Load Hypochlorite Storage Tank	1 day	Tue 31/10/17	Tue 31/10/17													
445	Batch & Fill RW Polymer storage	1 day	Wed 1/11/17	Wed 1/11/17													
446	Batch & Fill Filter Aid Polymer Storage	1 day	Thu 2/11/17	Thu 2/11/17													
447	Commission and fill Flouride Storage	3 days	Fri 27/10/17	Tue 31/10/17													
448	Site Acceptance Testing (SAT) - Wet Commissioning	141 days	Tue 27/06/17	Wed 24/01/18													
449	Lamella	97 days	Tue 27/06/17	Thu 9/11/17													
450	Fill Lamella/Rapid Mix/Flocculators with Potable	2 days	Wed 18/10/17	Thu 19/10/17													
451	Commission all Lamella Instruments	2 days	Fri 20/10/17	Mon 23/10/17													
452	Test run Rapid Tk Mixer & all Flocc Tks Mixers	1 day	Fri 20/10/17	Fri 20/10/17													
453	SAT/Sequence Testing of RW to Lamellas (o/f to WW Tk)	1 day	Mon 23/10/17	Mon 23/10/17													
454	SAT/ Sequence Testing of Lamellas with Chemical dosing & set dose rates	2 days	Mon 23/10/17	Tue 24/10/17													
455	Dual Media Filter	97 days	Tue 27/06/17	Thu 9/11/17													
456	Sequence Testing - backwash	1 day	Tue 27/06/17	Tue 27/06/17													
457	SAT/Sequence Testing - backwash Garnite all filters	2 days	Wed 28/06/17	Thu 29/06/17													
458	SAT/ Sequence Testing Filters Start/ Stop, etc	2 days	Fri 3/11/17	Mon 6/11/17													
459	Re-install FW Tk Bellmouth	1 day	Tue 7/11/17	Tue 7/11/17													
460	Process Water Pump System	2 days	Wed 8/11/17	Thu 9/11/17													
461	Commission Process Water Pump System	2 days	Wed 8/11/17	Thu 9/11/17													
462	Flush and fill Process System & pressurise (isolate temp connection)	2 days	Wed 8/11/17	Thu 9/11/17													
463	Clear Water System	1 day	Wed 8/11/17	Wed 8/11/17													
464	SAT/Sequence Testing of Level Controls	1 day	Wed 8/11/17	Wed 8/11/17													
465	Raw Water System	2 days	Wed 18/10/17	Thu 19/10/17													
466	SAT/Sequence Testing of Temp RW System	2 days	Wed 18/10/17	Thu 19/10/17													
467	Integrated Plant Operation	45 days	Thu 9/11/17	Wed 24/01/18													
468	SAT/Sequence Testing with temp RW Supply	3 days	Thu 9/11/17	Mon 13/11/17													
469	Test Run & Operate Plant - fine tune & adjust (o/f to stormwater)	5 days	Tue 14/11/17	Mon 20/11/17													
470	Chlorine disinfection of Filters, FW Tk, CW Tk & pipelines.	2 days	Tue 21/11/17	Wed 22/11/17													
471	Drain CW Storage & final inspect (blank temp overflow)	2 days	Thu 23/11/17	Fri 24/11/17													
472	Operate Plant and commence post Chlorine and Flouride dosing, fine tune & Adjust - Fil CW Tk, sample & test water quality	2 days	Mon 27/11/17	Tue 28/11/17													
473	Test Run CW Pumps - HL & LW Pumps	2 days	Wed 29/11/17	Thu 30/11/17													
474	Confirm HL & LL Storage Tanks Level Signals & Controls	1 day	Wed 29/11/17	Wed 29/11/17													
475	SAT/ Sequence Testing with CW Pumps on demand	3 days	Thu 30/11/17	Mon 4/12/17													
476	Demonstration Test & Commence Operation on demand, fine tune & adjust	7 days	Tue 5/12/17	Wed 13/12/17													
477	Operate Plant in Auto - monitor & adjust	20 days	Thu 14/12/17	Wed 24/01/18													

Date: Mon 16/10/17
File : Wagga WTP Schedule to Complete.171016.mp

Task

Critical Task

Milestone

Summary

Rolled Up Task

Rolled Up Critical Task

Rolled Up Milestone

Rolled Up Progress

Split

External Tasks

Project Summary

Group By Summary

Inactive Task

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Critical

Critical Split

Progress

Deadline

5. FEASIBILITY OF INCORPORATING THE GHSC WATER FUNCTION INTO RWCC OPERATIONS

RECOMMENDATION: that Riverina Water County Council advise Greater Hume Shire Council that it:

- i) **would not** support a proposal to incorporate the GHSC village water scheme into RWCC's existing operations.
 - ii) **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.
 - iii) **would** support a proposal to incorporate the Culcairn town water system into RWCC's existing operations.
-

Background

Greater Hume Shire Council (GHSC) formally approached Riverina Water County Council (RWCC) regarding the investigation of options for their Council's villages potable water scheme and the Culcairn town water scheme being incorporated into RWCC's operations.

Issues

RWCC's Director of Engineering and operational staff met with the GHSC General Manager and Director Engineering on a number of occasions to gather information and investigate the feasibility of the proposal. Three options were analysed: GHSC's water operations in their entirety; the Village scheme standalone; and, the Culcairn township standalone.

The investigations and feasibility of incorporating GHSC's water operations into RWCC's operations is based on the overarching philosophy of adopting 'postage stamp' pricing across the RWCC area.

Proposal 1 The village scheme

The initial investigations centred on whether a combination of RWCC's and GHSC's water allocations had the capacity to supply the villages scheme annual demand requirements. The village scheme's annual demand over the last 5 years is 381ML - applying a 1% population growth factor gave a 2040 annual demand of 465ML.

This is possible through a combination of water sourced from existing capacity in the Culcairn and Walla Walla borefield allocations. Beyond 2040, future capacity would require an increased allocation or a reallocation of existing water rights encased in the present agreement between GHSC and Albury City Council (ACC).

Additional future supply could also come from RWCC's southern trunk main.

The peak day demand was assessed using the current total villages scheme demand figure of 3.1ML/day and applying the growth factor of 1% to get a peak day demand of 3.8ML/day in 2040.

(Note: The Peak Day Demand per connection in the villages scheme is currently 2.2kL/day. This compares slightly lower than Riverina Water's adopted Peak Day Design

flows for new customers which is 2.5kL/day/township connection. There is a danger the figure could increase for the village scheme customers if the cost of water was lowered, however we've chosen to adopt this figure of 2.2kL/day for the analysis to reflect current customer behaviour rather than the more conservative figure of 2.5kL/day).

As a standalone proposal, the village water scheme requires significant capital outlay to connect the system to RWCC's existing network. This enabling infrastructure includes:

- connection to the Walla Walla borefield
- delivery pump station at Walla Walla
- a new balance/storage reservoir between Gerogery and Jinderra
- augmentation to the existing 150mm trunkmain between Gerogery and Jinderra.

Plan showing the existing GHSC village water scheme, *Attachment 1*.

Plan showing the proposed RWCC water supply connection to the GHSC village scheme, *Attachment 2*.

The total cost estimate for this enabling infrastructure is \$8.1 million.

There is a section of old existing main 18km long between the Culcairn water treatment plant and Walla Walla that Council could justify allocating contribution funding for the capital asset renewal of the existing 150mm diameter trunk main. This contribution is estimated to be \$2.2 million, leaving a nett cost of the enabling infrastructure at \$5.9 million.

More detailed cost estimates for this enabling infrastructure can be found in *Attachment 3*.

If the current number of connections (1423) is used to proportion the capital cost, this would be a capital input of \$4,146 per connection. With 1% growth, the village scheme is expected to have approximately 1,735 connections by 2040; this equates to a capital input cost of \$3,400 per connection.

If the current rate of 5% is adopted, the cost of capital alone is \$207 per connection. Without an upfront contribution from the owners, these capital costs are not economically feasible and not recoverable from the current annual access charge of \$314/connection. Based on these figures, proposal 1 was deemed unfeasible and no further analysis was undertaken.

Proposal 2 The entire GHSC water operations

The second option looked at was the whole of the GHSC water function being incorporated into RWCC's operations. This evaluation was simply an extension of the analysis undertaken for proposal 1 above, with the inclusion of the water connections within the Culcairn township.

From GHSC's budget figures, the equivalent number of connections is approximately 2300. Using this figure to distribute the cost of the enabling capital works (acknowledging, this approach recognises a cross-subsidy from the connections within the township of Culcairn to the villages scheme), the capital input would be \$2,565 per connection and the cost of capital is \$129 per connection. This capital cost is not recoverable from the current annual access charge of \$314/connection, and to increase the access charge across the board invokes the inequity of cross subsidisation.

It is not feasible (nor equitable) to ask for a capital contribution from Culcairn residents or unilaterally increase the annual access charge. So, the economic argument reverts to the capital contribution figure in analysis of proposal 1, and the same conclusion is arrived at. That based on these figures, proposal 2 was deemed unfeasible and no further analysis was undertaken.

Proposal 3 Culcairn township water system

The incorporation of the Culcairn township water supply into RWCC's operations would be a relatively simple process. The existing operation could be transferred 'as is' into RWCC's operations and essentially operate the same as it does now. A permanent connection and pressure reduction valve (PRV) giving access to RWCC's southern trunk main would provide a redundancy for the existing borefield and treatment plant that currently provides Culcairn with water.

Note: Culcairn bore field capacity and water allocations are able to meet 2040 demand projections before the need to upgrade Riverina Water's infrastructure connection.

Existing Infrastructure

Investigations have identified some capital replacement requirements with an aging pipe network, a reservoir approaching the end of its life and upgrades to the treatment plant required to meet current and future drinking water standards.

These aforementioned infrastructure upgrades are not difficult to engineer, however, are costly and have previously been identified by GHSC. Funds have been restricted within GHSC's water fund for this future replacement program. Any transfer of assets to RWCC would require a capital contribution from GHSC to ensure both generational equity and customer equity is addressed when this cost burden is incurred in the future.

If Council wish to progress this option, staff would need to more fully understand the water reticulation system, the expected levels of service (relating to pressure), the current condition and renewal requirements of the existing assets. This will allow accurate cost estimates of the asset replacement programme, and expected capital contribution prior to Council entering further discussion with GHSC.

Financial considerations

Various funding sources were investigated in relation to the capital outlay required to connect the villages scheme to RWCC's network. Leaving aside the Culcairn township in these financial considerations, the financial contributions to connect the village scheme is an estimated cost of \$8.13 million. This could be apportioned between the two organisations based on the reasons provided below.

Contribution from RWCC

The project would require the replacement of 18km of 150oPVC/12 trunk main between Culcairn and Walla Walla with an upgrade to 250oPVC/12. It is reasonable to expect RWCC to contribute the proportionate replacement cost of the existing main as part of its asset replacement programme. The cost is estimated at \$2.16 million.

It is reasonable to expect that with improved management and operating costs that come with the efficiencies of a much larger, specialised water authority, savings of \$75,000 per annum could be achieved. This could realistically service loan funding of approximately \$750,000 and provide RWCC with a neutral rate of return. To service this loan, the annual access charge for the village scheme connections would need to remain at the base rate

of \$314 + cpi for a period of ten years, before reverting to the same access charge for the rest of RWCC customers.

This combination of funding from RWCC would total \$2.91 million.

Contribution from GHSC

The remaining \$5.22 million (8.13 – 2.91), would need to be provided by GHSC or external funding (through GHSC).

These works include:

- new pump station in Walla Walla
- new trunk main from Walla Walla to a new Gerogery Balance Storage Reservoir
- a new 2.5ML reservoir at Gerogery
- upgrading of GHSC's internal trunk mains from Gerogery to Jinderra.

External funding

Preliminary investigations into external funding has been undertaken, in particular with the Growing Local Economies funding from the NSW State Government. Taking into consideration the villages area discussed already has the service delivered by another provider, and the capital costs involved in the upgrade, it is not possible to achieve a benefit cost ratio of less than 1.0 for the project. Accordingly, the advice is that the project would be ineligible for funding under this programme.

At this stage of the project feasibility study, it is not appropriate for RWCC to further pursue alternate funding avenues.

Notes to financial considerations

Estimates are based on the concept design only.

The cost estimates are built using current RWCC and industry construction prices. Due to the scale of the project, efficiencies could be achieved, however these cost savings are not significant and would not change the fundamental feasibility outcomes from the analysis.

To connect and incorporate the villages potable water scheme into RWCC operations without a capital contribution from GHSC would not be an acceptable outcome. To provide postage stamp pricing to the GHSC village scheme at RWCC's current rates, would require significant financial subsidisation from RWCC's existing operations.

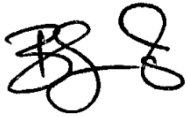
Options

Further investigation could be undertaken on the proposal:

- 1) Financial analysis based on the same differential pricing that is currently in place for the villages water scheme. This further analysis would improve the financial metrics of the feasibility argument, however there appears to be little value for the village scheme resident in this approach, over the existing situation.
- 2) Analysis of using source water from ACC, which is no change from the current supply situation. RWCC's lower operating costs per property and lower management costs per property are not significant enough to provide any meaningful reduction to the rate currently applied to village scheme connections.

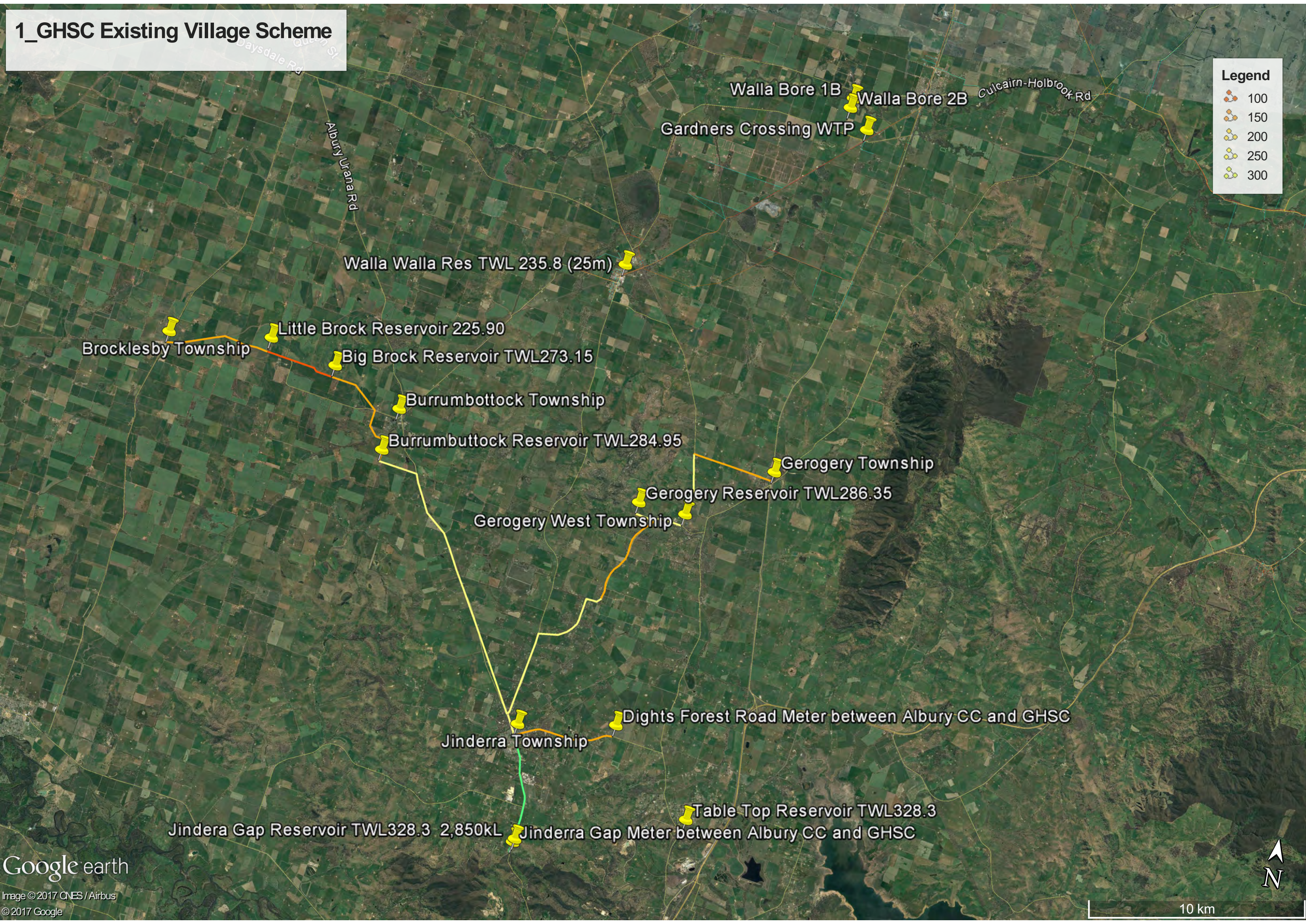
Attachments

- *1 Plan showing the existing GHSC village water scheme.*
- *2 Plan showing the proposed RWCC water supply connection infrastructure to the GHSC village scheme.*
- *3 Detailed cost estimates for the enabling connection infrastructure.*

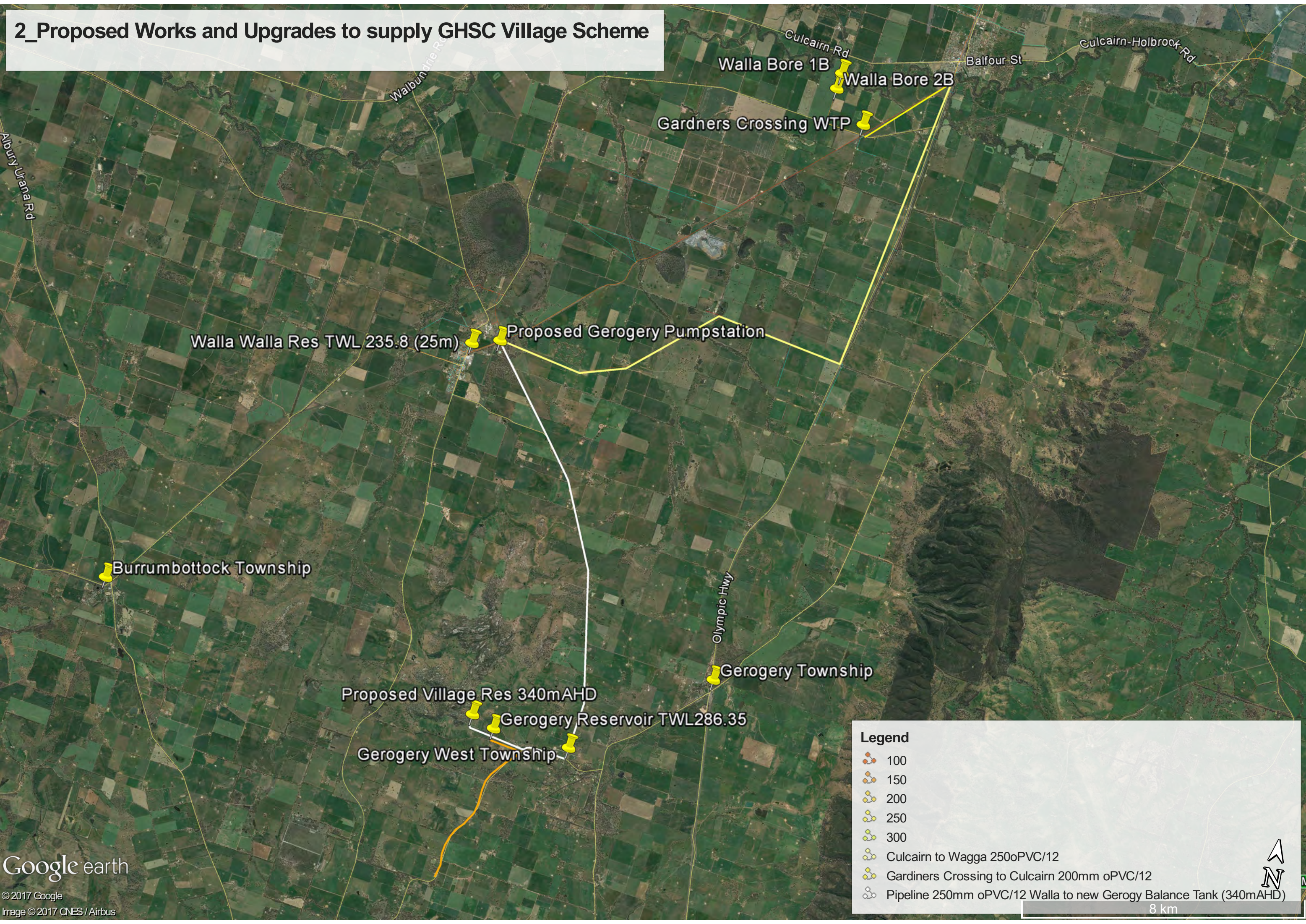
A handwritten signature in black ink, appearing to be 'BS' followed by a stylized flourish.

Bede Spannagle
DIRECTOR OF ENGINEERING

1_GHSC Existing Village Scheme



2_Proposed Works and Upgrades to supply GHSC Village Scheme



Attachment 3: GHSV Village Scheme Supply Proposal

1. Source

Most cost effective option is to utilise existing bore sources from RWCC's Walla Walla borefield and GHSC's Culcairn borefield, rather than constructing new source works, raw water rising main and treatment facility.

Annual Assessment

Annual Supply required for GHSC Village scheme is 465ML (2040 projections)

Utilise 440ML from existing available groundwater allocations:

- Walla Walla Borefield: 200ML available ie. WAL 400ML, currently utilising 200ML
 - Culcairn Borefield: 240ML available ie WAL 450ML, currently utilising 210ML
- ⇒ Available: 440ML for GHSC Village Scheme

PLUS

- 25ML balance required from Wagga's Southern Trunk Main

Peak Day Assessment

GHSC's Village Scheme currently a peak day demand 3.1ML/ day, with a projected peak demand of 3.8ML/day (2040 projections).

- Walla Walla Borefield: 2.5ML/day capacity, currently utilising 1.5ML/day
 - Culcairn Borefield: 2.7ML/day capacity, currently utilising 1.2ML/day for Culcairn township but it's proposed that 100% to be redirected to GHSC Village Scheme during peak demand periods and Wagga's Southern Trunk Main to supply Culcairn Township during peak demand periods
- ⇒ Available: 3.7ML/day for GHSC Village Scheme

Comment(s)

- Consider Culcairn township to be supplied from Wagga's Southern Trunk Main into Culcairn's reservoir(s) via pressure reducing valve, to allow full production of Culcairn Borefield to be directed to GHSC Village Scheme

Source Costs:

- | | |
|--|------------|
| • Upgrading of Walla Borefield: | 20k |
| • Upgrading of Culcairn Borefield | 20k |
| • Southern Trunk Main Connection to Culcairn | 15k |
| ⇒ Total Source Costs | 55k |

2. Treatment Plants

RWCC's Gardiner's Crossing WTP treatment capacity is 1.5ML/day. In order to treat maximum bore inflows of 2.5ML/day, duplication of the aeration basin and tower are required.

It's assumed that Culcairn WTP is already has a treatment capacity sufficient to treat 2.5ML/day borewater.

Treatment Plant Costs

- Upgrading of Gardiners Crossing WTP: 80k
- ⇒ **Total WTP Costs** 80k

3. Pump Stations

The upgrading of:

1. Gardiners Crossing Pump Station is required to deliver the increased flowrates of from 1.5ML/day to 2.5ML/day ie. from 18l/s to 30l/s (with a duty of 85m pressure)
2. Culcairn WTP Pump Station is also required to install additional pump(s) to pump from the CWS to Walla trunk main ie. 25l/s (with a duty of 77m pressure)

A new GHSC Village pump station is required to be installed at Walla Walla on the route to Albury. Consideration may be required to install a balance storage at the expense of breaking suction pressure into this pump station, resulting in higher static lift to the new Gerogery Balance Storage. Analysis was based on not requiring a balance storage.

Pump Station Costs

- Gardiners Crossing WTP Pump Station upgrade: 20k
- Culcairn WTP Pump Station upgrade: 225k
- New Walla-GHSC Village Pump Station: 235k
- ⇒ **Total Pump Station Costs** 480k

4. Trunk Mains

GHSC can utilise RWCC's asset replacement programme to upgrade 18km trunk main from Culcairn to Walla from a 150mm to a 250mm main at reduced cost along Olympic Hwy, along Benambra Road, and then to Walla Walla and the new Gerogery Balance Storage. This is an estimated saving of \$600k compared to constructing a 250mm trunk main along Olympic Hwy to Gerogery, and then to the new Gerogery Balance Storage.

Therefore, in order to provide treated water into the new Gerogery Balance Storage from 1) Gardiners Crossing WTP, 2) Culcairn WTP and 3) the new Walla-GHSC Village Pump Stations, the following trunk mains are required:

Trunk Main Costs

1. Gardiners Crossing WTP to Culcairn:
 - a. 2.16km of 200oPVC/12 @ \$150/m 324k
 2. Culcairn WTP to Walla Walla
 - a. 18.0km of 250oPVC/12 @ \$180/m 3,240k
 - b. LESS 18.0 km of 150oPVC/12 @ \$120/m -2,160k
- ⇒ Subtotal 1,080k

3. Walla Walla to new Gerogery Balance Tank
 - a. 12km of 250oPVC/12 1,800k

⇒ **TOTAL Pipeline Costs 3,204k**

5. Reservoirs

The GHSC Village Scheme is principally supplied via Jinderra Gap Reservoir (2.85ML, TWL 328.3m AHD). It's proposed to install an equivalent storage (ie. 2.5ML) with a Top Water Level of (say) 340m AHD. A slightly higher TWL is in response to hearsay evidence of low pressure in the elevated supply areas from Jinderra Gap Res, and to accommodate higher friction losses between Gerogery and Jinderra.

Reservoir Costs

- New Gerogery Balance Storage 2.5ML: 2,000k
- ⇒ **Total Reservoir Costs 2,000k**

6. Reticulation Improvements

The GHSC Village Scheme was originally designed to be supplied from Jinderra Gap Reservoir to Jinderra Township via a 300mm trunk main. It's envisaged that the various sections of existing trunk main between Gerogery and Jinderra are required to be upgraded. For example, a section of 5.13km of existing 150mm trunk main between Gerogery and Jinderra would need to be augmented.

Further hydraulic analysis would be required to investigate the system improvements.

Internal GHSC Village Reticulation Costs

- Immediate upgrade of mains between Gerogery & Jinderra: 150k
- ⇒ **Total Internal Reticulation Costs 150k**

COSTS SUMMARY

Based on the above preliminary assessment and estimates, the costs summary is tabulated below:

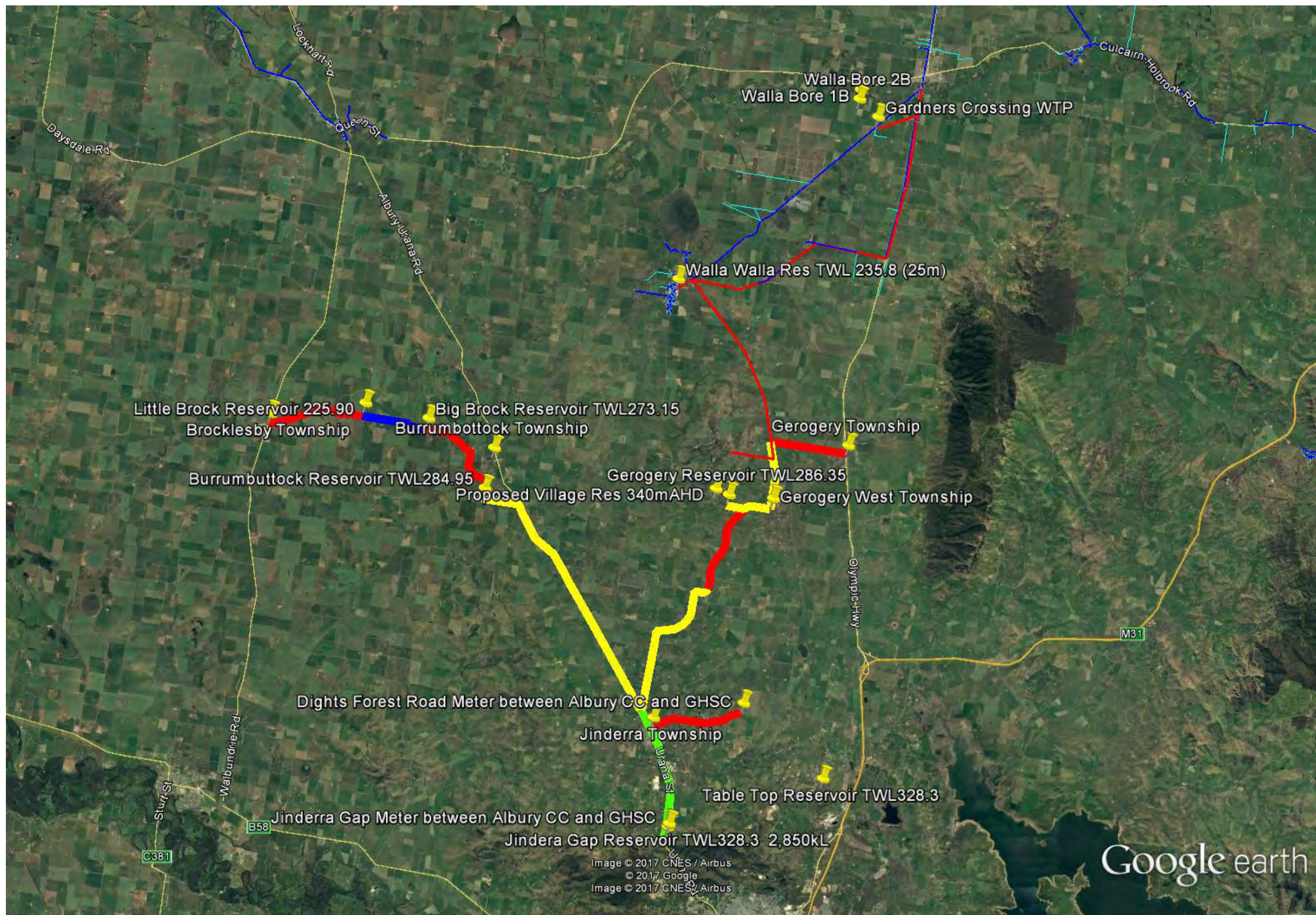
Source Costs	Upgrading of Walla Borefield	20
	Upgrading of Culcairn Borefield	20
	Southern Trunk Main Connection to Culcairn	15
	SubTotal	55
Treatment Costs	Upgrading of Gardiners Crossing WTP	80
Pump Stations	Gardiners Crossing WTP Pump Station upgrade	20
	Culcairn WTP Pump Station upgrade	225
	New Walla-GHSC Village Pump Station	235
	SubTotal	480
Trunk Mains	Gardiners Crossing WTP to Culcairn	324
	Culcairn WTP to Walla Walla	1,080
	Walla Walla to new Gerogery Balance Tank	1,800
	SubTotal	3,204
Reservoir	new Gerogery Balance Storage	2,000
Internal Reticulation	Immediate upgrade of mains between Gerogery & Jinderra	150
	Total Cost Estimate	5,969

Version 1.1

Prepared by:

Jason Ip

Manager Operations



QUESTIONS & STATEMENTS

CLOSURE OF MEETING TO THE PUBLIC **(Confidential Reports)**