



Goldenfields Water County Council
Water Supply Services
Review of Development Servicing Plans
May 2014

Adopted by Council Minute 14/059 – June 2014



Table of Contents

1. Executive Summary	3
2. Introduction	4
3. Administration	5
4. Review of the Developer Charge	7
4.1 Introduction	7
4.2 Growth Projections	7
4.3 Capital Charge	7
4.4 Agglomeration of Capital Charges	8
4.5 Reduction Amount	8
4.6 Calculated Developer Charges	9
4.7 Developer Charges	9
4.7 Developer Charges for High Use Industrial	9
5. Glossary	11

Table Index

Table 1	Definition of DSP Area A	5
Table 2	Definition of DSP Area B	5
Table 3	Initial Capital Charges	7
Table 4	Agglomeration of Service Area Capital Charges	8
Table 5	Summary of Developer Charges	9
Table 6	Comparison of 2006 and 2011 Developer Charges	9
Table 7	Suggested developer charges for 5yr period	9

Appendices

Appendix A Background Documents



1. Executive Summary

The following document provides a review of the 2011 Development Servicing Plans (DSP) as required by the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (December 2002) issued by the former Department of Land and Water Conservation (DLWC); a review of DSP's is required after a period of 5 years.

The review outlines the process undertaken in recalculating the developer charge based on current figures.

The register of existing assets and calculation of developer charges are provided in spreadsheet form in Appendix A.

The review recalculated the developer charge for two DSP areas: Retail customers (Area A) including Oura, Mt Arthur, Hylands Bridge, Mt Daylight and Jugiong Retail service areas; and Bulk customers (Area B) comprising of the Jugiong Bulk service area.

The resulting calculations produced a developer charge of \$12,314 per ET (\$2013/14) for the Retail DSP and \$10,724 per ET (\$2013/14) for the Bulk DSP.



2. Introduction

Section 64 of the *Local Government Act 1993* enables a local government council or water utility to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to section 306 of the *Water Management Act 2000*.

A Development Servicing Plan (DSP) is a document, which details the water supply developer charges to be levied on development areas requiring water supply infrastructure.

The current plan contains two DSPs for areas served by Goldenfields Water County Council (GWCC).

This review has been prepared in accordance with the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (December 2002) issued by the former Department of Land and Water Conservation (DLWC), pursuant to section 306(3) of the *Water Management Act 2000*. The guidelines require a review of DSPs to be conducted after a period of 5 to 6 years.

These DSPs supersede any other requirements related to water supply infrastructure developer charges for the area covered by these DSPs. These DSPs takes precedence over any of Council's codes or policies where there are any inconsistencies relating to water supply developer charges.



3. Administration

In order to maintain consistency in the review process, the areas defined in the Development Servicing Plans of 2011 will be maintained and are defined below:

Table 1 Definition of DSP Area A

DSP Name	GWCC Retail DSP
DSP A	Oura, Mt Arthur, Jugiong Retail, Hylands Bridge, Mt Daylight
DSP Boundaries	The basis for defining the DSP area boundaries are the areas served by the existing Jugiong (areas covering retail customers only), Oura, Mt Arthur, Hylands Bridge and Mt Daylight water supply distribution system and the future assets schedule for the next 5 years.
Payment of Developer Charges	<p>The contribution(s) will be assessed by Council and will apply for 3 months from the date of the assessment notice. Contributions not received by Council within 3 months of the date of notice will be adjusted in accordance with the DSP current at the time of payment.</p> <p>Developer charges are interrelated with the Compliance Certificate which must be submitted to complete a development. A Compliance Certificate will not be issued until the developer charge has been received.</p>
Indexation of Developer Charges	Developer charges will be indexed by 5% per annum

Table 2 Definition of DSP Area B

DSP Name	GWCC Bulk DSP
DSP B	Jugiong Bulk
DSP Boundaries	The basis for defining the DSP area boundaries are the areas served by the existing Jugiong (areas covering bulk customers only) water supply distribution system and the future assets schedule for the next 5 years
Payment of Developer Charges	The contribution(s) will be assessed by Council and will apply for 3 months from the date of the assessment notice. Contributions not received by Council within 3 months of the date of notice will be adjusted in accordance with the DSP current at the time of payment.



DSP Name	GWCC Bulk DSP
	Developer charges are interrelated with the Compliance Certificate which must be submitted to complete a development. A Compliance Certificate will not be issued until the developer charge has been received.
Indexation of Developer Charges	Developer charges will be indexed by 5% per annum



4. Review of the Developer Charge

4.1 Introduction

The developer charge was recalculated based on up-to-date figures. The following sections outline the methodology behind calculation of the developer charge and deviation from figures obtained in the original DSP.

4.2 Growth Projections

The growth rates assumed in the previous DSP were compared to the new connections for the current financial year. With little to no change previous growth rates were maintained.

Also consistent with the previous DSP report, growth of Hylands Bridge and Mt Daylight was determined to be zero, and as such will be excluded from the capital charge calculation. Agglomeration of areas with zero growth results in their exclusion from the capital charge.

4.3 Capital Charge

The capital charge for each service area is based on the present value of the capital cost for assets commissioned after 1970 and future assets planned for the next 5 years. Future assets catering for growth are included in the capital charge.

The capital cost for each asset is multiplied by a 'Return on Investment' factor (ROI) which takes into account the time to full take up of capacity for that asset, the resulting figure is the capital charge. The capital charges for each asset are totalled to produce the capital charge for each respective DSP area.

Table 3 Initial Capital Charges

Service Area	Capital Charge per ET (\$/ET*) \$2013
Oura	\$14,536
Jugiong Retail	\$13,174
Mt Arthur	\$5,980
Jugiong Bulk	\$11,094

* An ET is equal to 250 kL of water per annum

Areas of zero growth (Mt Daylight and Hylands Bridge) have been omitted from the Capital Charge calculation due to zero projected growth over the 25 year horizon. Capital charge is largely dependant on the quantity and value of assets as well as the number of equivalent tenements within the service area.



4.4 Agglomeration of Capital Charges

Areas with capital charges within 30% of the highest capital charge are agglomerated. Water utilities can further consolidate DSP areas by agglomeration, in order to compare with the previous DSP all retail areas have been agglomerated into a single capital charge (DSP Area A) shown in Table below.

Agglomeration of capital charges produces a weighted average capital charge for each DSP area. The weighted capital charge is the summation of each towns capital charge multiplied by the ratio of its growth to total growth of the DSP area.

Table 4 Agglomeration of Service Area Capital Charges

DSP Area	Service Area	Capital Charge per ET (\$/ET*)	Growth of ET (2014-2039)	Capital Charge for each DSP area (\$/ET* \$2013)
A	Oura	\$14,536	1242	
	Jugiong Retail	\$13,174	70	
	Mt Arthur	\$5,980	270	
	Total DSP A		1582	\$13,014
B	Jugiong Bulk	\$11,094	1102	
	Total DSP B		1102	\$11,094

* An ET is equal to 250 kL of water per annum

4.5 Reduction Amount

GWCC has employed the Direct NPV method for calculation of the reduction amount (Refer to Section 4.3 of the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2002)*, DLWC).

The Direct NPV method requires the total number of assessments (residential and non-residential) at year end for each year projected to 2038 for each DSP area. Projected yearly expenditure for renewal works over a 50 year horizon and improved level of service to 2038 are also required in the model. This data is extracted from the capital works program and asset register based on commissioning date and asset life span.

The calculated reduction amounts for DSP Area A (retail) was \$700 per ET (\$2013), while DSP Area B (bulk) was calculated at \$370 per ET. (\$2013) Details of the reduction amount calculation are located in Tables A5 and A6 of Appendix A.



4.6 Calculated Developer Charges

The developer charges recalculated using current figures are summarised in the table below:

Table 5 Summary of Developer Charges

DSP Name	Capital Charge (\$/ET*)	Reduction Amount (\$/ET)	Calculated Developer Charge (\$/ET \$2013)
A: GWCC Retail DSP Area	\$13,014	\$700	\$12,314
B: GWCC Bulk DSP Area	\$11,094	\$370	\$10,724

*An ET is equal to 250 kL of water per annum

Table 6 compares the developer charges obtained from the 2011 DSP report with the 2014 calculated figures.

Table 6 Comparison of 2011 and 2014 Developer Charges

DSP Name	Calculated Developer Charge 2011 (\$/ET*)	Calculated Developer Charge 2014 (\$/ET)
A: GWCC Retail DSP Area	\$14,302	\$12,314**
B: GWCC Bulk DSP Area	\$6,162	\$10,724***

* An ET is equal to 250 kL of water per annum

** The reduction in charge for DSP area A is attributed to the recent revaluation of assets.

*** The increase in charge for DSP area B is attributed to large capital works required to maintain levels of service and the recent major works undertaken.

4.7 Developer Charges

It is noted the developer charge is the maximum that may be levied by the utility; a combination of financial, social and environmental factors should be considered to present a fair and acceptable charge for developers. Table 6 shows the recommended charges considering external factors.

Table 7 Developer charges over 5 years (per ET*)

DSP Name	2014/15	2015/16	2016/17	2017/18	2018/2019
GWCC Retail DSP Area A	\$7,075	\$7,429	\$7,800	\$8,190**	\$8,600**
GWCC Bulk DSP Area B	\$6,470	\$6,794	\$7,134	\$7,491**	\$7,866**

* An ET is equal to 250 kL of water per annum

** Pricing to be approved by the next Board

Note – Pricing does not include 2014 indexing. As the bulk price has been adjusted by 5% this is inconsequential.



4.8 Developer Charge for High Use Industrial Developments

The high use industrial developer charge will be calculated on annual volume with a deduction applied for the constant (non peak) demand on the system. This will be based on the current peak day factor applied to system demands for infrastructure planning.



5. Glossary

Capital Cost	The Present Value (MEERA basis) of assets used to service the development based on recent similar project costings.
Capital Charge	Capital cost of asset per ET x ROI Factor
Developer Charge	A charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development
DSP	Development Servicing Plan
ET	Equivalent Tenement. A measure of the demand a development will place on the infrastructure in terms of the water consumption for an average residential dwelling equal to 250 KI pa
MEERA	Modern Engineering Equivalent Replacement Asset. An asset value calculated on the basis that the asset is constructed at the time of valuation in accordance with modern engineering practice and the most economically viable technologies, which provides similar utility functions to the existing asset in service.
NPV	Net Present Value
Post-1996 Asset	An Asset that was commissioned by a local water utility on or after 1 January 1996 or that is yet to be commissioned
Pre-1996 Asset	An Asset that was commissioned by a local water utility before 1 January 1996
Reduction Amount	The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the capital contribution that will be paid by the occupier of a development as part of future annual charges
ROI Return on investment	Represents the income that is, or could be, generated by investing money
ROI	An area served by a separate water supply system, an area served by a separate sewage treatment works, a separate small town or village, or a new development of over 500 lots.



Appendix A

Background Documents

- ▶ Table A1 Oura DSP Area Capital Charge Calculation
- ▶ Table A2 Mt Arthur DSP Area Capital Charge Calculation
- ▶ Table A3 Jugiong Retail DSP Area Capital Charge Calculation
- ▶ Table A4 Jugiong Bulk DSP Area Capital Charge Calculation
- ▶ Table A5 Direct NPV Reduction Calculation: DSP A
- ▶ Table A6 Direct NPV Reduction Calculation: DSP B

Table A1

Service Area	Oura		Pre 1996 discount rate	3%
Capital Charge	\$14,536	per ET	Post 1996 discount rate	7%
Scheme Capacity	13926	ET	Annual Consumption	250 KL

Current Year: 2013

Asset	Capital Cost (\$'000, 2013\$)	Year Commissioned	Effective year commissioned	Present value 2013 (\$'000)	Capacity (ETs)	Capital Cost (\$/ET)	Year of Full Take-up	Years to full take-up	Discount Rate %	ROI factor	Capital Charge (\$/ET)
Existing Assets (Pre 1996)											
ARIAH PARK PUMPING STATION	114,0784	1973	1996	114.08	8	2038	25	3%	1.39	11	
BARELLAN Town	53.75	1973	1996	53.75	4	2023	10	3%	1.14	4	
BARELLAN Town	182.56	1973	1996	182.56	13	2023	10	3%	1.14	15	
BARELLAN Town	156	1973	1996	156.00	11	2023	10	3%	1.14	13	
BARELLAN Town	24.75	1973	1996	24.75	2	2023	10	3%	1.14	2	
BARELLAN Town	28.4	1973	1996	28.40	2	2023	10	3%	1.14	2	
ARIAH PARK BOOSTER RESERVOIR	116,9607	1973	1996	116.96	8	2038	25	3%	1.39	12	
HEADER MAIN No. 4 - BORE 4 (Oura)	294.38	1974	1996	294.38	21	2038	25	3%	1.39	29	
HEADER MAIN No. 5 - BORE 4 (Oura)	514.14	1974	1996	514.14	37	2038	25	3%	1.39	51	
HEADER MAIN No. 6 - BORE 4 (Oura)	243,663	1974	1996	243.66	17	2038	25	3%	1.39	24	
OURA BORE No. 2	66,8997	1975	1996	66.90	5	2038	25	3%	1.39	7	
OURA BORE No. 2	172,0278	1975	1996	172.03	12	2015	2	3%	1.01	13	
OURA PUMPING STATION	908,2279	1975	1996	908.23	65	2038	25	3%	1.39	91	
OURA PUMPING STATION	2724,8354	1975	1996	2724.84	196	2015	2	3%	1.01	199	
JUNEE REEFS PUMPING STATION	92,2336	1975	1996	92.23	7	2038	25	3%	1.39	9	
TEMORA PUMPING STATION	122,5736	1975	1996	122.57	9	2038	25	3%	1.39	12	
TEMORA PUMPING STATION	199,7889	1975	1996	199.79	14	2015	2	3%	1.01	15	
BARMEDMAN PUMPING STATION	202,3678	1975	1996	202.37	15	2038	25	3%	1.39	20	
BARMEDMAN PUMPING STATION	330,0992	1975	1996	330.10	24	2015	2	3%	1.01	24	
REEFTON PUMPING STATION	133,9511	1975	1996	133.95	10	2038	25	3%	1.39	13	
REEFTON PUMPING STATION	271,8464	1975	1996	271.85	20	2015	2	3%	1.01	20	
HEADER MAIN No. 1 - BORE 2 (Oura)	112,2375	1975	1996	112.24	8	2038	25	3%	1.39	11	
HEADER MAIN No. 2 - BORE 2 (Oura)	418,7555	1975	1996	418.76	30	2038	25	3%	1.39	42	
CH. G418 - CH. G3643 (Oura P.S. to)	1870,98375	1975	1996	1870.98	134	2038	25	3%	1.39	187	
CH. G3643 - CH. G5568	1116,78785	1975	1996	1116.79	80	2038	25	3%	1.39	112	
CH. G5568 - CH. G9923	2526,55325	1975	1996	2526.55	181	2038	25	3%	1.39	253	
CH. G9932 - CH. G24223	8290,92365	1975	1996	8290.90	595	2038	25	3%	1.39	830	
CH. G24223 - CH. G25501 (to Junee B.T)	741,4317	1975	1996	741.43	53	2038	25	3%	1.39	74	
CH. T15 - CH. T24565 (Junee Reefs P.S.)	14242,6825	1975	1996	14242.68	1023	2038	25	3%	1.39	1426	
CH. T24565 - CH. T51592 (to Temora P.S.)	15679,71405	1975	1996	15679.71	1126	2038	25	3%	1.39	1569	
OURA BALANCE TANK	926,2802	1975	1996	926.28	67	2038	25	3%	1.39	93	
SURGE TANK No.1 - CH. G3643	22,775	1975	1996	22.76	2	2038	25	3%	1.39	2	
SURGE TANK No.2 - CH. G5568	22,775	1975	1996	22.76	2	2038	25	3%	1.39	2	
SURGE TANK No.3 - CH. G9923	22,775	1975	1996	22.76	2	2038	25	3%	1.39	2	
SURGE TANK No.4 - CH. G24223	22,775	1975	1996	22.76	2	2038	25	3%	1.39	2	
JUNEE BALANCE TANK No.1	950,0971	1975	1996	950.10	68	2038	25	3%	1.39	95	
JUNEE BALANCE TANK No.2	1260,3236	1975	1996	1260.32	91	2038	25	3%	1.39	126	
JUNEE SILOS PUMPING STATION	22,775	1976	1996	22.76	2	2038	25	3%	1.39	2	
HARFIELD Rural	80,388	1976	1996	80.39	6	2026	13	3%	1.19	7	
GUMLY SOUTH Rural	55.5	1976	1996	55.50	4	2038	25	3%	1.39	6	
GUMLY SOUTH Rural	74,555	1976	1996	74.55	5	2038	25	3%	1.39	7	
GUMLY SOUTH Rural	180.3	1976	1996	180.30	13	2038	25	3%	1.39	18	
GUMLY SOUTH Rural	181.93	1976	1996	181.93	13	2026	13	3%	1.19	16	
GUMLY SOUTH Rural	282.67	1976	1996	282.67	20	2026	13	3%	1.19	24	
GUMLY SOUTH Rural	140.7	1976	1996	140.70	10	2026	13	3%	1.19	12	
GUMLY SOUTH Rural	71.4	1976	1996	71.40	5	2026	13	3%	1.19	6	
GUMLY WEST Rural	198.3	1976	1996	198.30	14	2038	25	3%	1.39	20	
GUMLY WEST Rural	196,692	1976	1996	196.69	14	2038	25	3%	1.39	20	
GUMLY WEST Rural	76,146	1976	1996	76.15	5	2038	25	3%	1.39	8	
GUMLY WEST Rural	178.9	1976	1996	178.90	13	2038	25	3%	1.39	18	
GUMLY WEST Rural	68.65	1976	1996	68.65	5	2026	13	3%	1.19	6	
GUMLY WEST Rural	432.17	1976	1996	432.17	31	2026	13	3%	1.19	37	
GUMLY WEST Rural	407.33	1976	1996	407.33	29	2026	13	3%	1.19	35	
GUMLY WEST Rural	128,478	1976	1996	128.48	9	2026	13	3%	1.19	11	
GUMLY WEST Rural	423.822	1976	1996	423.82	30	2026	13	3%	1.19	36	
EUROLIE ROAD PUMPING STATION	62,197	1977	1996	62.20	4	2038	25	3%	1.39	6	
EUROLIE ROAD PUMPING STATION	167,9319	1977	1996	167.93	12	2017	4	3%	1.04	13	
BRADLEY Rural (Gumly)	59.1	1977	1996	59.10	4	2027	14	3%	1.20	5	
BRADLEY Rural (Gumly)	226,218	1977	1996	226.22	16	2027	14	3%	1.20	20	
BRADLEY Rural (Gumly)	115.8	1977	1996	115.80	8	2027	14	3%	1.20	10	
BRADLEY Rural (Gumly)	48.99	1977	1996	48.99	4	2027	14	3%	1.20	4	
BRADLEY Rural (Gumly)	60,858	1977	1996	60.86	4	2027	14	3%	1.20	5	
BRADLEY Rural (Gumly)	21.42	1977	1996	21.42	2	2027	14	3%	1.20	2	
BRADLEY Rural (Gumly)	8,568	1977	1996	8.57	1	2027	14	3%	1.20	1	
WALLACETOWN Rural	5.25	1977	1996	5.25	0	2027	14	3%	1.20	0	
WALLACETOWN Rural	24.15	1977	1996	24.15	2	2027	14	3%	1.20	2	
WALLACETOWN Rural	82,248	1977	1996	82.25	6	2027	14	3%	1.20	7	
WALLACETOWN Rural	85,422	1977	1996	85.42	6	2027	14	3%	1.20	7	
WALLACETOWN Rural	98,406	1977	1996	98.41	7	2027	14	3%	1.20	9	
WALLACETOWN Rural	8,946	1977	1996	8.95	1	2027	14	3%	1.20	1	
MARRARVALE Rural	203,574	1977	1996	203.57	15	2027	14	3%	1.20	18	
MARRARVALE Rural	71.7	1977	1996	71.70	5	2027	14	3%	1.20	6	
MARRARVALE Rural	126,75	1977	1996	126.75	9	2027	14	3%	1.20	11	
MARRARVALE Rural (Reduced 5.3km)	152,72	1977	1996	152.72	11	2027	14	3%	1.20	13	
MARRARVALE Rural	52,992	1977	1996	52.99	4	2027	14	3%	1.20	5	
MARRARVALE Rural (reduced 0.265km)	108,087	1977	1996	108.09	8	2027	14	3%	1.20	9	
MARRARVALE Rural	148,806	1977	1996	148.81	11	2027	14	3%	1.20	13	
JUNEE - COOLAMON Rural	154.5	1977	1996	154.50	11	2027	14	3%	1.20	13	
JUNEE - COOLAMON Rural (Removed :)	268.35	1977	1996	268.35	19	2027	14	3%	1.20	23	
JUNEE - COOLAMON Rural	29,452	1977	1996	29.45	2	2027	14	3%	1.20	3	
JUNEE - COOLAMON Rural (Reduced b)	64,528	1977	1996	64.53	5	2027	14	3%	1.20	6	
JUNEE - COOLAMON Rural	31.55	1977	1996	31.55	2	2027	14	3%	1.20	3	
JUNEE - COOLAMON Rural	58.8	1977	1996	58.80	4	2027	14	3%	1.20	5	
JUNEE Town	201,875	1977	1996	201.88	14	2038	25	3%	1.39	20	
CALLEEN BALANCE TANK No.1	56,129	1977	1996	56.13	4	2038	25	3%	1.39	6	
CALLEEN BALANCE TANK No.2	56,129	1977	1996	56.13	4	2038	25	3%	1.39	6	
CALLEEN BALANCE TANK No.3	56,129	1977	1996	56.13	4	2038	25	3%	1.39	6	
CALLEEN BALANCE TANK No.4	56,129	1977	1996	56.13	4	2038	25	3%	1.39	6	
MAROR PINNACLE NO.1 RESERVOIR	763,6578	1977	1996	763.66	55	2038	25	3%	1.39	76	
CARTWRIGHTS HILL NO.1 RESERVOIR	1063,8721	1977	1996	1063.87	76	2038	25	3%	1.39	106	
MCKINNONS HILL RESERVOIR	0	1977	1996	0.00	0	2007	1	3%	1.00	0	
TALBINGO LANE PUMPING STATION	75,5466	1978	1996	75.55	5	2038	25	3%	1.39	8	
EUROLIE ROAD RESERVOIR	111,6512	1978	1996	111.65	8	2038	25	3%	1.39	11	
PREUSS Rural (Gumly)	83,176	1979	1996	83.18	6	2029	16	3%	1.24	7	
PREUSS Rural (Gumly)	290,524	1979	1996	290.52	21	2029	16	3%	1.24	26	
PREUSS Rural (Gumly)	154.5	1979	1996	154.50	11	2029	16	3%	1.24	14	
PREUSS Rural (Gumly)	85.8	1979	1996	85.80	6	2029	16	3%	1.24	8	
PREUSS Rural (Gumly)	289,708	1979	1996	289.71	21	2029	16	3%	1.24	26	
PREUSS Rural (Gumly)	223,192	1979	1996	223.19	16	2029	16	3%	1.24	20	
PREUSS Rural (Gumly)</td											

UNGARIE RURAL RESERVOIR	12.8945	1981	1996	12.89	1	2038	25	3%	1.39	1
CONDOLBIN ROAD RESERVOIR	56.4324	1981	1996	56.43	4	2038	25	3%	1.39	6
TEMORA TRANSFER PUMPING STATIC	43.5379	1982	1996	43.54	3	2038	25	3%	1.39	4
TEMORA TRANSFER PUMPING STATIC	111.9546	1982	1996	111.95	8	2022	9	3%	1.12	9
MARINNA PUMPING STATION	144.115	1982	1996	144.12	10	2022	9	3%	1.12	12
JUNEE Town	293.44	1982	1996	293.44	21	2032	19	3%	1.29	27
MARRAR Town	34.7	1983	1996	34.70	2	2038	25	3%	1.39	3
MARINNA - BETHUNGRA Trunk Main	3.552	1983	1996	3.55	0	2033	20	3%	1.31	0
MARINNA - BETHUNGRA Trunk Main	430.051	1983	1996	430.05	31	2033	20	3%	1.31	40
MARINNA - BETHUNGRA Trunk Main	595.626	1983	1996	595.63	43	2033	20	3%	1.31	56
MARINNA - BETHUNGRA Trunk Main	92.4	1983	1996	92.40	7	2033	20	3%	1.31	9
MARINNA - BETHUNGRA Trunk Main	57.45	1983	1996	57.45	4	2033	20	3%	1.31	5
MARINNA - BETHUNGRA Trunk Main	103.638	1983	1996	103.64	7	2033	20	3%	1.31	10
MARINNA - BETHUNGRA Trunk Main	58.65	1983	1996	58.65	4	2033	20	3%	1.31	5
BETHUNGRA Town	229.824	1983	1996	229.82	17	2033	20	3%	1.31	22
BETHUNGRA Town	615.6	1983	1996	615.60	44	2033	20	3%	1.31	58
TEMORA Town	49.28	1983	1996	49.28	4	2033	20	3%	1.31	5
TEMORA Town	236	1983	1996	236.00	17	2033	20	3%	1.31	22
KAMARAH Town	9.5	1983	1996	9.50	1	2033	20	3%	1.31	1
BETHUNGRA RESERVOIR	110.741	1983	1996	110.74	8	2038	25	3%	1.39	11
OLD JUNEE Town	352.9	1984	1996	352.90	25	2034	21	3%	1.32	34
JUNEE Town	119.7	1984	1996	119.70	9	2038	25	3%	1.39	12
JUNEE Town (Reduced 266m)	1832.6	1984	1996	1832.60	132	2034	21	3%	1.32	174
ARIAH PARK Town	108.75	1984	1996	108.75	8	2034	21	3%	1.32	10
JUNEE GOLF ST. RESERVOIR	356.1916	1984	1996	356.19	26	2038	25	3%	1.39	36
JUNEE Town	159.84	1985	1996	159.84	11	2035	22	3%	1.34	15
JUNEE Town	83.5	1985	1996	83.50	6	2035	22	3%	1.34	8
ARDLETHAN Town	41.2	1985	1996	41.20	3	2035	22	3%	1.34	4
WEST WYALONG Town	11.4	1985	1996	11.40	1	2035	22	3%	1.34	1
CH. W14818 - CH. W19822 (Gidgibung)	1841.3469	1986	1996	1841.35	132	2038	25	3%	1.39	184
CH. W26244 - CH. W29972 (Reefton P.S.)	1371.8108	1986	1996	1371.81	99	2038	25	3%	1.39	137
CH. W41416 - CH. W53653 (Barmedmar)	3762.8775	1986	1996	3762.88	270	2038	25	3%	1.39	377
PARAGON GOLD Trunk Main	444	1986	1996	444.00	32	2036	23	3%	1.36	43
ARIAH PARK Town	64.32	1986	1996	64.32	5	2036	23	3%	1.36	6
ARIAH PARK Town	4.83	1986	1996	4.83	0	2036	23	3%	1.36	0
WEST WYALONG TERMINAL STORAGE	3556.9099	1986	1996	3556.91	255	2038	25	3%	1.39	356
OURA BORE No. 5	0	1987	1996	0.00	0	2038	25	3%	1.39	0
OURA BORE No. 5	0	1987	1996	0.00	0	2027	14	3%	1.20	0
TEMORA P.S. - CH. W0 - CH. W1044	4063.9159	1987	1996	4063.92	292	2038	25	3%	1.39	407
W. WYALONG RETIC. - CH. WW660 (tov)	270.6	1987	1996	270.60	19	2037	24	3%	1.38	27
CH. WW660 - CH. WW1996 (to W.W.T.s)	616.23	1987	1996	616.23	44	2037	24	3%	1.38	61
UNGARIE No.2 RESERVOIR (S/PIPE)	535.1976	1987	1996	535.20	38	2038	25	3%	1.39	54
HEADER MAIN No. 7 - BORE 5 (Our)	1047.56025	1988	1996	1047.56	75	2038	25	3%	1.39	105
WYALONG P.S. - CH. U0 - U24466 (to C:	7095.53175	1988	1996	7095.53	510	2038	25	3%	1.39	710
JUNEE Town	62	1988	1996	62.00	4	2038	25	3%	1.39	6
WANTABADGERY Town	237.6	1988	1996	237.60	17	2038	25	3%	1.39	24
WANTABADGERY Rural	48.6	1988	1996	48.60	3	2038	25	3%	1.39	5
WANTABADGERY Rural	44.55	1988	1996	44.55	3	2038	25	3%	1.39	4
WANTABADGERY Rural	144.078	1988	1996	144.08	10	2038	25	3%	1.39	14
WANTABADGERY BREAK PRESSURE T:	26.8509	1988	1996	26.85	2	2038	25	3%	1.39	3
WANTABADGERY RESERVOIR	113.4716	1988	1996	113.47	8	2038	25	3%	1.39	11
WYALONG PUMPING STATION	349.8202	1989	1996	349.82	25	2029	16	3%	1.24	31
TARA PUMPING STATION	75.5466	1989	1996	75.55	5	2038	25	3%	1.39	8
TARA PUMPING STATION	204.3399	1989	1996	204.34	15	2029	16	3%	1.24	18
JUNEE Town	109.8	1989	1996	109.80	8	2038	25	3%	1.39	11
TARA BECTRIC Rural	863.358	1989	1996	863.36	62	2038	25	3%	1.39	86
TARA BECTRIC Rural	548.784	1989	1996	548.78	39	2038	25	3%	1.39	55
TARA BECTRIC Rural	476.85	1989	1996	476.85	34	2038	25	3%	1.39	48
TARA BECTRIC Rural	219.75	1989	1996	219.75	16	2038	25	3%	1.39	22
TARA BECTRIC Rural	487.002	1989	1996	487.00	35	2038	25	3%	1.39	49
TARA BECTRIC Rural	338.928	1989	1996	338.93	24	2038	25	3%	1.39	34
RANNOCK Rural	227.1	1989	1996	227.10	16	2038	25	3%	1.39	23
RANNOCK Rural	83.55	1989	1996	83.55	6	2038	25	3%	1.39	8
RANNOCK (Colamond end) Rural	403.65	1989	1996	403.65	29	2038	25	3%	1.39	40
RANNOCK (Coolamond end) Rural	140.7	1989	1996	140.70	10	2038	25	3%	1.39	14
RANNOCK Rural	155.112	1989	1996	155.11	11	2038	25	3%	1.39	16
RANNOCK Rural	36.708	1989	1996	36.71	3	2038	25	3%	1.39	4
RANNOCK (Colamond end) Rural	90.252	1989	1996	90.25	6	2038	25	3%	1.39	9
MAROR PINNACLE No.2 RESERVOIR	46.5719	1989	1996	46.57	3	2038	25	3%	1.39	5
BECTRIC RESERVOIR	738.4756	1989	1996	738.48	53	2038	25	3%	1.39	74
TARA RESERVOIR	118.9328	1989	1996	118.93	9	2038	25	3%	1.39	12
REEFTON - CHLORINATOR	186.2876	1989	1996	186.29	13	2038	25	3%	1.39	19
BARELLAN Trunk Main	89.55	1990	1996	89.55	6	2038	25	3%	1.39	9
WYALONG Town	21	1990	1996	21.00	2	2038	25	3%	1.39	2
CARTWRIGHTS HILL No.2 RESERVOIR	50.5161	1990	1996	50.52	4	2038	25	3%	1.39	5
TEMORA Town	418	1991	1996	418.00	30	2038	25	3%	1.39	42
BECKOM Town	29.1	1991	1996	29.10	2	2038	25	3%	1.39	3
JUNEE Town	39	1992	1996	39.00	3	2038	25	3%	1.39	4
JUNEE Town	7	1992	1996	7.00	1	2038	25	3%	1.39	1
TEMORA Town	500	1992	1996	500.00	36	2038	25	3%	1.39	50
OURA BORE No. 6	133.9511	1993	1996	133.95	10	2038	25	3%	1.39	13
OURA BORE No. 6	271.8464	1993	1996	271.85	20	2033	20	3%	1.31	25
HEADER MAIN No. 8 - BORE 6 (Our)	47.1295	1993	1996	47.13	3	2038	25	3%	1.39	5
MARRAR Town	98.8	1993	1996	98.80	7	2038	25	3%	1.39	10
OURA BORE No. 3	66.8997	1994	1996	66.90	5	2038	25	3%	1.39	7
OURA BORE No. 3	172.0278	1994	1996	172.03	12	2034	21	3%	1.32	16
HEADER MAIN No. 3 - BORE 3 (Our)	9.225	1994	1996	9.23	1	2038	25	3%	1.39	1
OLD JUNEE Town	62.7	1995	1996	62.70	5	2038	25	3%	1.39	6
UNGARIE Town	27	1995	1996	27.00	2	2038	25	3%	1.39	3
Existing Assets (Post 1996)										
OURA PUMPING STATION - CHLORINA'	186.2876	1998	1998	186.29	13	2038	25	7%	2.00	27
OURA BORE No. 4	111.4995	2000	2000	111.50	8	2038	25	7%	2.00	16
OURA BORE No. 4	260.1655	2000	2000	260.17	19	2038	25	7%	2.00	37
TEMORA Town (French St.)	25.2	2000	2000	25.20	2	2038	25	7%	2.00	4
TEMORA Town (French St.)	31.5	2000	2000	31.50	2	2038	25	7%	2.00	5
TEMORA Town (Aerodrome Road)	30	2000	2000	30.00	2	2038	25	7%	2.00	4
TEMORA Town	9.6	2000	2000	9.60	1	2038	25	7%	2.00	1
ARIAH PARK Town	6	2000	2000	6.00	0	2038	25	7%	2.00	1
WEST WYALONG Town	20.4	2000	2000	20.40	1	2038	25	7%	2.00	3
WEST WYALONG Town	148.8	2000	2000	148.80	11	2038	25	7%	2.00	21
OURA PUMPING STATION - FLUORIDA'	199.3338	2000	2000	199.33	14	2038	25	7%	2.00	29
ARDLETHAN PUMPING STATION	50.6678	2001	2001	50.67	4	2038	25	7%	2.00	7
ILLABO Town (Crowther St.)	13	2001	2001	13.00	1	2038	25	7%	2.00	2
TEMORA Town (Bundawarra Rd.)	46	2001	2001	46.00	3	2038	25	7%	2.00	7
TALBINGO LANE PUMPING STATION	204.3399	2002	2002	204.34	15	2038	25	7%	2.00	29
MARRAR Town (Webb Street)	25	2002	2002	25.00	2	2038	25	7%	2.00	4
JUNEE Town (Crawley Estate)	115.92	2002	2002	115.92	8	2038	25	7%	2.00	17
ILLABO Town (Commis St.)	10	2002	2002	10.00	1	2038	25	7%	2.00	1
ILLABO Town (Turland St.)										

JUNEE Town (Banksia Place)	11	2004	2004	11.00	1	2038	25	7%	2.00	2
BARELLAN Town (potable)	24,375	2004	2004	24.38	2	2038	25	7%	2.00	4
BARELLAN Town (potable)	164.5	2004	2004	164.50	12	2038	25	7%	2.00	24
JUNEE Town (King Street)	6	2005	2005	6.00	0	2038	25	7%	2.00	1
JUNEE Town (Rocky Hill Reservoir Inlet	43.12	2005	2005	43.12	3	2038	25	7%	2.00	6
EURONGILLY Rural	74.16	2005	2005	74.16	5	2038	25	7%	2.00	11
GUMLY WEST Rural (Derick)	10.75	2005	2005	10.75	1	2038	25	7%	2.00	2
TEMORA Town (Bundawarra Rd.)	29	2005	2005	29.00	2	2038	25	7%	2.00	4
TEMORA Town (Bundawarra Rd.)	120	2005	2005	120.00	9	2038	25	7%	2.00	17
Barellan Trunk Main (Burley Griffin/Mirrool	5.04	2005	2005	5.04	0	2038	25	7%	2.00	1
Barellan Trunk Main (Burley Griffin/Mirrool	278.425	2005	2005	278.43	20	2038	25	7%	2.00	40
Barellan Trunk Main (Ardlethan/Newell ren	50,727	2005	2005	50.73	4	2038	25	7%	2.00	7
MIRROOL Trunk Main (part renewal)	43,425	2005	2005	43.43	3	2038	25	7%	2.00	6
WEST WYALONG Town (Industrial Est	26	2005	2005	26.00	2	2038	25	7%	2.00	4
WEST WYALONG Town (Bolte's Rd.)	47.7	2005	2005	47.70	3	2038	25	7%	2.00	7
WEST WYALONG Town (Park-Wooten	67.2	2005	2005	67.20	5	2038	25	7%	2.00	10
WEST WYALONG Town (Crest Estate)	21.34	2005	2005	21.34	2	2038	25	7%	2.00	3
WEST WYALONG Town (Crest Estate)	12,432	2005	2005	12.43	1	2038	25	7%	2.00	2
WEST WYALONG Town (Crest Estate)	37	2005	2005	37.00	3	2038	25	7%	2.00	5
WEST WYALONG Town (Tower Street	1.386	2005	2005	1.39	0	2038	25	7%	2.00	0
WEST WYALONG Town (Tower Street	10,282	2005	2005	10.28	1	2038	25	7%	2.00	1
JUNEE SILOS PUMPING STATION	50,66985	2006	2006	50.67	4	2038	25	7%	2.00	7
ARIAH PARK PUMPING STATION	186,2876	2006	2006	186.29	13	2038	25	7%	2.00	27
BARELLAN PUMPING STATION	30.34	2006	2006	30.34	2	2038	25	7%	2.00	4
BARELLAN PUMPING STATION	22,755	2006	2006	22.76	2	2038	25	7%	2.00	3
JUNEE Town (Gloucester Street)	38.58	2006	2006	38.58	3	2038	25	7%	2.00	6
JUNEE Town (Harold Street)	19.18	2006	2006	19.18	1	2038	25	7%	2.00	3
JUNEE Town (Beach Street)	23.96	2006	2006	23.96	2	2038	25	7%	2.00	3
JUNEE Town (Roberts Street)	26.74	2006	2006	26.74	2	2038	25	7%	2.00	4
JUNEE Town (Percy Street)	67.18	2006	2006	67.18	5	2038	25	7%	2.00	10
JUNEE Town (Hammond Street)	43.69	2006	2006	43.69	3	2038	25	7%	2.00	6
JUNEE Town (Wardle Street)	43.6	2006	2006	43.60	3	2038	25	7%	2.00	6
JUNEE Town (Gwynne Place)	22,9824	2006	2006	22.98	2	2038	25	7%	2.00	3
TEMORA Town (Loftus St.)	53.95	2006	2006	53.95	4	2038	25	7%	2.00	8
TEMORA Town (Nottingham Street)	2.52	2006	2006	2.52	0	2038	25	7%	2.00	0
TEMORA Town (Nottingham Street)	16	2006	2006	16.00	1	2038	25	7%	2.00	2
WYALONG Town (Sturt Street)	6	2006	2006	6.00	0	2038	25	7%	2.00	1
WYALONG Town (Gilbert Street)	2,337	2006	2006	2.34	0	2038	25	7%	2.00	0
ARIAH PARK BOOSTER STORAGE RES	1377,314025	2006	2006	1377.31	99	2038	25	7%	2.00	198
BARELLAN RESERVOIR (Terminal Stora	819.18	2006	2006	819.18	59	2038	25	7%	2.00	118
BARELLAN RESERVOIR (High Level)	659,895	2006	2006	659.90	47	2038	25	7%	2.00	95
JUNEE Town (Adams Street)	21.6	2007	2007	21.60	2	2038	25	7%	2.00	3
JUNEE Town (Loughan Street)	1,232	2007	2007	1.23	0	2038	25	7%	2.00	0
JUNEE Town (Kanaly Square/Gate Stre	10	2007	2007	10.00	1	2038	25	7%	2.00	1
JUNEE Town (Kanaly Square/Gate Stre	3.15	2007	2007	3.15	0	2038	25	7%	2.00	0
JUNEE Town (Lydia Street)	2,016	2007	2007	2.02	0	2038	25	7%	2.00	0
JUNEE Town (Broadway)	1.8	2007	2007	1.80	0	2038	25	7%	2.00	0
JUNEE Town (Broadway)	2,772	2007	2007	2.77	0	2038	25	7%	2.00	0
JUNEE Town (Lydia Street)	1,386	2007	2007	1.39	0	2038	25	7%	2.00	0
TEMORA Town (Waratah Street)	2,016	2007	2007	2.02	0	2038	25	7%	2.00	0
TEMORA Town (Waratah Street)	38	2007	2007	38.00	3	2038	25	7%	2.00	5
TEMORA Town (Ashelford Street)	9,072	2007	2007	9.07	1	2038	25	7%	2.00	1
TEMORA Town (Ashelford Street)	131,544	2007	2007	131.54	9	2038	25	7%	2.00	19
WEST WYALONG (Dumaresque Street)	15.29	2007	2007	15.29	1	2038	25	7%	2.00	2
WEST WYALONG (Dumaresque Street)	13,328	2007	2007	13.33	1	2038	25	7%	2.00	2
WEST WYALONG (Russell Street)	8.1	2007	2007	8.10	1	2038	25	7%	2.00	1
WEST WYALONG (Welshs Street)	5	2007	2007	5.00	0	2038	25	7%	2.00	1
WEST WYALONG (Welshs Street)	12.6	2007	2007	12.60	1	2038	25	7%	2.00	2
MARRAR Town (York Street)	55.65	2008	2008	55.65	4	2038	25	7%	2.00	8
MARRAR Town (York Street)	2,772	2008	2008	2.77	0	2038	25	7%	2.00	0
MARRAR Town (Don Street)	51.2	2008	2008	51.20	4	2038	25	7%	2.00	7
MARRAR Town (Don Street)	4,032	2008	2008	4.03	0	2038	25	7%	2.00	1
MARRAR Town (Don Street)	4,032	2008	2008	4.03	0	2038	25	7%	2.00	1
MARRAR Town (Wise Street)	13.5	2008	2008	13.50	1	2038	25	7%	2.00	2
MARRAR Town (Wise Street)	2,268	2008	2008	2.27	0	2038	25	7%	2.00	0
MARRAR Town (Wood Street)	28.5	2008	2008	28.50	2	2038	25	7%	2.00	4
MARRAR Town (Wood Street)	3,528	2008	2008	3.53	0	2038	25	7%	2.00	1
MARRAR Town (Wood Street)	2,268	2008	2008	2.27	0	2038	25	7%	2.00	0
MARRAR Town (Wood Street)	2,394	2008	2008	2.39	0	2038	25	7%	2.00	0
MARINNA - BETHUNGRA Trunk Main (C	19.61	2008	2008	19.61	1	2038	25	7%	2.00	3
MARINNA - BETHUNGRA Trunk Main (C	1.28	2008	2008	1.28	0	2038	25	7%	2.00	0
MARINNA - BETHUNGRA Trunk Main (C	69,375	2008	2008	69.38	5	2038	25	7%	2.00	10
MARINNA - BETHUNGRA Trunk Main (C	5,312	2008	2008	5.31	0	2038	25	7%	2.00	1
TEMORA Town (Loftus Street)	234.5	2008	2008	234.50	17	2038	25	7%	2.00	34
TEMORA Town (Victoria Street)	23.59	2008	2008	23.59	2	2038	25	7%	2.00	3
TEMORA Town (Narraburra Street/Loftu	504.75	2008	2008	504.75	36	2038	25	7%	2.00	73
TEMORA Town (Bundawarra Rd.)	112.5	2008	2008	112.50	8	2038	25	7%	2.00	16
TEMORA Town (Chifley Street)	54,096	2008	2008	54.10	4	2038	25	7%	2.00	8
TEMORA Town (Tiger Moth Avenue - ne	54.84	2008	2008	54.84	4	2038	25	7%	2.00	8
TEMORA Town (Tiger Moth Avenue - ne	5,292	2008	2008	5.29	0	2038	25	7%	2.00	1
WEST WYALONG (Monash Street - new)	2.4	2008	2008	2.40	0	2038	25	7%	2.00	0
OURA PUMPING STATION HV UPGRADE	464,435	2009	2009	464.44	33	2038	25	7%	2.00	67
MARINNA PUMPING STATION REPLAC	15,425	2009	2009	15.43	1	2038	25	7%	2.00	2
THANOWRING ROAD PUMPING STATIK	93,106	2009	2009	93.11	7	2038	25	7%	2.00	13
REEFTON to BARMEDMAN PS	4070,171475	2010	2010	4070.17	292	2038	25	7%	2.00	586
YIDDAA to WYALONG	3191.85	2010	2010	3191.85	229	2038	25	7%	2.00	460
TEMORA TOWN (Victoria Street)	7.5	2010	2010	7.50	1	2038	25	7%	2.00	1
TEMORA TOWN Complete Reservoir Inte	16.25	2010	2010	16.25	1	2038	25	7%	2.00	2
BARMEDMAN Town	37.5	2010	2010	37.50	3	2038	25	7%	2.00	5
JUNEE - COOLAMON Rural (Melvern La	0.64	2011	2011	0.64	0	2038	25	7%	2.00	0
JUNEE - COOLAMON Rural (Melvern La	18,796	2011	2011	18.80	1	2038	25	7%	2.00	3
JUNEE - COOLAMON Rural (Aerodrome	3.2	2011	2011	3.20	0	2038	25	7%	2.00	0
JUNEE - COOLAMON Rural (Aerodrome	154,445	2011	2011	154.45	11	2038	25	7%	2.00	22
JUNEE Town (Kaiser Sub Olympic Way)	48.45	2011	2011	48.45	3	2038	25	7%	2.00	7
JUNEE Town (Kaiser Sub Olympic Way)	9.1	2011	2011	9.10	1	2038	25	7%	2.00	1
JUNEE Town (Kaiser Sub)	111,664	2011	2011	111.66	8	2038	25	7%	2.00	16
JUNEE Town (Loughan Rd)	2,224	2011	2011	2.22	0	2038	25	7%	2.00	0
TEMORA Town (Loftus St)	6.6	2011	2011	6.60	0	2038	25	7%	2.00	1
BARMEDMAN Town (reservoir outlet)	18,928	2011	2011	18.93	1	2038	25	7%	2.00	3
BARMEDMAN Town (reservoir inlet)	44.73	2011	2011	44.73	3	2038	25	7%	2.00	6
WEST WYALONG (Central Rd)	3.6	2011	2011	3.60	0	2038	25	7%	2.00	1
WEST WYALONG (Showground Rd)	20.3	2011	2011	20.30	1	2038	25	7%	2.00	3
JUNEE BALANCE TANK - Rehabilitation	57,438	2011	2011	57.44	4	2038	25	7%	2.00	8
TEMORA TOWN RES - Rehabilitation	15,608	2011	2011	15.61	1	2031	18	7%	1.67	2
TEMORA TOWN RES - Painted	341,261	2011	2011	341.26	25	2031	18	7%	1.67	41
CALLEEN BALANCE TANK - Rehabilitatio	36.29	2011	2011	36.29	3	2038	25	7%	2.00	5
JUNEE BEACH ST. RES - Rehabilitation	19,992	2011	2011	19.99	1	2038	25	7%	2.00	3
CWRIGHTS HILL N1 RES - Rehabilitati	26,918	2011	2011	26.92	2	2038	25	7%	2.00	4
EURONGILLY Rural (Kameruka Ln)	13.44	2012	2012	13.44	1	2038	25	7%	2.00	2
TEMORA Town (Britannia St)	43	2012	2012	43.00	3	2038	25			

Table A2

Service Area		Mt Arthur					Pre 1996 discount rate			3%			
Capital Charge		\$5,980					per ET			Post 1996 discount rate			
Scheme Capacity		2310					ET			Annual Consumption			
Current Year: 2013													
Asset	Capital cost (\$'000)	Year dollars	Capital Cost (\$'000, 2013\$)	Year Commissioned	Effective year commis- ioned	Present value 2010 (\$'000)	Capacity (ML or ML/d) Capacity (Ets)	Capacity (ETs)	Capital Cost (\$/ET)	Year of full take-up	Years to full take-up	Discount Rate %	Capital Charge (\$/ET)
Existing Assets (Pre 1996)													
LONESDALE LANE PUMPING STATION	42.02	1978	1996	42.02			18		2038	25	3%	1.39	25
LONESDALE LANE PUMPING STATION	108.16	1978	1996	108.16			47		2036	23	3%	1.36	64
COOLAMON Town	39.60	1978	1996	39.60			17		2038	25	3%	1.39	24
GANMAIN PUMPING STATION	171.27	1979	1996	171.27			74		2038	25	3%	1.39	103
GANMAIN No 4 STORAGE RESERVOIR	331.46	1979	1996	331.46			144		2038	25	3%	1.39	200
COOLAMON Town (reduced by 1.095)	58.80	1980	1996	58.80			25		2038	25	3%	1.39	35
MATONG Town	8.90	1985	1996	8.90			4		2038	25	3%	1.39	5
GRONG GRONG Town	233.20	1988	1996	233.20			101		2038	25	3%	1.39	141
GANMAIN Town	90.00	1989	1996	90.00			39		2038	25	3%	1.39	54
COOLAMON Town	85.12	1990	1996	85.12			37		2038	25	3%	1.39	51
COOLAMON Town	75.00	1991	1996	75.00			32		2038	25	3%	1.39	45
COOLAMON Town	750.00	1991	1996	750.00			325		2038	25	3%	1.39	453
Mt. ARTHUR BORE No.1	79.34	1992	1996	79.34			34		2038	25	3%	1.39	48
Existing Assets (Post 1996)													
Mt. ARTHUR BORE No.2	79.34	2000	2000	79.34			34		2038	25	7%	2.00	69
Mt. ARTHUR BORE No.2	214.35	2000	2000	214.35			93		2038	25	7%	2.00	186
GRONG GRONG Town	12.00	2000	2000	12.00			5		2038	25	7%	2.00	10
COOLAMON Town	21.50	2000	2000	21.50			9		2038	25	7%	2.00	19
MATONG Town (Wood Street) (reduced by 54.9km)	2.10	2002	2002	2.10			1		2038	25	7%	2.00	2
GANMAIN Town (Grave Street)	10.20	2002	2002	10.20			4		2038	25	7%	2.00	9
GANMAIN Town (Lake Street)	20.00	2002	2002	20.00			9		2038	25	7%	2.00	17
GANMAIN Town (Hall Street)	20.00	2002	2002	20.00			9		2038	25	7%	2.00	17
GANMAIN - CHLORINATOR	186.29	2002	2002	186.29			81		2038	25	7%	2.00	162
COOLAMON Town (Cowabbe Street North)	19.04	2004	2004	19.04			8		2038	25	7%	2.00	17
COOLAMON Town (Lewis Street)	308.79	2004	2004	308.79			134		2038	25	7%	2.00	268
COOLAMON Town (Wagga Road)	86.25	2004	2004	86.25			37		2038	25	7%	2.00	75
COOLAMON Town (Banksia Street)	22.40	2004	2004	22.40			10		2038	25	7%	2.00	19
COOLAMON Town (Orr Street)	3.50	2005	2005	3.50			2		2038	25	7%	2.00	3
COOLAMON Town (Ivrae Street)	57.00	2005	2005	57.00			25		2038	25	7%	2.00	49
COOLAMON Town (Lewis Street)	7.50	2005	2005	7.50			3		2038	25	7%	2.00	7
COOLAMON Town (Learys Lane)	90.00	2005	2005	90.00			39		2038	25	7%	2.00	78
COOLAMON Town (Dan Curtis Lane)	75.00	2005	2005	75.00			32		2038	25	7%	2.00	65
Mt. ARTHUR BORE No.1	214.35	2006	2006	214.35			93		2038	25	7%	2.00	186
GANMAIN PUMPING STATION	373.64	2006	2006	373.64			162		2038	25	7%	2.00	324
MATONG PUMPING STATION	26.34	2006	2006	26.34			11		2038	25	7%	2.00	23
MATONG PUMPING STATION	58.62	2006	2006	58.62			25		2038	25	7%	2.00	51
Coolamon South Reservoir Inlet Main	17.50	2006	2006	17.50			8		2038	25	7%	2.00	15
Coolamon South Reservoir Inlet Main	125.00	2006	2006	125.00			54		2038	25	7%	2.00	109
COOLAMON Town (Wagga Road)	34.63	2006	2006	34.63			15		2038	25	7%	2.00	30
COOLAMON Town (Hakea Drive)	36.50	2006	2006	36.50			16		2038	25	7%	2.00	32
GANMAIN Town	57.50	2006	2006	57.50			25		2038	25	7%	2.00	50
GANMAIN Town	56.00	2006	2006	56.00			24		2038	25	7%	2.00	49
GANMAIN Town	285.10	2006	2006	285.10			123		2038	25	7%	2.00	247
GANMAIN Town (Lake Street)	21.50	2006	2006	21.50			9		2038	25	7%	2.00	19
GANMAIN No. 1, 2, 3 STORAGE RESERVOIR	910.28	2006	2006	910.28			394		2038	25	7%	2.00	790
LONGSDALES LANE RESERVOIR	88.74	2006	2006	88.74			38		2038	25	7%	2.00	77
COOLAMON SOUTH RESERVOIR	996.67	2006	2006	996.67			432		2038	25	7%	2.00	865
MATONG PUMPING STATION RESERVOIR	458.89	2006	2006	458.89			199		2038	25	7%	2.00	398
COOLAMON Town (Lewis St Subdivision)	26.20	2010	2010	26.20			11		2038	25	7%	2.00	23
COOLAMON Town (Lewis St Subdivision)	4.16	2010	2010	4.16			2		2038	25	7%	2.00	4
COOLAMON Town (Lewis St Rail Xing)	7.00	2010	2010	7.00			3		2038	25	7%	2.00	6
COOLAMON Town (Lewis, Stinson, Methul and Orr St)	24.25	2010	2010	24.25			10		2038	25	7%	2.00	21
COOLAMON Town (Lewis, Stinson, Methul and Orr St)	176.39	2010	2010	176.39			76		2038	25	7%	2.00	153
GANMAIN Town (Waterview Street)	3.15	2010	2010	3.15			1		2038	25	7%	2.00	3
GANMAIN Town (Waterview Street)	11.30	2010	2010	11.30			5		2038	25	7%	2.00	10
MATONG Town (Matong St)	23.00	2011	2011	23.00			10		2038	25	7%	2.00	20
MATONG Town (Matong St)	3.53	2011	2011	3.53			2		2038	25	7%	2.00	3
COOLAMON Town (Mann St)	3.78	2011	2011	3.78			2		2038	25	7%	2.00	3
COOLAMON Town (Mann St)	19.70	2011	2011	19.70			9		2038	25	7%	2.00	17
COOLAMON Town (Hornby Sub Funner St)	7.62	2011	2011	7.62			3		2038	25	7%	2.00	7
COOLAMON Town (Hornby Sub Wallace & Mirool St)	68.80	2011	2011	68.80			30		2038	25	7%	2.00	60
COOLAMON Town (Hornby Sub Mirool St)	1.76	2011	2011	1.76			1		2038	25	7%	2.00	2
COOLAMON Town (Hornby Sub Funner St)	4.03	2011	2011	4.03			2		2038	25	7%	2.00	3
GANMAIN Town (Waterview St)	14.11	2011	2011	14.11			6		2038	25	7%	2.00	12
GANMAIN Town (Waterview St)	24.50	2011	2011	24.50			11		2038	25	7%	2.00	21
GANMAIN Town (Ford & Wright St)	8.00	2011	2011	8.00			3		2038	25	7%	2.00	7
GANMAIN RES - Rehabilitation	13.88	2011	2011	13.88			6		2038	25	7%	2.00	12
LONGSDALES LANE RES - Rehabilitation	9.13	2011	2011	9.13			4		2038	25	7%	2.00	8

Table A3

Service Area		Jugiong Retail					Pre 1996 discount rate		3%		
Capital Charge	\$13,174	per ET			Post 1996 discount rate		7%				
Scheme Capacity	1568	ET			Annual Consumption		250 KL				
Current Year: 2013											
Asset	Capital cost (\$'000)	Capital Cost (\$'000, 2013\$)	Effective year commis- ioned	Present value 2013 (\$'000)	Capacity (ML or ML/d) Capacity (Ets)	Capacity (ETs)	Capital Cost (\$/ET)	Year of full take-up	Years to full take-up	Discount Rate %	Capital Charge (\$/ET) ROI factor
Existing Assets (Pre 1996)											
BAULOORA - TEMORA Trunk Main	2644.62	1975	1996	2644.62	1687	2038	25	3%	1.39	2351	
WALLENDBEEN Town	153.22	1976	1996	153.22	98	2038	25	3%	1.39	136	
WALLENDBEEN Town	438.40	1976	1996	438.40	280	2038	25	3%	1.39	390	
WALLENDBEEN Town	58.80	1976	1996	58.80	38	2038	25	3%	1.39	52	
BRAWLIN Rural	67.35	1980	1996	67.35	43	2038	25	3%	1.39	60	
BRAWLIN Rural	91.35	1980	1996	91.35	58	2038	25	3%	1.39	81	
BRAWLIN Rural	135.65	1980	1996	135.65	87	2038	25	3%	1.39	121	
BRAWLIN Rural	62.79	1980	1996	62.79	40	2038	25	3%	1.39	56	
BRAWLIN Rural	112.52	1980	1996	112.52	72	2038	25	3%	1.39	100	
BRAWLIN RESERVOIR	110.74	1980	1996	110.74	71	2038	25	3%	1.39	98	
DIRNASEER Rural	15.54	1981	1996	15.54	10	2038	25	3%	1.39	14	
DIRNASEER Rural	146.30	1981	1996	146.30	93	2038	25	3%	1.39	130	
DIRNASEER Rural	74.59	1981	1996	74.59	48	2038	25	3%	1.39	66	
DIRNASEER Rural	130.05	1981	1996	130.05	83	2038	25	3%	1.39	116	
DIRNASEER Rural	78.20	1981	1996	78.20	50	2038	25	3%	1.39	70	
DIRNASEER Rural	661.20	1981	1996	661.20	422	2038	25	3%	1.39	588	
DIRNASEER Rural	41.68	1981	1996	41.68	27	2038	25	3%	1.39	37	
DIRNASEER Rural	220.66	1981	1996	220.66	141	2038	25	3%	1.39	196	
DIRNASEER Rural	182.45	1981	1996	182.45	116	2038	25	3%	1.39	162	
DIRNASEER Rural	36.16	1981	1996	36.16	23	2038	25	3%	1.39	32	
FRAMPTON Rural	110.25	1981	1996	110.25	70	2038	25	3%	1.39	98	
FRAMPTON Rural	103.73	1981	1996	103.73	66	2038	25	3%	1.39	92	
FRAMPTON Rural	84.00	1981	1996	84.00	54	2038	25	3%	1.39	75	
FRAMPTON Rural (Reduced by 0.063)	88.53	1981	1996	88.53	56	2038	25	3%	1.39	79	
FRAMPTON Rural	78.52	1981	1996	78.52	50	2038	25	3%	1.39	70	
FRAMPTON Rural	11.59	1981	1996	11.59	7	2038	25	3%	1.39	10	
FRAMPTON Rural	7.06	1981	1996	7.06	5	2038	25	3%	1.39	6	
OLD TEMORA RD. (FRAMPTON) PUMPING	39.75	1982	1996	39.75	25	2038	25	3%	1.39	35	
OLD TEMORA ROAD RESERVOIR	56.43	1982	1996	56.43	36	2038	25	3%	1.39	50	
FRAMPTON RESERVOIR	110.74	1982	1996	110.74	71	2038	25	3%	1.39	98	
MANNINGS RESERVOIR	110.74	1982	1996	110.74	71	2038	25	3%	1.39	98	
DIRNASEER RESERVOIR	110.74	1982	1996	110.74	71	2038	25	3%	1.39	98	
WALLENDBEEN RESERVOIR	115.75	1982	1996	115.75	74	2038	25	3%	1.39	103	
STOCKINBINGAL Town	155.00	1983	1996	155.00	99	2038	25	3%	1.39	138	
COOTAMUNDRA Rural	46.50	1987	1996	46.50	30	2038	25	3%	1.39	41	
STOCKINBINGAL Town	122.00	1988	1996	122.00	78	2038	25	3%	1.39	108	
WALLENDBEEN Town	9.50	1993	1996	9.50	6	2038	25	3%	1.39	8	
Existing Assets (Post 1996)											
DIRNASEER Rural	1.80	2000	2000	1.80	1	2038	25	7%	2.00	2	
OLD TEMORA RD. (FRAMPTON) PUMPING	98.61	2002	2002	98.61	63	2038	25	7%	2.00	126	
DIRNASEER Rural	104.01	2004	2004	104.01	66	2038	25	7%	2.00	133	
DIRNASEER Rural	56.05	2004	2004	56.05	36	2038	25	7%	2.00	72	
FRAMPTON Rural (Grays)	8.78	2005	2005	8.78	6	2038	25	7%	2.00	11	
STOCKINBINGAL Town (Duduman Road)	2.92	2007	2007	2.92	2	2038	25	7%	2.00	4	
STOCKINBINGAL Town (Duduman Road)	2.00	2007	2007	2.00	1	2038	25	7%	2.00	3	
1/3 BAULOORA - TEMORA Trunk Main	4055.76	2008	2008	4055.76	2587	2038	25	7%	2.00	5187	
SPRINGDALE Town	12.60	2008	2008	12.60	8	2038	25	7%	2.00	16	
TEMORA EAST RESERVOIR	1077.72	2009	2009	1077.72	687	2038	25	7%	2.00	1378	
BRAWLIN Rural	0.38	2010	2010	0.38	0	2038	25	7%	2.00	0	
BRAWLIN Rural	0.38	2010	2010	0.38	0	2038	25	7%	2.00	0	
FRAMPTON Rural (Creek Crossing)	1.45	2011	2011	1.45	1	2038	25	7%	2.00	2	
Murray St Offtake	6.00	2012	2012	6.00	4	2038	25	7%	2.00	8	
FRAMPTON Rural - Offtake Extension	132.50	2012	2012	132.50	85	2038	25	7%	2.00	169	
Future Assets											

Table A4

Service Area		Jugiong - Bulk						Pre 1996 discount rate		3%			
Capital Charge	\$11,094	per ET						Post 1996 discount rate		7%			
Scheme Capacity	13032	ET						Annual Consumption		250 KL			
Current Year: 2013													
Asset	Capital cost (\$'000)	Capital Cost dollars	Year 2013\$	Effective year commis- ioned	Present value 2013\$'000	Capacity (ML or ML/d)	Capacity (Ets)	Capital Cost (\$/ET)	Year of full take-up	Years to full take-up	Discount Rate %	ROI factor	Capital Charge (\$/ET)
Existing Assets (Pre 1996)													
ROSEHILL PUMPING STATION	300.6694	1975	1996	300.67	23	2038	25	3%	1.39	32			
DEMONDRILLE PUMPING STATION	238.6241	1975	1996	238.62	18	2038	25	3%	1.39	26			
PRUNEVALE PUMPING STATION	208.8909	1975	1996	208.89	16	2038	25	3%	1.39	22			
CH. CA25121 - CH. CA28351 (to Bell's Hill) (duplicate)	0	1975	1996	0.00	0	2038	25	3%	1.39	0			
CH. YA33248 - CH. YA38524	781.3575	1975	1996	781.36	60	2038	25	3%	1.39	84			
CH. YD42469 - CH. YD44350 (to Young T.S.)	192.8025	1981	1996	192.80	15	2038	25	3%	1.39	21			
YOUNG TERMINAL STORAGE	5810.7168	1983	1996	5810.72	446	2038	25	3%	1.39	622			
JUGIONG CLEAR WATER PUMPING STATION	946.0012	1987	1996	946.00	73	2038	25	3%	1.39	101			
JUGIONG CLEAR WATER PUMPING STATION	2838.1553	1987	1996	2838.16	218	2036	23	3%	1.36	296			
CH. J9581 - CH. J13659 (Jugiong Booster P.S. to)	2365.8517	1987	1996	2365.85	182	2038	25	3%	1.39	253			
CH. Y885 - CH. Y9314	4319.8625	1987	1996	4319.86	331	2038	25	3%	1.39	462			
CH. Y16523 - CH. Y19684	1620.0125	1987	1996	1620.01	124	2038	25	3%	1.39	173			
CH. Y23298 - CH. Y25305 (to Demondrille P.S.)	859.89915	1987	1996	859.90	66	2038	25	3%	1.39	92			
CH. Y25305 - CH. Y28855	1520.9975	1987	1996	1521.00	117	2038	25	3%	1.39	163			
JUGIONG BOOSTER BALANCE TANK	819.7668	1988	1996	819.79	63	2038	25	3%	1.39	88			
DEMONDRILLE - CHLORINATOR	186.2876	1989	1996	186.29	14	2038	25	3%	1.39	20			
CH. J239 - CH. J6301	3516.8693	1990	1996	3516.87	270	2038	25	3%	1.39	376			
CH. Y28855 - CH. Y32255	1456.73	1990	1996	1456.73	112	2038	25	3%	1.39	156			
CH. Y35643 - CH. Y38524 (Decreased by 0.297)	794.58	1990	1996	794.58	61	2038	25	3%	1.39	85			
JUGIONG CLEARWATER TANK	1060.5347	1990	1996	1060.53	81	2038	25	3%	1.39	113			
JUGIONG - WATER TREATMENT PLANT - CIVIL	14579.485	1990	1996	14579.49	1119	2038	25	3%	1.39	1559			
JUGIONG - WATER TREATMENT PLANT - ELEC/MECH	6248.3508	1990	1996	6248.35	479	2036	23	3%	1.36	651			
RAW WATER P.S. - TO JUGIONG W.T.P.	105.5973	1991	1996	105.59	8	2038	25	3%	1.39	11			
JUGIONG CLEAR WATER TANK - TO JUGIONG C.W.P.S.	154.18788	1991	1996	154.19	12	2038	25	3%	1.39	16			
JUGIONG RAW WATER PUMPING STATION	442.6060	1992	1996	442.66	34	2036	23	3%	1.36	46			
JUGIONG BOOSTER PUMPING STATION	979.8303	1994	1996	979.83	75	2038	25	3%	1.39	105			
JUGIONG BOOSTER PUMPING STATION	2939.7943	1994	1996	2939.79	226	2036	23	3%	1.36	306			
Existing Assets (Post 1996)													
CH. J8792.4 - CH. J8930.4 (to Cooneys Ck.)	80.0607	1997	1997	80.06	6	2038	25	7%	2.00	12			
CH. Y475 - CH. Y885 (to Rosehill P.S.)	150.86975	2001	2001	150.87	12	2038	25	7%	2.00	23			
ROSEHILL PUMPING STATION	534.4391	2003	2003	534.44	41	2038	25	7%	2.00	82			
DEMONDRILLE PUMPING STATION	389.4139	2003	2003	389.41	30	2038	25	7%	2.00	60			
PRUNEVALE PUMPING STATION	371.3616	2003	2003	371.36	28	2038	25	7%	2.00	57			
CH. J6301 - CH. J8792	1445.1537	2005	2005	1445.15	111	2038	25	7%	2.00	222			
CH. J8930.4 - CH. J9581 (to Jugiong Booster P.S.)	377.67765	2005	2005	377.68	29	2038	25	7%	2.00	58			
CH. J13659 - CH. J18566 (to Cowangs Res.)	2846.7961	2005	2005	2846.80	218	2038	25	7%	2.00	438			
JUGIONG C.W.P.S. - CH. J239	138.65585	2006	2006	138.66	11	2038	25	7%	2.00	21			
CH. Y29253 (Rocky Hill B.P.T. Offtake) - to Rocky Hill B.P.T.	27.23015	2006	2006	27.23	2	2038	25	7%	2.00	4			
CH. Y38233 (Kings Creek replacement 0.350 long)	149.9575	2006	2006	149.96	12	2038	25	7%	2.00	23			
COWANGS RES - Inlet Replace Investigations	3.396	2011	2011	3.40	0	2021	8	7%	1.25	0			
YOUNG TERMINAL STORAGE - Rehab	1.324	2011	2011	1.32	0	2038	25	7%	2.00	0			
Cowangs Res to Bell's Hill	5238.7545	2012	2012	5238.75	402	2038	25	7%	2.00	806			
Bell's Hill to Cootamundra Pump Station	3164.175	2012	2012	3164.18	243	2038	25	7%	2.00	487			
Cootamundra Pump Station to Bauloora Res	4640.175	2012	2012	4640.18	356	2038	25	7%	2.00	714			
DEMONDRILLE PUMP 1 Rebuild	49	2013	2013	49.00	4	2018	5	7%	1.14	4			
JUGIONG - WATER TREATMENT PLANT - ACCESS RD, /	275.575	2013	2013	275.58	21	2038	25	7%	2.00	42			
1/3 BAULOORA - TEMORA Trunk Main	4055.76	2008	2008	4055.76	311	2038	25	7%	2.00	624			
Future Assets													
New Reservoir	10000.00	2013	2013	10000.00	767	2038	25	7%	2.00	1538			

Table A5 - Calculation of Developer Charges using the Direct NPV Method
Goldenfields Water County Council - Water Supply for DSP Area A - Combined Oura + Jugiong Retail + Mt Arthur

Base Data																													
Capital charge per ET	(2013/14\$)	13,014																											
Year 1	2013/14																												
Debt at end of 2012/13 (\$'000)	-																												
Cash and investments at end of 2012/13 (\$'000)	-																												
Net debt (\$'000)	-																												
Discount rate for future works	7%																												
Assessments at year end																													
Year No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25			
Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38			
Residential (including backlog works)	7,348	7,394	7,440	7,486	7,532	7,578	7,624	7,670	7,716	7,762	7,808	7,854	7,900	7,946	7,992	8,038	8,084	8,130	8,176	8,222	8,268	8,314	8,360	8,406	8,452	8,498			
Non-residential	3,195	3,201	3,208	3,214	3,220	3,227	3,233	3,239	3,246	3,252	3,258	3,265	3,271	3,277	3,284	3,290	3,296	3,303	3,309	3,315	3,322	3,328	3,334	3,341	3,347	3,353			
ET per Residential assessment	0.99																												
ET per non-residential assessment	2.80																												
Capacity for future customers (ET)	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Capital works																													
Renewals	Base year	2013/14																											
(2013/14\$'000)*Renewals	0	0	3698.5977	0	167.9319	108.1621	0	22	325.3965	256.0696	445.46	0	0	2217.538	2317.185	0	2652.53	627.562	2765.811	293.44	2908.417	2466.278	304.84	571.95	933.33				
Inflation from Base year to Year 1 (%)	0.00%																												
Capital Works for Improved Standards (2013/14\$'000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Government Grant on Works for Improved standards (2013/14\$'000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Inflation from 2013/14 to 2013/14 (%)	0.00%																												
Last year of the program	2063/164																												
PV of ET																													
Total equivalent tenements (ET)	16,221	16,283	16,348	16,411	16,473	16,538	16,601	16,663	16,728	16,791	16,853	16,918	16,981	17,043	17,108	17,171	17,233	17,298	17,361	17,423	17,488	17,550	17,613	17,678	17,740	17,803			
Growth (ET)	62	65	62	62	65	62	62	62	65	62	62	65	62	62	65	62	62	65	62	62	65	62	62	65	62	62	65		
PV of 10 years of growth (ET)	509																												
PV ETs	16,729																												
PV of renewal works																													
Renewals (\$'000) in 2013/14\$	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25				
PV of 50 year of renewals at discount rate of 7% pa	0	0	3,699	0	168	108	0	22	325	256	445	0	0	2,218	2,317	0	2,653	628	2,766	293	2,908	2,466	305	572	933				
PV Renewals per ET (\$)	703																												
PV of Works for Improved Standards to existing population																													
Works for Improved Standards (\$'000) in 2013/14\$ after Government grant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25				
PV of works for Improved Standards at discount rate of 7% pa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PV Standards per ET (\$)	0																												
The Reduction Amount is the greater of																													
(1)	PV Renewals per ET + PV Standards per ET	703																											
(2)	Capital Charge - [(N/(N-F)) * [Capital Charge - PV Renewals per ET - PV Standards per ET - Net debt per ET]]	703																											
Where:	Capital Charge =	13,014																											
	N - PV of present and future ETs =	16,729																											
	F - Capacity for future customers =	0																											
	Net debt per ET	0																											
Developer Charge Calculation																													
Reduction Amount is therefore																													
\$703 say \$700																													
Developer Charge for 2013/14 in 2013/14\$																													
Capital Charge less Reduction amount																													
\$13,014 less \$700																													
Developer Charge																													
\$12,314																													

Table A6 - Calculation of Developer Charges using the Direct NPV Method
Goldenfields Water County Council - Water Supply for DSP Area B - Jugiong Bulk

Base Data																												
Capital charge per ET	(2013/14\$)	11,094																										
Year 1	2013	14																										
Debt at end of 2012/13 (\$'000)	-																											
Cash and investments at end of 2012/13 (\$'000)	-																											
Net debt (\$'000)	-																											
Discount rate for future works	7%																											
Assessments at year end																												
Year No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	2037/38	
Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38		
Residential (including backlog works)	7,487	7,523	7,559	7,595	7,631	7,667	7,703	7,739	7,775	7,811	7,847	7,883	7,919	7,955	7,991	8,027	8,063	8,099	8,135	8,171	8,207	8,243	8,279	8,315	8,351	8,387		
Non-residential	1,611	1,614	1,617	1,620	1,623	1,626	1,629	1,632	1,635	1,638	1,641	1,644	1,647	1,650	1,653	1,656	1,659	1,662	1,665	1,668	1,671	1,674	1,677	1,680	1,683	1,686		
ET per Residential assessment	0.99																											
ET per non-residential assessment	2.80																											
Capacity for future customers (ET)	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Capital works																												
Renewals	Base year	13	14																									
	Year	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38		
(13/14\$'000)*Renewals	0	0	0	0	0	0	0	0	0	3.396	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inflation from 13/14 to 2013/14 (%)	0.00%																											
Capital Works for Improved Standards (13/14\$'000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Government Grant on Works for Improved standards (13/14\$'000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Inflation from 13/14 to 2013/14 (%)	0.00%																											
Last year of the program	2063	164																										
PV of ET																												
Total equivalent tenements (ET)	11,929	11,974	12,018	12,062	12,106	12,150	12,194	12,238	12,282	12,326	12,370	12,414	12,459	12,503	12,547	12,591	12,635	12,679	12,723	12,767	12,811	12,855	12,899	12,944	12,988	13,032		
Growth (ET)	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	
PV of 10 years of growth (ET)	354																											
PV ETs	12,283																											
PV of renewal works																												
Renewals	Year No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Renewals (\$'000) in 2013/14\$	0	0	0	0	0	0	49	0	0	3	0	0	0	781	0	2,838	0	0	6,248	0	443	0	2,940	0	0	0	0	
PV of 50 year of renewals at discount rate of 7% pa	4,516																											
PV Renewals per ET (\$)	368																											
PV of Works for Improved Standards to existing population																												
Works for Improved Standards (\$'000) in 2013/14\$ after Government grant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25			
PV of works for Improved Standards at discount rate of 7% pa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PV Standards per ET (\$)	0																											
The Reduction Amount is the greater of																												
(1)	PV Renewals per ET + PV Standards per ET	368																										
(2)	Capital Charge - [(N/(N-F)) * [Capital Charge - PV Renewals per ET - PV Standards per ET - Net Debt per ET]]	368																										
Where:	Capital Charge =	11,094																										
	N - PV of present and future ETs =	12,283																										
	F - Capacity for future customers =	0																										
	Net debt per ET	0																										
Developer Charge Calculation																												
Reduction Amount is therefore																												
\$368 say \$370																												
Developer Charge for 2013/14 in 2013/14\$																												
Capital Charge less Reduction amount																												
\$11,094 less \$370																												
Developer Charge																												
\$10,724																												