



Goldenfields Water

RESOURCING STRATEGY

Adopted: April 2017
Minute: 17/028



Contents

INTRODUCTION	3
LONG TERM FINANCIAL PLAN	5
Income Statements	6
Balance Sheet	8
Cash Flow	11
Capital Works	16
WORKFORCE MANAGEMENT PLAN	19
Introduction.....	20
Workforce Profile.....	24
Workforce Management Strategies.....	30
Implementation & Monitoring.....	34

ASSET MANAGEMENT PLAN	35
Summary.....	36
Introduction.....	38
Levels of Service.....	44
Future Demand.....	52
Lifecycle Management Plan.....	57
Financial Summary.....	61
Asset Management Practices.....	68
Appendix A: Schematics	69
Supply Map.....	70
Scheme Map	71
Jugiong System.....	72
Oura System.....	73
Hylands System.....	74
Mt Arthur System.....	75
Mt Daylight System.....	76
Appendix B: Asset Replacement Profiles	77

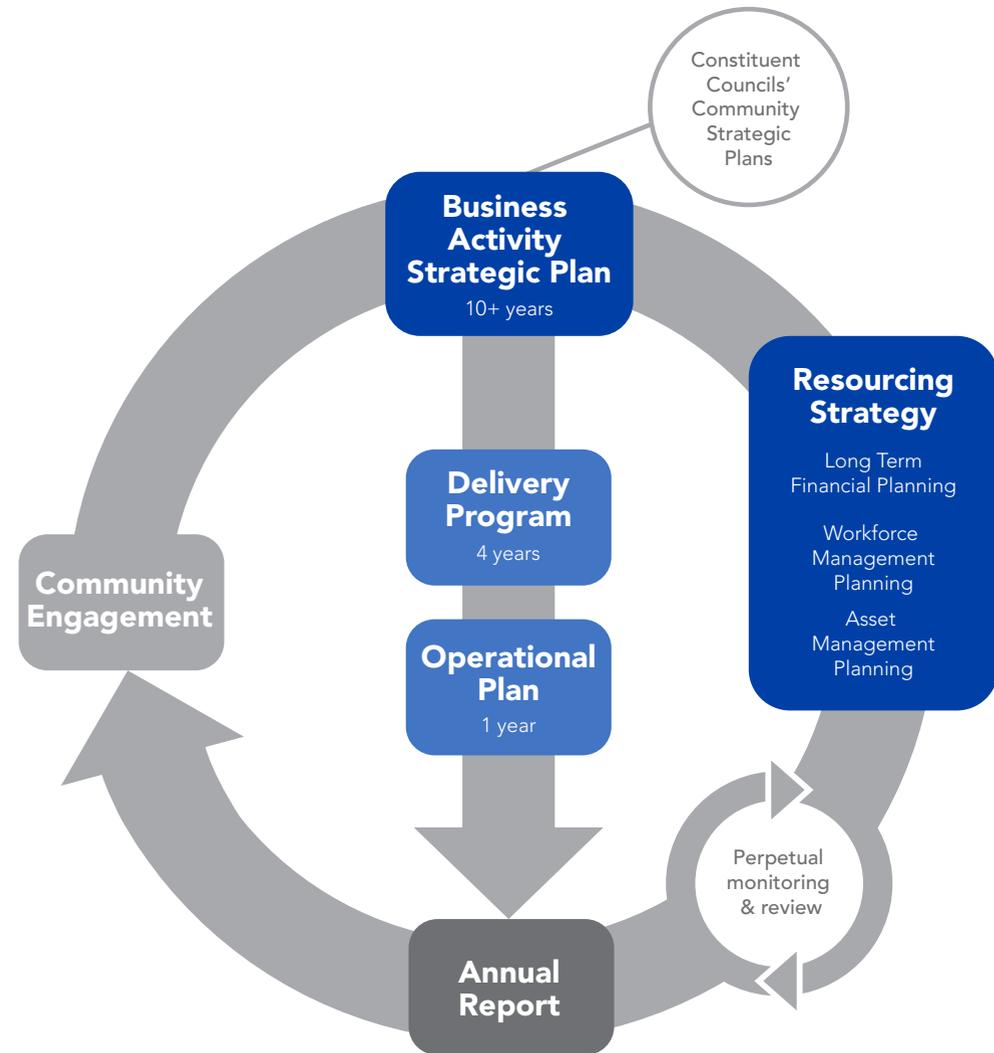


Introduction

Goldenfields Water's Resourcing Strategy is part of the Integrated Planning and Reporting documents.

It documents Goldenfields Water's long-term strategy for providing the resources required to implement the strategies established by the Business Activity Strategic Plan.

It includes long-term financial, workforce management and asset management planning.





Business Activity Strategic Plan

Description

- Council's main business activity priorities.
- Strategic objectives and strategies for achieving those objectives.
- *Endorsed by Council.*
- Covers a period of at least 10 years.

Review

Every 4 years



Delivery Program

Description

- Activities to be undertaken to implement the Business Activity Strategic Plan.
- *Adopted by Council.*
- Covers a period of 4 years.

Review

Every 4 years



Operational Plan

Description

- Actions to be completed to achieve the commitments in the Delivery Program.
- *Adopted by Council.*
- Covers a period of 1 year.

Review

Every year



Resourcing Strategy

THIS IS THE DOCUMENT YOU ARE READING

Description

Part 1

LONG TERM FINANCIAL PLAN

Modelled on a 30 year timeframe.

Includes projected income and expenditure, balance sheet and cash flow statement; planning assumptions used to develop the Plan; sensitivity analysis; financial modelling for different scenarios; methods of monitoring financial performance.

Part 2

WORKFORCE MANAGEMENT PLAN

Modelled on a minimum 4 year timeframe.

Includes the human resourcing requirements to act on the Delivery Program.

Part 3

ASSET MANAGEMENT STRATEGY AND PLAN

Modelled on a 20 year timeframe.

Includes an Asset Management Policy; Asset Management Strategy identifying assets that are critical to Council operations and the risk management strategies for these assets, specific actions required to improve Council's asset management capability and projected resource requirements and timeframes; Asset Management Plan that encompasses all the assets under Council's control and identifies asset service standards, long term asset maintenance projects, rehabilitation and replacement costs.

Review

Reviewed in detail every 4 years in conjunction with the Business Activity Strategic Plan. Updated annually when developing the Operational Plan.



LONG TERM FINANCIAL PLAN



Income statement

Goldenfields Water County Council											
10 Year Financial Plan for the Years ending 30 June 2027											
INCOME STATEMENT	Current Year	Projected Years									
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Income from Continuing Operations											
Revenue:											
Rates & Annual Charges	4,671,900	4,812,057	4,956,419	5,105,111	5,258,265	5,363,430	5,470,699	5,580,112	5,691,715	5,805,549	5,921,660
User Charges & Fees	13,800,400	14,214,412	14,640,844	15,080,070	15,532,472	15,843,121	16,159,984	16,483,183	16,812,847	17,149,104	17,492,086
Interest & Investment Revenue	1,260,000	1,460,000	1,488,000	1,516,560	1,545,691	1,575,405	1,605,713	1,636,627	1,668,160	1,700,323	1,733,130
Other Revenues	109,800	91,800	91,800	91,800	91,800	91,800	91,800	91,800	91,800	91,800	91,800
Grants & Contributions provided for Operating Purposes	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000
Grants & Contributions provided for Capital Purposes	865,000	985,000	1,885,000	1,835,000	985,000	985,000	985,000	985,000	985,000	985,000	985,000
Other Income:											
Net gains from the disposal of assets	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-
Total Income from Continuing Operations	20,905,100	21,761,269	23,260,063	23,826,541	23,611,228	24,056,756	24,511,195	24,974,723	25,447,522	25,929,776	26,421,676



INCOME STATEMENT (continued)	Current Year	Projected Years									
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Expenses from Continuing Operations											
Employee Benefits & On-Costs	6,477,457	5,940,651	5,999,874	6,121,824	6,246,564	6,374,156	6,504,667	6,638,164	6,774,715	6,914,391	7,057,262
Borrowing Costs	-	-	-	-	-	-	-	-	-	-	-
Materials & Contracts	2,327,557	2,134,665	2,178,348	2,483,947	2,726,984	3,098,479	2,804,952	2,851,426	2,898,922	3,237,464	3,017,073
Depreciation & Amortisation	5,440,000	4,995,600	4,995,600	4,995,600	4,995,600	4,995,600	4,995,600	4,995,600	4,995,600	4,995,600	4,995,600
Impairment	-	-	-	-	-	-	-	-	-	-	-
Other Expenses	3,791,496	3,477,284	3,477,645	3,554,153	3,677,345	3,712,256	3,793,926	3,877,392	4,007,695	4,049,874	4,138,972
Interest & Investment Losses	-	-	-	-	-	-	-	-	-	-	-
Net Losses from the Disposal of Assets	-	-	-	-	-	-	-	-	-	-	-
Joint Ventures & Associated Entities	-	-	-	-	-	-	-	-	-	-	-
Total Expenses from Continuing Operations	18,036,510	16,548,200	16,651,467	17,155,525	17,646,492	18,180,491	18,099,145	18,362,582	18,676,933	19,197,329	19,208,907
Operating Result from Continuing Operations	2,868,590	5,213,069	6,608,596	6,671,016	5,964,735	5,876,265	6,412,050	6,612,141	6,770,589	6,732,447	7,212,769
Discontinued Operations - Profit/(Loss)	-	-	-	-	-	-	-	-	-	-	-
Net Profit/(Loss) from Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-
Net Operating Result for the Year	2,868,590	5,213,069	6,608,596	6,671,016	5,964,735	5,876,265	6,412,050	6,612,141	6,770,589	6,732,447	7,212,769
Net Operating Result before Grants and Contributions provided for Capital Purposes	2,003,590	4,228,069	4,723,596	4,836,016	4,979,735	4,891,265	5,427,050	5,627,141	5,785,589	5,747,447	6,227,769



Balance sheet

Goldenfields Water County Council												
10 Year Financial Plan for the Years ending 30 June 2027												
BALANCE SHEET	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
ASSETS												
Current Assets												
Cash & Cash Equivalents	3,435,000	3,436,047	6,390,887	9,655,695	14,142,274	14,947,346	15,382,559	21,544,270	23,532,177	23,206,623	30,333,145	33,037,748
Investments	-	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364	17,186,364
Receivables	5,265,000	4,495,143	4,664,422	4,939,671	5,108,518	5,133,254	5,225,886	5,389,438	5,502,892	5,590,503	5,771,379	5,898,961
Inventories	617,000	781,714	716,931	731,602	834,238	915,863	1,040,630	942,048	957,657	973,609	1,087,308	1,013,290
Other	153,000	94,351	86,532	87,211	93,103	98,750	105,016	101,750	103,753	106,495	112,365	110,341
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	9,470,000	25,993,619	29,045,136	32,600,542	37,364,496	38,281,577	38,940,455	45,163,870	47,282,843	47,063,593	54,490,562	57,246,704
Non-Current Assets												
Investments	38,000,000	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636	20,813,636
Receivables	-	485,000	485,000	485,000	485,000	485,000	485,000	485,000	485,000	485,000	485,000	485,000
Inventories	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure, Property, Plant & Equipment	215,746,000	218,490,349	220,563,349	223,571,177	225,544,005	230,656,833	235,939,661	236,107,489	240,628,567	247,654,645	247,022,698	251,470,751



BALANCE SHEET (continued)	Actuals	Current	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Non-Current Assets (continued)												
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Non-current assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Assets	253,746,000	239,788,985	241,861,985	244,869,813	246,842,641	251,955,469	257,238,297	257,406,125	261,927,203	268,953,281	268,321,334	272,769,387
TOTAL ASSETS	263,216,000	265,782,605	270,907,121	277,470,356	284,207,137	290,237,046	296,178,752	302,569,995	309,210,046	316,016,874	322,811,896	330,016,091
LIABILITIES												
Current Liabilities												
Bank Overdraft	-	-	-	-	-	-	-	-	-	-	-	-
Payables	1,669,000	1,367,631	1,279,194	1,233,832	1,299,570	1,364,698	1,430,127	1,409,290	1,437,170	1,473,361	1,535,921	1,527,315
Borrowings	-	-	-	-	-	-	-	-	-	-	-	-
Provisions	1,446,000	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569	1,445,569
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	3,115,000	2,813,200	2,724,762	2,679,401	2,745,138	2,810,267	2,875,695	2,854,858	2,882,739	2,918,930	2,981,489	2,972,883



BALANCE SHEET	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Non-Current Liabilities												
Payables	2,000	1,384	1,269	1,269	1,297	1,342	1,355	1,384	1,415	1,462	1,478	1,510
Borrowings	-	-	-	-	-	-	-	-	-	-	-	-
Provisions	19,000	19,431	19,431	19,431	19,431	19,431	19,431	19,431	19,431	19,431	19,431	19,431
Investments Accounted for using the equity method	-	-	-	-	-	-	-	-	-	-	-	-
Liabilities associated with assets classified as "held for sale"	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Liabilities	21,000	20,815	20,700	20,700	20,728	20,773	20,786	20,816	20,846	20,894	20,909	20,942
TOTAL LIABILITIES	3,136,000	2,834,015	2,745,462	2,700,101	2,765,867	2,831,040	2,896,481	2,875,674	2,903,585	2,939,824	3,002,398	2,993,825
Net Assets	260,080,000	262,948,590	268,161,659	274,770,255	281,441,271	287,406,006	293,282,271	299,694,321	306,306,462	313,077,051	319,809,498	327,022,266
EQUITY												
Retained Earnings	83,769,000	86,637,590	91,850,659	98,459,255	105,130,271	111,095,006	116,971,271	123,383,321	129,995,462	136,766,051	143,498,498	150,711,266
Revaluation Reserves	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000	176,311,000
Council Equity Interest	260,080,000	262,948,590	268,161,659	274,770,255	281,441,271	287,406,006	293,282,271	299,694,321	306,306,462	313,077,051	319,809,498	327,022,266
Minority Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	260,080,000	262,948,590	268,161,659	274,770,255	281,441,271	287,406,006	293,282,271	299,694,321	306,306,462	313,077,051	319,809,498	327,022,266



Cash flow

Goldenfields Water County Council												
10 Year Financial Plan for the Years ending 30 June 2027												
CASH FLOW STATEMENT	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
CASH FLOWS FROM OPERATING ACTIVITIES												
Receipts:												
Rates & Annual Charges	4,458,000	4,750,969	4,777,679	4,921,009	5,068,640	5,220,699	5,337,635	5,444,388	5,553,275	5,664,341	5,777,628	5,893,180
User Charges & Fees	15,702,000	14,089,735	14,137,652	14,561,782	14,998,635	15,448,594	15,785,525	16,101,236	16,423,260	16,751,726	17,086,760	17,428,495
Interest & Investment Revenue Received	1,101,000	1,286,028	1,416,943	1,445,347	1,461,659	1,535,643	1,567,911	1,529,001	1,611,750	1,670,898	1,611,602	1,699,546
Grants & Contributions	1,439,000	1,024,836	1,167,967	1,970,255	2,039,264	1,289,481	1,183,000	1,183,000	1,183,000	1,183,000	1,183,000	1,183,000
Bonds & Deposits Received	1,000	-	-	-	-	-	-	-	-	-	-	-
Other	123,000	(397,914)	99,733	94,920	98,251	101,091	96,245	96,334	96,425	96,518	96,612	96,708
Payments:												
Employee Benefits & On-Costs	(5,102,000)	(6,541,296)	(5,952,209)	(6,060,477)	(6,121,824)	(6,246,564)	(6,374,156)	(6,504,667)	(6,638,164)	(6,774,715)	(6,914,391)	(7,057,262)
Materials & Contracts	(1,613,000)	(2,235,467)	(2,147,040)	(2,186,956)	(2,535,464)	(2,758,099)	(3,170,263)	(2,730,227)	(2,847,569)	(2,887,947)	(3,301,161)	(2,956,440)
Borrowing Costs	-	-	-	-	-	-	-	-	-	-	-	-
Bonds & Deposits Refunded	-	-	-	-	-	-	-	-	-	-	-	-



CASH FLOW STATEMENT (cont)	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
CASH FLOWS FROM OPERATING ACTIVITIES (continued)												
Other	(3,341,000)	(3,791,496)	(3,477,284)	(3,477,645)	(3,554,153)	(3,677,345)	(3,712,256)	(3,793,926)	(3,877,392)	(4,007,695)	(4,049,874)	(4,138,972)
Net Cash provided (or used in) Operating Activities	12,768,000	8,185,396	10,023,440	11,268,235	11,455,007	10,913,500	10,713,641	11,325,139	11,504,585	11,696,124	11,490,175	12,148,256
CASH FLOWS FROM INVESTING ACTIVITIES												
Receipts:												
Sale of Investment Securities	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Real Estate Assets	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Infrastructure, Property, Plant & Equipment	766,000	580,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000
Sale of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors Receipts	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Disposal Groups	-	-	-	-	-	-	-	-	-	-	-	-
Distributions Received from Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-



CASH FLOW STATEMENT (cont)	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
CASH FLOWS FROM INVESTING ACTIVITIES (continued)												
Other Investing Activity Receipts	-											
Payments:												
Purchase of Investment Securities	(9,000,000)	-	-	-	-	-	-	-	-	-	-	-
Purchase of Investment Property	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Infrastructure, Property, Plant & Equipment	(5,099,000)	(8,764,349)	(7,698,600)	(8,633,428)	(7,598,428)	(10,738,428)	(10,908,428)	(5,793,428)	(10,146,678)	(12,651,678)	(4,993,653)	(10,073,653)
Purchase of Real Estate Assets	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Debtors & Advances Made	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Interests in Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Contributions Paid to Joint Ventures & Associates	-	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activity Payments	-											
Net Cash provided (or used in) Investing Activities	(13,333,000)	(8,184,349)	(7,068,600)	(8,003,428)	(6,968,428)	(10,108,428)	(10,278,428)	(5,163,428)	(9,516,678)	(12,021,678)	(4,363,653)	(9,443,653)



CASH FLOW STATEMENT (cont)	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
CASH FLOWS FROM FINANCING ACTIVITIES												
Receipts:												
Proceeds from Borrowings & Advances	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from Finance Leases	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Receipts	-											
Payments:												
Repayment of Borrowings & Advances	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of Finance Lease Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
Distributions to Minority Interests	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activity Payments	-											
Net Cash Flow provided (used in) Financing Activities	-	-	-	-	-	-	-	-	-	-	-	-
Net Increase/(Decrease) in Cash & Cash Equivalents	(565,000)	1,047	2,954,840	3,264,807	4,486,579	805,072	435,213	6,161,711	1,987,907	(325,554)	7,126,522	2,704,603



CASH FLOW STATEMENT (cont)	Actuals	Current Year	Projected Years									
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Cash, Cash Equivalents & Investments - beginning of year	4,000,000	3,435,000	3,436,047	6,390,887	9,655,695	14,142,274	14,947,346	15,382,559	21,544,270	23,532,177	23,206,623	30,333,145
Cash & Cash Equivalents - end of the year	3,435,000	3,436,047	6,390,887	9,655,695	14,142,274	14,947,346	15,382,559	21,544,270	23,532,177	23,206,623	30,333,145	33,037,748
Investments - end of the year	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000
Cash, Cash Equivalents & Investments - end of the year	41,435,000	41,436,047	44,390,887	47,655,695	52,142,274	52,947,346	53,382,559	59,544,270	61,532,177	61,206,623	68,333,145	71,037,748
Representing:												
- External Restrictions	-	-	-	-	-	-	-	-	-	-	-	-
- Internal Restrictions	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000	33,546,000
- Unrestricted	7,889,000	7,890,047	10,844,887	14,109,695	18,596,274	19,401,346	19,836,559	25,998,270	27,986,177	27,660,623	34,787,145	37,491,748
TOTAL RESERVES	41,435,000	41,436,047	44,390,887	47,655,695	52,142,274	52,947,346	53,382,559	59,544,270	61,532,177	61,206,623	68,333,145	71,037,748



Capital works

Goldenfields Water County Council										
10 Year Financial Plan for the Years ending 30 June 2027										
CAPITAL WORKS SUMMARY										
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
INCOME										
Capital Grants & Contributions										
Grants & Contributions provided for Capital Purposes (funded in CAPEX)	985,000	1,885,000	1,835,000	985,000	985,000	985,000	985,000	985,000	985,000	985,000
Total Capital Grants & Contributions	985,000	1,885,000	1,835,000	985,000	985,000	985,000	985,000	985,000	985,000	985,000
TRANSFER FROM RESERVES										
Transfer from Reserves (Internal & External)	-	-	-	-	-	-	-	-	-	-
Total Transfer from Reserves	-	-	-	-	-	-	-	-	-	-
PROCEEDS FUNDING										
Proceeds from Sale of I,PP&E	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000
Total Proceeds Funding	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000
LOAN FUNDING										
New loans raised	-	-	-	-	-	-	-	-	-	-
Total Loan Funding	-	-	-	-	-	-	-	-	-	-



CAPITAL WORKS SUMMARY (continued)										
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
GENERAL REVENUE										
General Revenue	6,083,600	6,118,428	5,133,428	9,123,428	9,293,428	4,178,428	8,531,678	11,036,678	3,378,653	8,458,653
Total General Revenue	6,083,600	6,118,428	5,133,428	9,123,428	9,293,428	4,178,428	8,531,678	11,036,678	3,378,653	8,458,653
TOTAL INCOME	7,698,600	8,633,428	7,598,428	10,738,428	10,908,428	5,793,428	10,146,678	12,651,678	4,993,653	10,073,653
EXPENDITURE										
Capital Expenses										
New System Assets										
Investigations	100,000	-	-	100,000	-	-	100,000	-	-	100,000
Developer Paid	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Mains	2,570,000	3,020,000	1,820,000	1,820,000	1,860,000	1,885,000	45,000	870,000	20,000	20,000
Reservoirs	-	-	-	-	1,227,500	1,027,500	27,500	27,500	27,500	27,500
Pumping Stations	1,100,000	1,244,828	1,694,828	344,828	372,328	872,328	592,328	372,328	372,328	372,328
Treatment	25,000	110,000	25,000	25,000	-	-	-	-	-	3,500,000
Bores	170,000	300,000	-	-	300,000	-	-	-	-	-
Service Meters	200,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
Backflow Devices	750,000	750,000	750,000	-	-	-	-	-	-	-
Plant & Equipment	755,000	755,000	755,000	755,000	755,000	755,000	755,000	755,000	755,000	755,000
Intangibles	790,000	-	-	-	-	-	-	-	-	-
Land & Buildings	80,000	-	-	-	-	-	-	-	-	-
Total New System Assets	6,580,000	6,344,828	5,209,828	3,209,828	4,679,828	4,704,828	1,684,828	2,189,828	1,339,828	4,939,828



CAPITAL WORKS SUMMARY (continued)										
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
EXPENDITURE (continued)										
Renewals										
Mains	200,000	375,000	375,000	5,375,000	5,325,000	375,000	7,968,250	7,968,250	3,160,225	4,640,225
Reservoirs	360,000	460,000	1,060,000	550,000	40,000	260,000	40,000	40,000	40,000	40,000
Pumping Stations	288,600	788,600	788,600	1,438,600	448,600	288,600	288,600	288,600	288,600	288,600
Treatment	40,000	500,000	-	-	-	-	-	-	-	-
Bores	-	-	-	-	100,000	-	-	-	-	-
Service Meters	145,000	145,000	145,000	145,000	145,000	145,000	145,000	2,145,000	145,000	145,000
Plant & Equipment	-	-	-	-	-	-	-	-	-	-
Land & Buildings	85,000	20,000	20,000	20,000	170,000	20,000	20,000	20,000	20,000	20,000
Total Renewals	1,118,600	2,288,600	2,388,600	7,528,600	6,228,600	1,088,600	8,461,850	10,461,850	3,653,825	5,133,825
Total Capital Expenditure	7,698,600	8,633,428	7,598,428	10,738,428	10,908,428	5,793,428	10,146,678	12,651,678	4,993,653	10,073,653
Total Expenditure	7,698,600	8,633,428	7,598,428	10,738,428	10,908,428	5,793,428	10,146,678	12,651,678	4,993,653	10,073,653
Net Funding	-	-	-	-	-	-	-	-	-	-



WORKFORCE MANAGEMENT PLAN

2017 - 2021



Introduction

Goldenfields Water's Workforce Management Plan 2017-2021 (the Plan) is an important element in Goldenfields Water's Resourcing Strategy which supports the Business Activity Strategic Plan (BASP). This document complies with the Office of Local Government Integrated Planning and Reporting requirements. The Plan is an integral component to Goldenfield Water's business planning and risk management strategies.

The Plan aims to analyse Goldenfields Water's current workforce trends and forecast Goldenfields Water's future workforce needs to equip our organisation to readily address the workforce challenges facing our organisation over the next four years. The findings and strategies developed as a result of the analysis will feed into the development, refinement and implementation of Goldenfields Water's Human Resources (HR) processes, policies and systems. This aims to provide Goldenfields Water with the best people to deliver the objectives as set out in our BASP.

It should be noted that this is the first Workforce Management Plan that Goldenfields Water has developed. Inevitably, over the four year duration of the Plan there will be refinements and further changes that will be required. Therefore, this document will be considered a 'working document' where changes and improvements will be encouraged.

Where are we now?

Initially, Goldenfields Water's current workforce profile was documented and analysed. This analysis enabled Goldenfields Water to identify the risks associated with the current structure of the business, and opportunities to optimise the use of Goldenfields Water's current resources to ensure organisational efficiencies and operational effectiveness.

Where do we need to be?

Following this, an analysis of the items set out in Goldenfields Water's Delivery Program and Operational Plan was conducted in conjunction with workforce projections as determined by management. This information was then used to gauge the future needs of Goldenfields Water to ensure that our strategic goals could be met in consideration of the Long Term Financial Plan. The gaps within our current workforce were then identified, along with the strategies and potential actions to reduce these issues.

How do we get there?

The development of strategies as outlined in this document will ensure that Goldenfields Water has the right people in the right jobs at the right time. Implementation of these strategies will be undertaken over a four year period. To ensure relativity and continuous improvement of the identified strategies, and the success of each strategy, this document will be monitored and reviewed on an on-going basis.



The Plan in context

Goldenfields Water is committed to being dynamic in the way we plan and deliver our services to ensure we keep up with the ever-changing environment that is local government. The way in which Goldenfields Water's workforce supply and demand is influenced by a number of internal and external factors is consistent with many other organisations in our industry. The key internal and external influencing factors at Goldenfields Water include:

External	Internal
<ul style="list-style-type: none"> • Labour market (current and future). • Economic market (current and future). • Legislative changes. • Political changes. • Industry reform. • Technological changes. • Differing service level expectations amongst the constituent Councils. 	<ul style="list-style-type: none"> • Ageing workforce. • Skill Shortages. • Leadership changes. • Political influence. • Retention of staff and knowledge. • Capital works / ageing infrastructure.

In recognition of the similarities in challenges faced across local government organisations, in late 2016, Local Government New South Wales (LGNSW) published the NSW Local Government Workforce Strategy 2016-2020. This document was underpinned by the development of the national work force strategy, Future-Proofing Local Government: National Workforce Strategy 2013-2020.

The release of these documents provides a consistent national approach to be utilised in local government for workforce development.

Both documents have adopted the same broad visions which we have now adopted within Goldenfields Water. This ensures Goldenfields Water has:

- the workforce capability it requires for a productive, sustainable and inclusive future; and
- the capacity to develop and use the skills of our workforce to meet the needs and aspirations of our community.

What do we do?

Goldenfields Water provides the essential water requirements of 46,418 people, spread over an area of 22,526 square kilometres between the Lachlan and Murrumbidgee Rivers in the South West of NSW. The reticulation network consists of five water sources, two treatment plants, over 100 reservoirs, 37 pump stations and over 2000km of water mains.

Council has a modern water treatment plant at Jugiong, extracting water from the Murrumbidgee River and supplying bulk water to Hilltops and Cootamundra-Gundagai Regional Council. Groundwater bores near Wagga, Lake Brewster and Matong, and a surface extraction point near Leeton, supply rural and residential customers in the Council areas of Junee, Coolamon, Narrandera, Bland and Temora Shires.



Mission Statement

“To provide regional economic opportunity and lifestyle choices through provision of a quality water supply by innovative leadership showing environmental responsibility in cooperation with the community, constituent Councils and governments.”

Vision Statement

“To be innovative leaders in the supply and distribution of water through regional efficiency, technical excellence and customer service.”

Workplace Values

Strongly influencing the development and delivery of the Plan and the way we do things are our Workplace Values. Implemented at the beginning of 2017, our Workplace Values were developed to set the culture that drives management and staff in pursuing the GWCC’s outcomes and in achieving high levels of organisational performance.

Integrity	All staff act in the best interest of the communities that we serve, demonstrating and promoting moral and ethical principles in all that we do.
Trust	Built on from the value of Integrity, mutual trust is established between teams and staff at all levels. Open communication lines and transparency in our operations reflects and further builds on this trust.
Respect	All staff treat others with courtesy, politeness and kindness. Differences in viewpoints and beliefs are recognised and considered, with all people being treated fairly and equally.
Teamwork	All staff work together collaboratively and support one another in achieving the operational objectives of GWCC. Our staff understand the importance of working with each other to achieve our objectives.
Continuous Improvement	Staff feel confident and comfortable to offer ideas and suggestions to ensure that GWCC is continually working to deliver better services to our community and finding more efficient ways of undertaking business.



Workforce Goals

While Goldenfields Water's workforce needs to be adequate in skill and number to be able to sustain current and future service delivery levels and standards, the continuing challenge is to achieve this and minimise employment costs at the same time. Goldenfields Water needs to adopt a mature workforce planning attitude and capitalise on the opportunities presented by generational workforce change.

This Workforce Management Plan supports this vision. Our priority outcomes for this Plan are therefore:

- Attracting, recruiting and selecting the right people.
- Inducting, training and developing a high performing workforce.
- Motivating, managing and rewarding performance.
- Promoting collaboration.
- Creating a vibrant, modern and positive workplace culture.
- Supporting diversity.
- Supporting a healthy and productive organisation.

Organisational Structure

Goldenfields Water strives to deliver quality water supply and associated services to our community in line with directives set out in our BASP.

Goldenfields Water's organisational structure, as shown to the right, operates under the direction of our Elected Council who represent our constituent communities. The structure is made up of four business units being the General Manager's Office, Operations, Production & Services and Corporate Services.

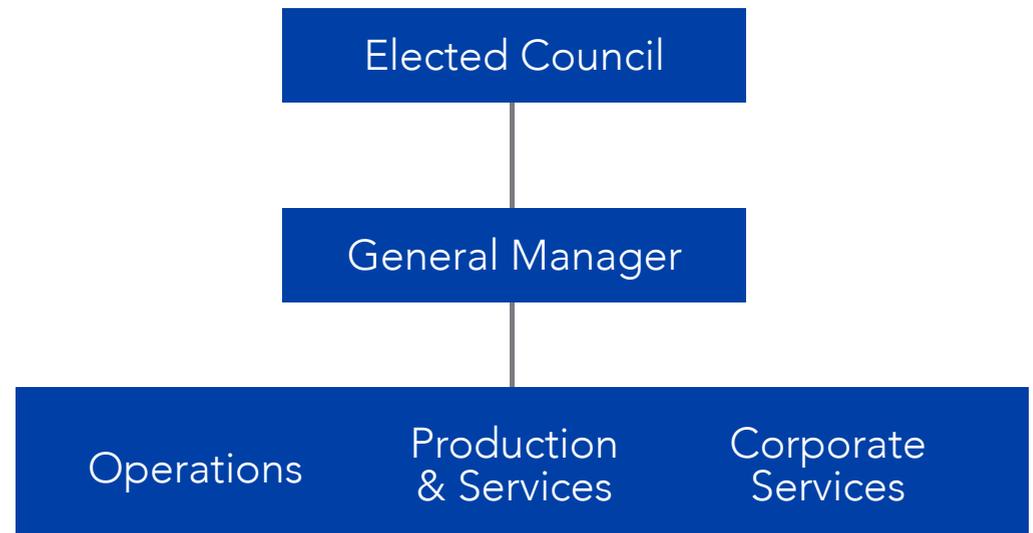


Figure 1: Goldenfield Water's Organisational Chart.



Workforce profile

As at 9 March 2017, Goldenfields Water has a headcount of 54 staff members with a full-time equivalent (FTE) of 51.6. The figures below visualise the current make-up of our workforce.

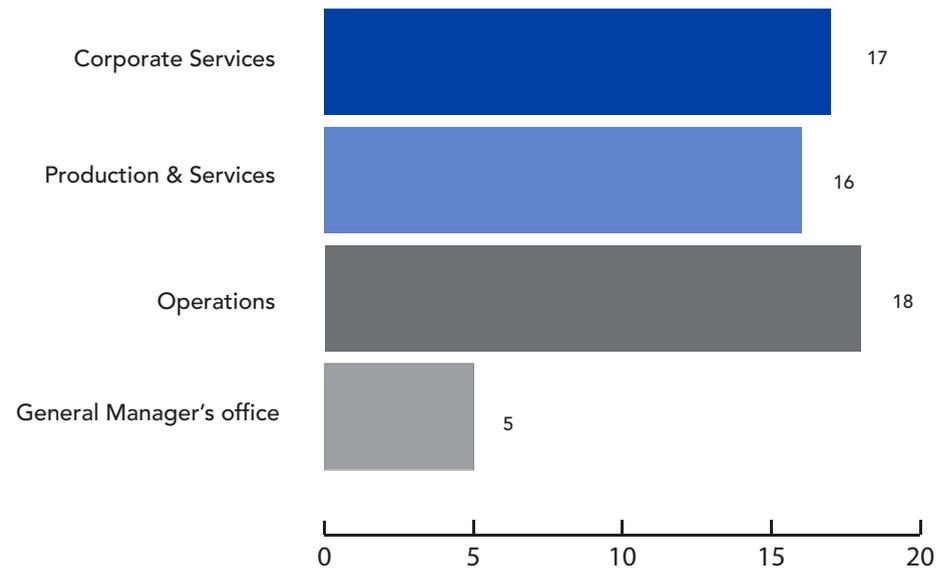


Figure 2: Number of positions per Business Unit.

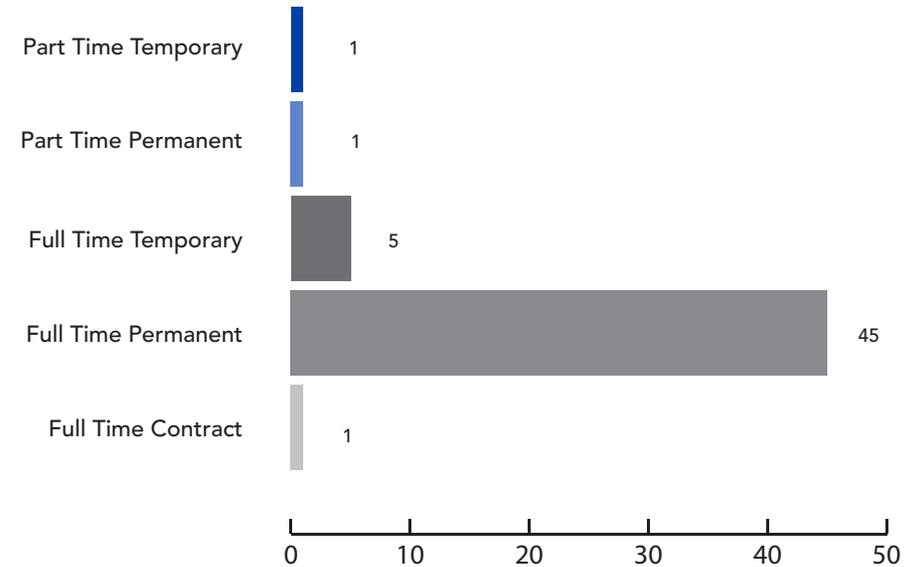


Figure 3: Employment status of workforce.



Gender of total workforce

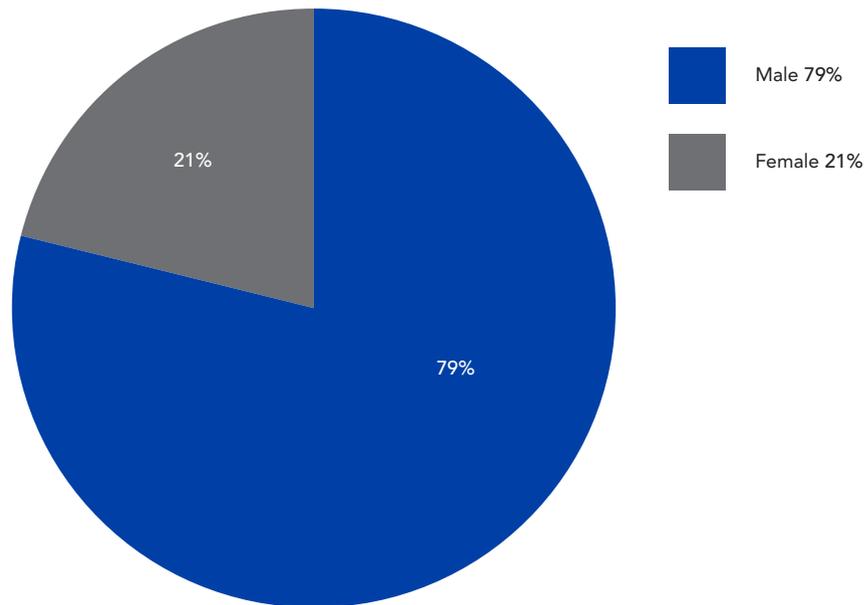


Figure 4: Gender of total workforce.

Gender of workforce in consideration of gender-biased positions

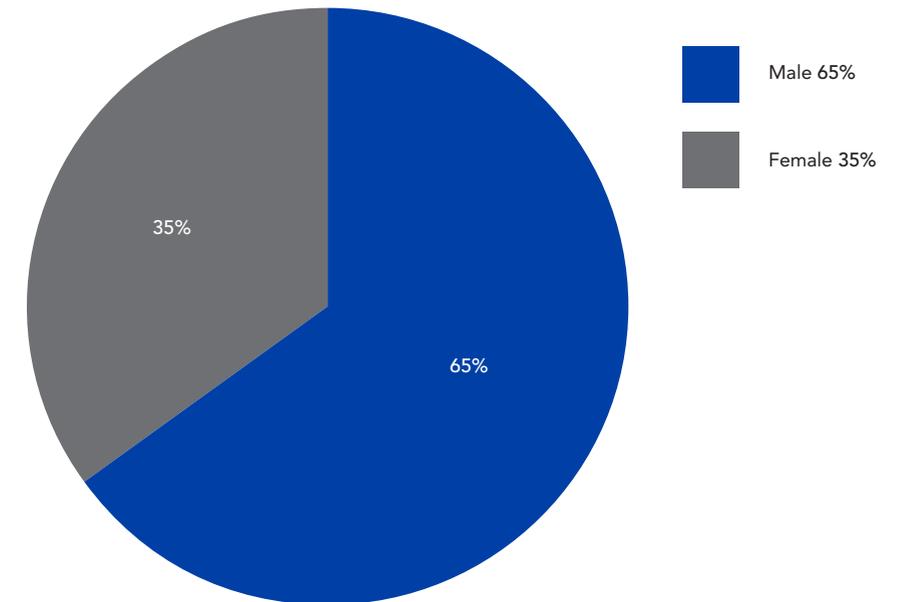


Figure 5: Gender of workforce in consideration of gender-biased positions

Corporate Position	Male	Female	Total
Executive	1	0	1
Manager	2	0	2
Coordinator	9	3	12

Figure 6: Gender distribution by position type.



Age of Workforce

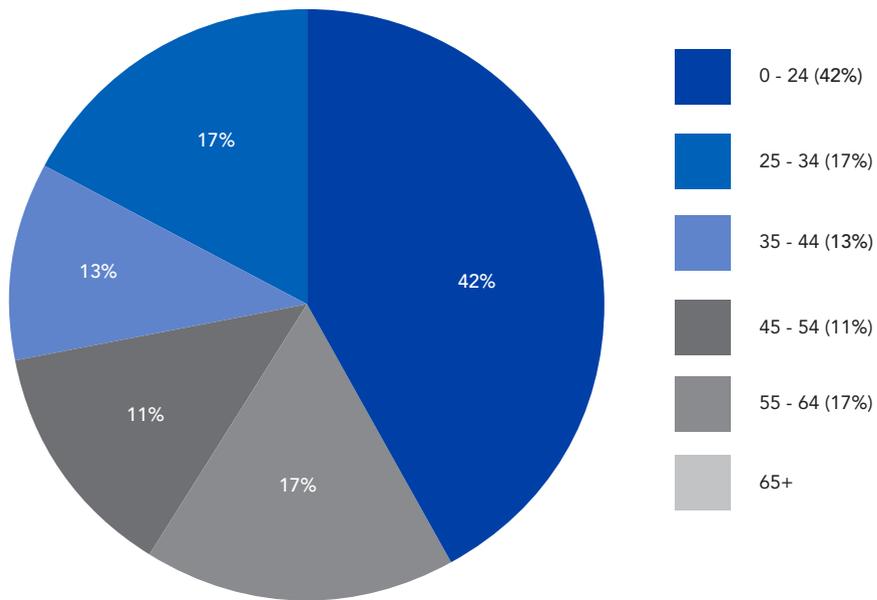


Figure 7: Age of workforce by percentage.

Staff years of service to Goldenfields Water

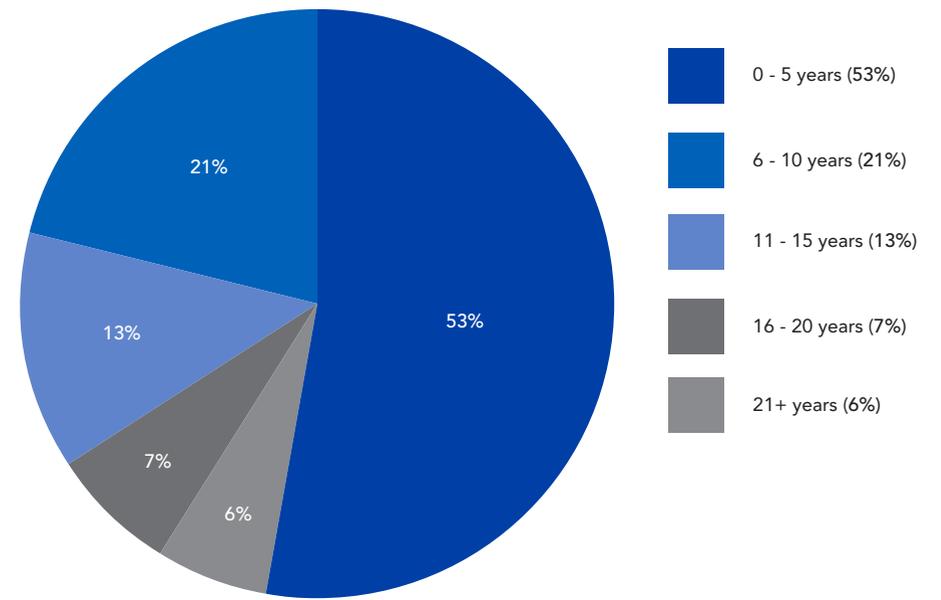


Figure 8: Staff years of service to GWCC by percentage.



Workforce Analysis

Analysis of the above figures draws a number of broad conclusions:

- Goldenfields Water's current workforce comprises of a total of 54 staff members; 83.6% of which are employed on a full-time, permanent basis.
- 9.1% of Goldenfields Water's workforce is made up of trainee/apprentice/cadet positions, making evident Goldenfields Water's commitment to providing learning opportunities to the residents within our constituent communities.

Gender

- Goldenfields Water's workforce appears to be somewhat male dominated with only 21% of total employees being female, however further analysis of the types of roles within Goldenfields Water determines that 38% of positions within the organisation are typically 'male dominated' (i.e. roles within Operations and Engineering).
- With the removal of the gender biased roles, women make up approximately one third of Goldenfields Water's workforce.

Age & years of service of workforce

- In contrast to a large majority of local government organisations, Goldenfields Water's workforce is relatively young. The largest proportion of the workforce is aged between 35 – 44 years (42%), with 30% of the total workforce being under the age of 34.

- The youth of Goldenfields Water's workforce is also reflected in the years of service within the workforce where 53% of Goldenfields Water's employees hold less than five years' service and only 6% of employees exceeding twenty one years of service.
- 11% of the workforce are anticipated to retire in the next five years. The majority of people whom Goldenfields Water expect to lose as a result of retirement are amongst those who have contributed the most extensive lengths of service to Goldenfields Water.

Equal Employment Opportunity

In accordance with our Equal Employment Opportunity (EEO) Policy, Goldenfields Water is committed to ensuring our status as an EEO Employer.

Goldenfields Water recognises the value of a diverse workforce and prohibits discrimination of any form within our workplace. This is supported through a number of workplace policies and procedures, together with embedded practices to ensure that our processes and systems are fair, equitable and do not disadvantage people because they belong or identify to a particular group and/or groups.

Goldenfields Water's EEO Policy is available at www.gwcc.nsw.gov.au.



What our employees said

In undertaking Goldenfields Water’s first Workforce Management Plan, it was important to gather the thoughts of our employees to ensure that their opinion was consistent to what the data from our workforce profile displayed.

The thoughts of employees were measured via a staff survey which asked our staff three questions. 94% of staff responded to the survey. The results are displayed in Figure 9 below.

Figure 9: Results of employee survey conducted in March 2017.

KEY:



Are you satisfied with your job?



Are you proud to work for GWCC?



Do you foresee yourself working for GWCC in five (5) years’ time?



Challenges expected

Goldenfields Water will face a number of challenges over the coming four year period that this WMP covers. As identified by the Local Government Sector as part of the Destination 2036 Action Plan, these challenges are similar to that of many other local government organisations. The challenges likely to impact Goldenfields Water are detailed as follows.

Ageing Workforce

Whilst the majority of Goldenfields Water’s workforce does not fall in to age brackets considered to be ageing at the time this document was written, it is noted that throughout the term of this plan approximately 28% per

cent of our workforce will move into the 45-54 age bracket, largely shifting our current age distribution as pictured at Figure 7. In addition, approximately 11% of Goldenfields Water’s workforce is anticipated to retire in the next five years. The employee survey that was conducted as part of the research for this strategy indicated that 22.45% of Goldenfields Water’s workforce did not intend on working for Goldenfields Water in the next five years. The biggest risk associated with these facts is the loss of critical organisational knowledge. As a result of this, there is an urgent need for Goldenfields Water to focus on transferring this knowledge and skills to our more recently appointed staff to ensure that valuable business knowledge is not lost in transition.

Changing nature of work

Rapid advancements in technology has dramatically changed the way in which work can be carried out, and also reduced the demand for traditional skills.

There is an increasing need for Goldenfields Water to focus on the implementation of more technology-based systems to ensure that we are conducting business efficiently. We need to ensure that our staff keep pace with these changes and are trained, confident and capable to adapt to ensure this transition is successful and does not prohibit the operations of our business.



Skill shortages

As identified by the NSW Independent Local Government Review Panel, the sector has identified skills shortages in a number of areas. Based on the sector-wide findings and competition with private enterprise, Goldenfields Water is likely to undergo a shortage of staff who carry out specialised and technical roles in the future.

Based on industry trends, likely areas to undergo skills shortages include:

- Engineering;
- Accounting/Finance Management; and
- Information Technology.

As a result of Goldenfields Water's rural location, this challenge will continue to be amplified in comparison to other like organisations in coastal and metropolitan areas.

Employee Engagement & Development

With 30% of Goldenfields Water's workforce currently made up of Millennials (aged from 0-34), it is imperative that training and development opportunities are provided to ensure that our staff are highly skilled in their relevant fields to maintain and promote staff engagement.

Equally, it is vital that supervisory staff are competent in the fields of performance management, target setting and driving innovation to ensure that our emerging workforce remains engaged and driven to succeed.

As a result of Goldenfields Water's regional location, it has proven to be difficult for staff to access training and professional development opportunities in a cost-effective way. Being a smaller organisation, the opportunities for staff to act in higher grade roles to attain such development opportunities can be limited. Furthermore, the opportunity to network can also be greatly restricted. As a result of this, Goldenfields Water needs to find more unique ways to ensure staff engagement and loyalty.

Health & Wellbeing

Goldenfields Water is committed to the provision of a safe workplace for all our staff. The growing knowledge surrounding the link between employee health and well-being and employee performance requires Goldenfields Water to invest in the health of our staff. Evidence suggests that this brings about a multitude of benefits to both the organisation and the employee including positive workplace culture, reduced absenteeism, and improved productivity outcomes.



Workforce management strategies

Goldenfields Water will implement a number of initiatives, actions and strategies over the next four years to ensure effective workplace planning and efficient resourcing. These initiatives are divided in to four broad areas with key links to the BASP.

These are:

1. Workforce planning to ensure organisational sustainability.
2. Attracting the best staff by promoting Goldenfields Water as an employer of choice.
3. Developing staff to create a talented and responsive workforce equipped to meet organisational needs.
4. Retaining a committed, engaged and satisfied workforce.

Workforce Management Strategic Area	Action	2017/2018	2018/2019	2019/2020	2020/2021
1. Workforce planning to ensure organisational sustainability.	1.1 Provide funding for leadership training and professional development opportunities for managers, coordinators and potential leaders within the organisation.	x	x	x	x
	1.2 Continue partnership with Charles Sturt University in relation to the Engineering undergraduate program.	x	x	x	x
	1.3 Develop and implement a mentoring program where experienced staff can act as formal mentors to more junior staff to ensure the transfer of skills and knowledge.		x		
	1.4 Investigate the options for staff to be mentored from individuals in other local government organisations.		x		
	1.5 Provide support to managers and coordinators to enable them to identify and address their strategic workforce needs, taking into account ageing workforce demographics to ensure business continuity and organisational goals are met.	x	x	x	x



Workforce Management Strategic Area	Action	2017/2018	2018/2019	2019/2020	2020/2021
2. Attracting the best staff by promoting Goldenfields Water (GW) as an employer of choice.	2.1 Conduct a review of Council's mission and vision to ensure they align with current organisational objectives.		x		
	2.2 Re-invent GW's external Careers internet page, with the development of new materials to emphasise the benefits of working with GW.	x			
	2.3 Incorporate new branding and workplace values as part of external recruitment documentation.	x			
	2.4 Continue to review position descriptions prior to advertising to ensure that the role description, position requirements and job design reflect current operational needs.	x	x	x	x
	2.5 Develop a Recruitment Policy which ensures EEO and flexible practices.	x			
	2.6 Review and update EEO Policy.	x			
	2.7 Develop and implement EEO Management Plan.	x		x	
	2.8 Provide EEO training to all staff across the organisation.	x	x	x	x
	2.9 Liaise with surrounding schools, TAFEs and universities to gauge opportunities to promote school based opportunities. E.g. work experience, school based traineeships/apprenticeships.	x	x	x	x
	2.10 Increase community awareness of job diversity within GW by ensuring presence at local 'Career Expos' at surrounding universities and high schools.	x	x	x	x
	2.11 Identify incentives to attract potential staff to GW.	x	x	x	x
	2.12 Ensure that Employee Exit Interviews are conducted to better understand the reasons for employees leaving the organisation.	x	x	x	x



Workforce Management Strategic Area	Action	2017/2018	2018/2019	2019/2020	2020/2021
3. Developing staff to create a talented and responsive workforce equipped to meet organisational needs.	3.1 Develop, implement and monitor organisation-wide training plan to ensure available funds for required training.	x	x	x	x
	3.2 Promote and support GW's annual Staff Development Plan process as a way of encouraging staff to consider their career development.	x	x	x	x
	3.3 Promote and support GW's Education Assistance program to encourage staff to undertake formal qualifications.	x	x	x	x
	3.4 Develop and facilitate supervisory support training sessions on topics such as performance management and work health and safety.	x	x	x	x
	3.5 Promote and support GW's internal employee/team recognition program to reward and recognise high performing employees.	x	x	x	x
	3.6 Identify external funding opportunities for training and education.	x	x	x	x
	3.7 Implement a Human Resource Information System (HRIS) to ensure that training records, qualification history and skill gaps are appropriately recorded and can be reported and acted on.		x		
	3.8 Develop and implement a mentoring program where experienced staff internal or external to GW can mentor others.		x		
	3.9 Encourage staff to act in higher level positions as opportunities arise.	x	x	x	x



Workforce Management Strategic Area	Action	2017/2018	2018/2019	2019/2020	2020/2021
4. Retaining a committed, engaged and satisfied workforce.	4.1 Regularly monitor and review the effectiveness of HR policies and procedures to ensure they are appropriate and successful.	x	x	x	x
	4.2 Maintain data from employee exit forms to determine reasons for staff turnover.	x	x	x	x
	4.3 Promote and support GW's recognition program for high-performing and long-serving employees.	x	x	x	x
	4.4 Investigate and promote options for flexible work arrangements within GW.	x	x	x	x
	4.5 Review salary system to ensure position sizing is consistent with industry standards.		x		
	4.6 Identify incentives to retain valuable staff.	x	x	x	x
	4.7 Maintain and promote GW's Employee Assistance Programs.	x	x	x	x
	4.8 Investigate ways to promote work-life balance within GW.	x			
	4.9 Develop and implement GW's Health and Wellbeing strategy.	x			
	4.9 Conduct an Employee Opinion Survey annually.	x	x	x	x



Implementation & monitoring

Implementation of the Plan is directly aligned with the goals and objectives of the BASP. It is the responsibility of all staff to support and engage in ensuring the Plan is implemented.

The Plan will be coordinated by the Human Resources Coordinator and monitored by Goldenfields Water's management team (MANEX).

The collective outcomes from this Plan will be formally reported to Council on an annual basis.



ASSET MANAGEMENT PLAN

PREPARED BY
OPUS INTERNATIONAL CONSULTANTS
2012

EXPLANATORY NOTE

The following Asset Management Plan (AMP) was prepared in 2012 for Goldenfields Water by an external consultant.

As such, some of the details contained in the AMP may be out of date.

Given the AMP is modelled on a 20 year timeframe it remains relevant in preparing this Resourcing Strategy.

Revising the AMP is a key activity in Goldenfields Water's Delivery Program for 2017–2021. This action will be completed as part of the Operational Plan for 2017/2018.



1. Summary

1.1 What Council provides

Goldenfields Water carries out water supply functions within the Local Government areas of Bland, Coolamon, Cootamundra, Harden, Junee, Temora, Young and part of Narrandera.

Retail water distribution in Cootamundra Town and the Shires of Harden and Young is undertaken by local General Purpose Councils (GPCs), with Goldenfields Water providing bulk water supply to each.

The Governor's Proclamation establishing Goldenfields Water details the legal operating framework and principal objectives of the organisation.

Goldenfields Water's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers.

1.2 What does it cost?

There are two key indicators of cost relating to the provision of bulk and retail water services namely:

- The life cycle cost being the average cost over the life cycle of the asset;
- The total maintenance and capital renewal expenditure required to deliver agreed service levels over the next 10 years under the long term financial plan.

The estimated life cycle cost to provide the water services is \$8,995,342 per annum. Council's planned life cycle expenditure for the first year of the Asset Management Plan (AMP) is \$5,333,465 resulting in a life cycle sustainability index of about 0.4.

The estimated total maintenance and capital expenditure required to provide water services in the next 10 years is \$65,154,322 at an expenditure average of \$6,515,432 per year.

1.3 Plans for the future

Goldenfields Water plans to operate and maintain the bulk and retail water networks to achieve the following strategic objectives:

- Ensure the water networks are maintained at a safe and functional standard, as set out in this AMP;
- Be a successful business;
- Operate at least as efficiently as comparable businesses;
- Exhibit a sense of social responsibility by having regard to the interests of the community in which it operates.



1.4 Measuring performance

1.4.1 Quality

The water supply assets will be maintained in a condition that is fit for purpose and provides an acceptable level of redundancy. Defects found or reported that are outside the service standard will be repaired.

1.4.2 Function

Goldenfields Water intends to maintain an appropriate water supply network in partnership with other levels of government and stakeholders, to meet the current and future water needs of the community.

The water supply asset attributes will be maintained at a safe level. Associated signage and equipment will be provided as needed to ensure public safety. Goldenfields Water's aim is to ensure that key functional objectives are met including compliance with:

- The Australian Drinking Water Guidelines (ADWG);
- Pressure and flow requirements;
- Water demand requirements.

1.4.3 Safety

Goldenfields Water regularly monitors and inspects various components of the water supply network and prioritises and repairs defects in accordance with an overall inspection schedule.

1.5 The next steps

The actions resulting from this AMP are:

- Ongoing improvement of asset management systems and processes;
- Improving the gathering and analysis of population and demographic data;
- More accurate modelling of system capacity, operation and upgrade/renewal programming;
- Implementing demand and risk management;
- Assessing leakage and other losses following the renewal of water meters.



2. Introduction

2.1 Background

This AMP demonstrates responsive management of assets and services provided from assets, compliance with regulatory requirements, and communication of the funding needed to provide the required levels of service.

The AMP is to be read in conjunction with the following associated planning documents:

- Business Activity Strategic Plan 2012/16 (BASP);
- Development Servicing Plans for Water Supply Services 2006 and 2011 (DSPWSS).

2.2 Water supplies

2.2.1 General

Goldenfields Water carries out water supply functions within the Local Government areas of Bland, Coolamon, Cootamundra, Harden, Junee, Temora, Young and part of Narrandera.

Retail water distribution in Cootamundra Town and the Shires of Harden and Young is undertaken by the local GPCs, from the GWCC bulk water

supply. The Governor's Proclamation establishing Goldenfields Water details the legal operating framework and principal objectives of the organisation.

Schematics of the supply networks are included in Appendix A.

2.2.2 Jugiong

The Jugiong Supply is obtained from the Murrumbidgee River at Jugiong. The original treatment plant, which was constructed in the 1930s, was replaced in the 1980s. Following subsequent additional improvements the plant is now a modern facility with a design capacity of 40 ML/day.

Treatment processes include settlement, filtration, chlorination and fluoridation. Treated water is pumped to the Cowangs reservoirs for distribution.

The system, which includes 14 sets of reservoirs and eight pumping stations, serves consumers in the rural areas and villages of the Shires of Cootamundra and Temora east of the Temora township, as well as the bulk

consumers of Cootamundra, Harden and Young Shires. The main pumping station configuration is inefficient and requires upgrading.

2.2.3 Oura

The Oura Supply is sourced from a bore field at Gumly Gumly Island on the northern side of the Murrumbidgee River, east of Wagga Wagga. Treatment processes include aeration, chlorination and fluoridation.

Treated water is pumped to balance tanks at Junee for distribution. The system comprises four bore pumps, 19 pumping stations and 33 sets of reservoirs. It supplies minor bulk water to Riverina Water County Council (RWCC) rural customers in the eastern sector of Wagga Wagga and Goldenfields Water's retail customers from Junee to Ungarie in the north and to Barellan in the west.

2.2.4 Hylands Bridge Supply

Non-potable water, sourced from an irrigation canal, contributes to the Barellan Water Supply. It also provides a farm water supply to the Binya area through a small network comprising two pumping stations and three sets of reservoirs.



2.2.5 Mt Arthur Supply

The Mt Arthur Supply is sourced from two bores near Matong, on the northern side of the Murrumbidgee River. The system supplies treated water to Goldenfields Water customers in the Coolamon/Grong Grong area and can be interconnected with the Oura System if required.

2.2.6 Mt Daylight Supply

The Mt Daylight Supply is sourced from a bore field situated between Lake Brewster, previously known as Lake Ballyrogan, and the Lachlan River south west of Lake Cargelligo. The supply is jointly operated by Goldenfields Water and Carrathool Shire Council. It supplies treated water to the villages of Naradhan, Weethalle and Tallimba and the surrounding rural areas. The infrastructure includes seven reservoirs and five pumping stations.

The approximate proportions of output from each source are:

- Jugiong 45%
- Oura 45%
- Mt Arthur 6%
- Hylands Bridge 2%
- Mt Daylight 2%

2.3 Key Stakeholders

Key stakeholders in the preparation and implementation of this AMP are shown in Table 2.3.

Stakeholder	Responsibility
Federal and State Governments and Agencies	Funding assistance and standards development
Elected members from representative Councils	Local Authority representation and administration
Management Executive	Managing and reporting on the status and effectiveness of current asset
Community and consumers	End user involvement including decisions on levels of service
Developers	Providing services and infrastructure facilities
Council Engineering and Operational staff	Preparing and implementing the AMP



2.4 Goals and objectives of Asset Management

Goldenfields Water's purpose is to provide water services to its communities. Some of these services are provided through infrastructure assets.

Goldenfields Water has acquired infrastructure assets through the Governor's Proclamation, by purchase, contract, construction by day labour staff and the donation of assets constructed by developers and others to meet increased levels of service and demands from population growth.

Goldenfields Water's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Taking a life cycle approach;
- Developing cost effective management strategies for the long term;
- Providing defined levels of service and monitoring performance;
- Understanding and meeting the demands of growth through demand management and infrastructure investment;
- Managing risks associated with asset failures;
- Adopting sustainable use of physical resources;
- Continuously improving asset management practices.

This AMP is prepared in accordance with Goldenfields Water's vision, mission, goals and objectives.

Council's Vision is "To be innovative leaders in the supply and distribution of water through regional efficiency, technical excellence and customer service".

Council's Mission is "To provide regional economic opportunity and lifestyle choices through provision of a quality water supply by innovative leadership showing environmental responsibility in cooperation with the community, constituent councils and governments".

Relevant Council goals and objectives and how these are addressed are shown in Table 2.4 overleaf.



Table 2.4 Council Goals and Objectives

Goal	Objective	Reference Section
Levels of Service	Provide water supply services that meet or exceed Levels of Service	3 Levels of Service
Areas Served	Extend water services to all new urban development	4 Future Demand
Water Demand Management	Improve efficiency of water use in Goldenfields Water area of supply	4 Future Demand
Pricing	Maintain a cost structure that is fair, transparent and complies with best practice management	6 Financial Summary
Customer Satisfaction	Satisfy customers and maintain appropriate levels of complaints	3 Levels of Service
Community Involvement	Involve the Community in appropriate decision making processes	3 Levels of Service
Environment	Plan and operate the system for long term adequacy and sustainability	4 Future Demand
Operations and Maintenance	Operate and maintain the system to deliver the levels of service cost effectively	5 Lifecycle Management Plan
Capital Works	Establish a capital works program that provides assets which deliver levels of service at the optimum cost	5 Lifecycle Management Plan

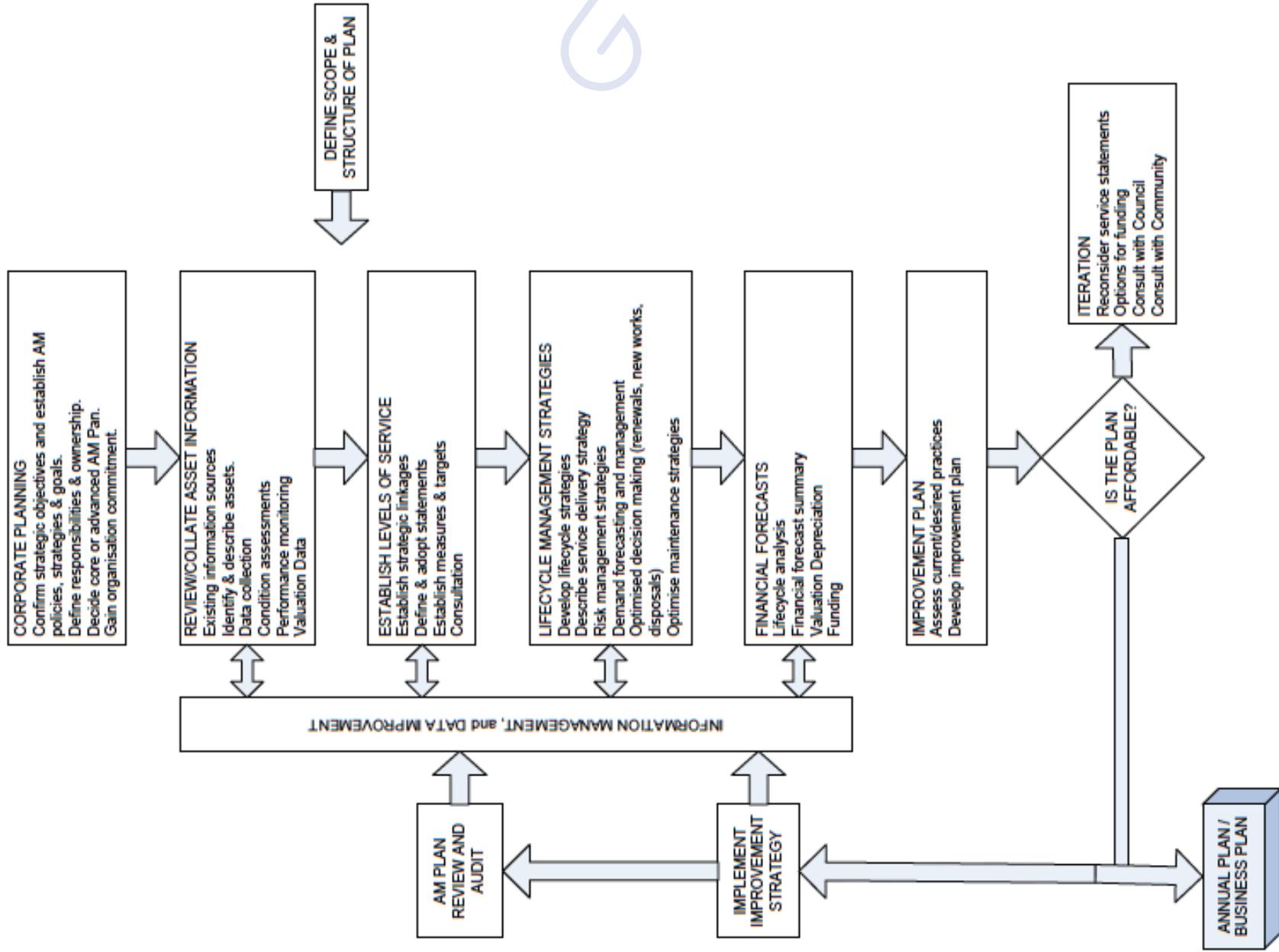
2.5 Plan Framework

Key elements of the AMP are:

- Levels of service – the services and levels of service to be provided by Goldenfields Water;
- Future demand – the impact on future service delivery and how this is to be met;
- Life cycle management – the management of existing and future assets to provide the required services;
- Financial forecasts – the funds needed to provide the required services;
- Monitoring – monitoring of the AMP to ensure it is meeting Goldenfields Water objectives;
- Asset management improvement – the means of upgrading the AMP in response to future conditions.

A flow chart for preparing an AMP is shown on page 42.

Asset Management Plan Flow Chart
 Source: IMM Fig 1.5.1, p 1.11





2.6 Core and Advanced Asset Management

The AMP is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the system or network level.

Future revisions of the AMP will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

The main aim of this initial version of the asset management plan is to provide Goldenfields Water with:

- An overall asset replacement profile and an annual depreciation based on currently assumed lives for each asset type;
- A prioritised list of required capital works for the next five years. The list will be updated each year.



3. Levels of service

3.1 Customer research and expectations

Goldenfields Water has carried out limited research on customer expectations but customer surveys may be undertaken over the next 2 to 3 years. The results will be incorporated in future updates of the AMP.

3.2 Legislative Requirements

Goldenfields Water is required to meet Australian and State Legislation and Regulations as shown in Table 3.2.

Table 3.2: Legislative Requirements

Legislation	Requirement
Local Government Act	Sets out the role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Water Management Act 2000	The object of this Act is the sustainable and integrated management of the State's water for the benefit of both present and future generations.
Water Management Act Amendment Bill 2004	The object of this Bill is to amend the <i>Water Management Act 2000</i> (the Principal Act), to facilitate the commencement of the Act and published water sharing plans and to deal with aspects of the National Water Initiative.
The Australian Accounting Standards	Standard AASB 116 Property, Plant and Equipment, requires that assets be valued and reported on in the annual accounts, including the cost of depreciation.



Legislation	Requirement
Protection of Environment Operations Act 1977	Sets out to protect, restore and enhance the quality of the environment in NSW, having regard to the need to maintain ecologically sustainable development, prevent pollution, eliminate harmful wastes, reduce the use of materials and enhance the re-use, recovery or recycling of materials.
Protection of Environment (Administration) Act 1991	The object of this Act is to constitute the Environment Protection Authority (now the DECC), to provide integrated administration for environment protection and to require the Authority to perform particular tasks in relation to the quality of the environment, environmental audit and reports on the state of the environment.
Environmental Planning and Assessment Act 1979	Sets out to encourage the proper management, development and conservation of natural and artificial resources for the purpose of promoting the social and economic welfare of the community and the protection of the environment, including the protection and conservation of native animals and plants, threatened species, populations and ecological communities, and their habitats.
National Environmental Protection Measures (Implementation) Act 1998	The objective of this Act is to make provision for the implementation of national environmental protection measures to protect, restore and enhance the quality of the environment and to ensure that the community has access to relevant and meaningful information about pollution in Australia. It is based on the Intergovernmental Agreement on the Environment 1992 ('the IGAE'), in which the Commonwealth, State and Territory Governments agreed to work together to develop uniform national environment protection standards for the control of air, water, land and noise pollution.
Occupational Health and Safety (OH&S) Act 2000	Sets out roles and responsibilities for the health, safety and welfare of personnel at work.
Workers Compensation Act 1987	Sets out to provide for the compensation and rehabilitation of workers in respect of work related injuries.
Public Health Act 1991	The objective of this Act is to protect the public health of the community.
Waste Avoidance and Resource Recovery Act 2001	The objective of this Act is to encourage the most efficient use of resources, to provide for a continual reduction in waste generation, to minimise the consumption of natural resources, to ensure efficient funding of waste and resource management planning and to assist with the achievement of the objectives of the Protection of Environment Operations Act.
Public Works Act 1912	Sets out to provide the legal framework for an effective and transparent operation of Public Works in NSW.



Legislation	Requirement
Civil Liability Act 2002	Sets out to make provision in relation to the recovery of damages for death or personal injury caused by the fault or negligent of a person or organisations.
Native Vegetation Conservation Act 1997	The objective of this Act is to provide for the conservation and management of native vegetation, including protection, encouragement and promotion, improving the existing condition, encouraging revegetation and rehabilitation, preventing inappropriate clearing, and promoting the significance of native vegetation, all in accordance with the principles of ecologically sustainable development.
Soil Conservation Act 1938	The objective of this Act is to preserve proclaimed works and catchment areas.
Catchment Management Act 1989	Promotes community participation in natural resource management and ensures sustainable use of the natural resources.
Other relevant Acts and Legislation	As required.



3.3 Current levels of service

This AMP defines service levels in two ways.

Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met.

Service levels are categorised as:

Service Criteria:

- Quality;
- Quantity;
- Availability;
- Safety.

Technical Measures:

- Water purity, drinking water standards;
- Meeting demand;
- Service failures;
- Public safety.

Goldenfields Water's target levels and current rank in the NSW Office of Water (NOW) performance monitoring criteria are detailed in Table 3.3.



Table 3.3: Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Pressure and flow – reticulated connections	12-90m head per standard 20mm connection.	Measure pressure	1 or 2	Not ranked
Pressure and flow – non reticulated connections	Equivalent to reticulated connections as a target but may not be achieved in all circumstances. It is a condition of supply that new connections have an onsite 10,000 Litres minimum size storage tank. Retrospective fitting to existing connections to be implemented over time.	Measure pressure	1 or 2	Not ranked
Water quantity	Annual demand: 294 kL/ET Peak day demand: 4 kL/ET/d	Recorded at sources and meters	1 or 2	Not ranked
Notice of planned interruption (written notice)	Domestic and rural – minimum 24 hours Commercial/industrial – 3 working days	Record and review notice periods provided	1 or 2	Not ranked
Unplanned interruption – reticulated connections	Maximum 2 times/yr if lasting up to 12 hours Maximum 5 times/yr if lasting up to 5 hours	Record and review interruption periods	1 or 2	5
Unplanned interruptions – non reticulated connections	May experience interruptions without prior notice.	Record and review interruption periods	1 or 2	Not ranked
Service provision	All urban areas of towns and villages within the Goldenfields Water area of responsibility. It will also be available to non-urban areas where adequate supply lines already exist or can be laid at a practical and economically recoverable cost.	Record incidents where no connection could be provided and review	1 or 2	Not ranked



Table 3.3: Current Service Levels (continued)

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Water quality	Potable water should meet Australian Drinking Water Guidelines (2004). Non-potable water is not supplied for human consumption.	Test and Review performance against guidelines	1 or 2	3
Response time to complaints	Written: 10 working days Phone: 24 hours	Record and review response times	1 or 2	Not ranked
Complaints	Less than 2 complaints per 1000 properties	Record and review response times	1 or 2	3
Response to supply failures	Priority 1 – 15 min (supply to a large number of customers at a critical time) Priority 2 – 30 min (supply to a small number of customers at a non-critical time) Priority 3 – same day (supply to a single customer) Priority 4 – within 1 week (minor problem or complaint) Immediate – in case of emergency or catastrophe	Record and review response times	1 or 2	Not ranked
Response to enquiries	Respond to 95% of written enquiries within 10 working days Respond to 95% of personal enquiries within 2 working days	Record and review response times	1 or 2	Not ranked
Ongoing water conservation measures	Implement a regional demand management strategy.	The demand management plan is being prepared and will include actions with timeframes. The progress can then be reviewed.	1 or 2	Not ranked



3.4 Desired levels of service

At present, indications of desired levels of service are obtained from various sources including residents' feedback to Councillors and staff, service requests and correspondence. Council has yet to quantify some of these desired levels of service. This will be done in future revisions of the AMP in accordance with the Improvement Plan.

3.5 Proposed actions

The BASP includes additional objectives that relate to the level of service that Council provides.

Objective 1 of the BASP relates to levels of service and involves:

- Developing a monitoring system to document actual results against targets;
- Reporting to Council with recommendations for improving compliance on a priority basis;
- Incorporating compliance improvements into Council's annual management planning process.

The intention is to supply a water service which meets or exceeds levels of service.

Most of these actions are ongoing. Goldenfields Water is building additional storage reservoirs within the reticulation areas to provide greater reserve, allow more standing time and enhance the settling of contaminants.

Objective 2 relates to maximising the regional water supply and involves:

- Undertaking network analyses of water systems in the Goldenfields Water area;
- Obtaining predicted demand volumes from bulk and retail councils.

The capacity of the systems is currently reviewed using free modelling software. Goldenfields Water intends to purchase advanced modelling software which will enable more accurate determination of system capacities and identify ways of improving overall efficiency.

Objective 5 relates to customer satisfaction and involves:

- Increasing awareness through advertising;
- Reinforcing throughout the organisation that Goldenfields Water is customer orientated;
- Providing information to constituent councils to enhance operation.

Customer surveys have not yet commenced but will be essential in moving from a core plan to a more advanced plan in the future. A complaint handling system is currently in place, but a more stringent process is being developed in-house.

The intent is to have satisfied customers and an appropriate level of complaints.



3.6 Improvements required

Data in Table 3.3 outlines levels of service. Certain performance measures are not well defined, cannot be properly measured and require amendment.

These include:

- Pressure and flow - non-reticulated connections sets a target level but does not define limits on an acceptable failure rate;
- Unplanned interruptions – non reticulated connections sets a target level but does not define limits on an acceptable failure rate;
- Response to supply failures includes criteria which are not defined
- Occupational Health & Safety should be included in the objectives.



4. Future demand

4.1 Demand forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, consumer preferences and expectations, economic factors, agricultural practices and environmental awareness.

The DSPWSS indicated a 2005 population of 34,200 for the region including the population supplied with bulk water from the Jugiong system. The population of 34,200 equated to 24,526 equivalent tenements (ET).

The report predicted no increase in ETs for Daylight and Hylands and 0.5% per year compounded growth for the remaining areas. The corresponding average growth rate for the region is 0.48% resulting in a projected total of 27,014 ET by 2023 and of 28,350 ET by 2035.

The DSPWSS was updated in 2011 but new population growth and demographic information was not available. The review was therefore based on the number of assessments over the previous three years. It confirmed zero growth in Daylight and Hylands and showed a growth of about 0.35 per year elsewhere.

The 2006 census figures for the Temora local area indicate a population of 5,855. Of this population 1,150 (13.3%) are over 65 years of age and 1,164 (33.2%) have never married. Of the families 37.2% have no children. Therefore it is reasonable to conclude that the average household size is reasonably small. The census shows an average household size of 2.4 versus 2.6 for Australia. Other areas in region have not been

compared but the data gives an indication of the likely demographics for the region. For the number of residential connections and the 2005 population for the region, the average household is about 2.8 persons.

Objective 2 of the BASP relates to areas of new urban development and involves:

- Liaising with general purpose councils to understand areas of potential development;
- Monitoring urban and village growth and augmenting supply as required.

The intention is to extend services to all new developments.

4.2 Changes in technology

Technology changes are forecast to have little effect on the delivery of services covered by the AMP but improvements in technology will allow greater operational effectiveness and efficiency. Examples include:

- Acquiring new asset management software will allow better tracking of service requests and works instructions;
- Installing variable speed drives at major pump stations such as at Jugiong will result in significant savings due to the more efficient use of electricity by matching supply to demand.



4.3 Demand Management Plan

Demand for new services will be managed by:

- Maintaining, replacing and upgrading existing assets, continuing to manage demands and providing new assets to meet demand;
- Implementing demand management practices that include non-asset solutions, insuring against risks and managing failures.

Goldenfields Water has not yet developed a formal Demand Management Plan (DMP) but a DMP will be prepared in accordance with the BASP. Engineering and Operational staff have already identified opportunities for demand management, examples of which are shown in Table 4.3. Further opportunities will be developed in the DMP and be covered in future revisions of the AMP.

Demand Management Plan Summary - Table 4.3

Service	Activity
Operation	Implement a calibration and replacement program for internal meters
Operation	Develop a water meter replacement program
Operation	Carry out leakage audits and regular monitoring
Education	Continue and enhance an advertising campaign
Demand substitution	Cooperate with GPCs regarding the reuse of effluent as and when practical

4.3.1 Demand Management Strategies

The object of demand management planning is to actively seek to modify customer demands for service, in order to optimise utilisation of existing assets or to reduce or defer the need for new assets. Demand management strategies provide alternatives to the creation of new assets. Demand management should be practiced continuously to maintain total demand at reasonable and sustainable levels. Key strategies are included in Table 4.3.1.1.

Demand Management Strategies - Table 4.3.1.1

Demand component	Example
Legislation/ Regulation	Develop a demand management plan
Education	Educate the general public on water conservation Demonstrate the savings to be made by reducing potable water consumption
Incentives	Provide incentives for developing and using non-potable water sources Develop an incremental charging regime
Operation	Control and reduce leakage Control supply pressure Renew assets as required
Demand substitution	Promote stormwater use for gardens Promote effluent reuse where appropriate



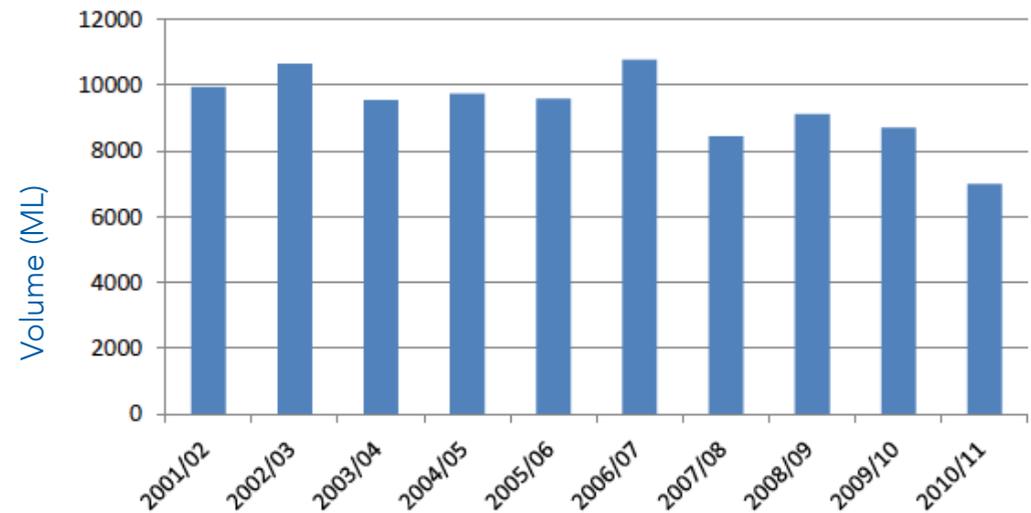
The NSW Government carried out a Water Wise initiative to promote water savings and provide easy solutions for consumers to reduce their water consumption. This initiative proved very successful in the Goldenfields Water region and did reduce the water demand significantly. The February 2007 "Review of Relative Efficiencies and Economies of the Reticulation and Distribution of Water", quotes volumes of water supplied from 2003 to 2005. Details are included in Table 4.3.1.2.

Total Water Supplied - Table 4.3.1.2

Year	Volume (ML)
2002/2003	10,700
2003/2004	9,560
2004/2005	9,240

Figure 4.3.1 shows the amounts of water supplied over the past 10 years.

Figure 4.3.1





Although price increases may have affected the demand to some extent, it is likely that much of this reduction can be attributed to customers being “water wise” and to climate conditions.

Pricing is a demand management tool. Currently Goldenfields Water has a flat fee structure with a fixed fee per kilolitre, irrespective of the volume used. Fees and charges are set annually.

The two main design criteria for water supplies are peak daily and average daily demand. High peak demand results in inefficient use of assets since they are under utilised most of the time. It is therefore appropriate to reduce peak supply rates where possible.

One means of reducing system supply rates is through the provision of on-site storages. Currently rural consumers are supplied on demand. A recently introduced policy requires new consumers in rural areas to provide on-site storage.

On-site storages can be utilised in townships to provide for sustained local fire fighting capability or to service development beyond main supply areas. The storages can be supplied at substantially lower flow rates and customer demand can be matched to individual needs.

Imposition of water restrictions is another non-asset solution for demand management. Goldenfields Water has only used this method when supply was restricted during prolonged dry conditions.

The installation of variable speed drives at pump stations will allow the matching of pump discharge to demand with a corresponding reduction in leakage.

Unclaimed water is a serious issue in most of the Goldenfields Water supply areas and is resulting in a significant loss of revenue for unbilled water use. Table 4.3.1.3 shows the unclaimed potable water for 2009/10 and 2010/11.

Potable Water Losses - Table 4.3.1.3

Scheme	Water Losses (%)	
	2009/2010	2010/2011
Oura	19.1	27.45
Jugiong	6.9	11.9
Mt Arthur	10.9	14.7
Daylight	27.7	23.4
TOTAL	13.4	19.3

Unclaimed water in the Hylands non potable system were 11.9% and 24.7% respectively.

Unclaimed water is calculated by measuring the quantity of water supplied from source and subtracting the volume of water recorded by customer service meters. Water used for swabbing and flushing is also measured and accounted for. A few properties are not metered.

The assessment of unclaimed water relies on accurate individual water meters. Many meters are inaccurate and need replacement so calculated losses may not necessarily reflect the actual situation.

A significant water meter replacement program is to commence shortly. This will result in increased revenue, since recorded water usage falls with advanced meter age, and allow losses to be accurately determined.



At present leakage audits are restricted to patrolling pipelines. The replacement meter program will lead to a more rigorous leakage prevention and detection program.

4.3.2 Water network modelling

Real time modelling of water supplies is rapidly becoming the international benchmark for both optimum network operation and for managing future demand patterns. Water modelling is a powerful tool and is virtually essential for the proper planning and operation of modern water supplies. It can be used to identify means of:

- Optimising pumping systems, reducing electricity use and cost, and improving operation of storages;
- Improving water quality through increased retention in reservoirs and improved chlorine residuals;
- Developing contingency plans to deal with asset failures;
- Appropriately sizing mains when carrying out renewal works or capital projects;
- Managing pressures throughout the systems to reduce breakages, leakage and costs;
- Identifying means of improving system reliability and efficiency;
- Improving planning for shutdowns.

4.4 New assets from growth

New assets required to meet growth will be funded by land developers and constructed by day labour or specialist contractors. Goldenfields Water requires the payment of developer contributions for new works, and these funds can be used to create new assets.

Acquiring new assets will commit Goldenfields Water to fund ongoing operations and maintenance for the period of service. These future costs are identified and quantified in the forecasts of future operating and maintenance costs.



5. Lifecycle Management Plan

The Lifecycle Management Plan (LMP) details how GWCC plans to manage and operate the assets at the agreed levels of service while optimising life cycle costs.

5.1 Background Data

5.1.1 Physical Parameters

The assets covered by the AMP are summarised in Table 5.1.1.

Assets Covered by this Plan - Table 5.1.1

Asset category	Details	Replacement Value (\$M) 2012
Bulk bores	4	1,224,700
Retail bores	2	573,056
Bulk pumping stations	14	16,458,499
Retail pumping stations	23	4,584,793
Bulk mains	310 km	122,930,441
Retail mains	1,786 km	197,953,631
Bulk reservoirs and surge tanks	22 reservoirs (total capacity 118.7 ML) 8 surge tanks	28,921,163
Retail reservoirs and surge tanks	92 reservoirs (total capacity 66.8 ML)	25,690,471
Bulk treatment plants	6	21,290,720
Retail treatment plants	2	262,677
Water meters	10739	1,973,900

The total replacement value is \$421,864,051 at 2012.

Schematics showing water sources, bulk supply systems and towns and villages supplied are included in Appendix A.



5.1.2 Asset Details

Three older reservoirs have been decommissioned. It will be 20-30 years before further reservoirs require replacement.

Most treatment assets have a remaining life of at least 30 years or more. Minor assets such as chemical dosing equipment will require replacement in about 6 years or so.

Details of bulk mains are included in Table 5.1.2.1.

Bulk Mains - Table 5.1.2.1

Pipe Type	Length (km)
AC	23.9
CI	18.9
Concrete	6.6
DI	126.9
Hobas	2.0
MS	107.5
PVC	3.8

The total length of mains is 289.6 km.

Most of the pipes are ductile iron (DI) and mild steel (MS). These mains, which are subject to high pumping heads, are generally performing satisfactorily.

Some mains between Jugiong and Temora have failed at the joints, but most of these defective mains have been, or will be, replaced in 2012.

Most of the mains were constructed in the 1980s and significant replacements will not be required for the foreseeable future.

The life of these assets can be extended by reducing the pumping rate to match demand.

This will lead to a consequent reduction in pumping head and transient pressures.

Details of reticulation mains are shown in Table 5.1.2.2.

Reticulation Mains - Table 5.1.2.2

Pipe Type	Length (km)
AC	345.5
CI	256.2
DI	47.9
PVC	1,126.9
Other	9.6

The total length of mains is 1,786.1 km. Most comprise PVC, the life of which has not been as high as expected. PE is now generally the preferred pipe type for renewals.

About 90% of the PVC mains were installed before 1990. Goldenfields Water experience is that these pipes have a life of less than 50 years. This means that significant renewal expenditure will be required in about 20-30 years.

5.1.3 Risk Management

A Risk Management Plan (RMP) will be produced before the next update of the AMP. It is important for Goldenfields Water to quantify and make informed decisions on how to deal with risks. The analysis will identify potential risks, including those relating to WH&S, operational, environmental and public satisfaction and lead to the preparation of contingency plans for each risk.

The contingency plans will allow Goldenfields Water to respond to events that last for extended periods and facilitate a return to normal operation as soon as possible after the interruption. Individual plans will feed into Goldenfields Water's Corporate Risk Management Plan (CRMP).



5.1.4 Asset Capacity and Performance

Deficiencies in service performance are shown in Table 5.1.4.

Performance Deficiencies - Table 5.1.4

Description	Service Deficiency
Oura bore fields	Bore No. 5 is no longer operational and Bore No. 2 is in poor condition. The availability of water allocation is in question and could affect future supply capability. Bores are on private land and acquiring additional land for more bores is problematic.
Jugiong Pump Station	The pumps are not fitted with variable speed drives and are oversized for the requirement. The pumps are inefficient and the power usage would be reduced significantly if appropriately designed replacement pumps were installed.
Rural supplies	Older connections did not require an on-site storage and the need to supply on demand places a strain on the delivery system.
Oura water quality	The water from Oura, which provides about 45% of supply has high concentrations of iron and manganese. Quality issues necessitate the flushing and swabbing of mains with a consequential increase in operating costs and inconvenience to consumers.

5.1.5 Asset Valuations

The value of assets as at 30 June 2011 is summarised in Table 5.1.5. Assets were last revalued at 30 June 2010.

Asset Values - Table 5.1.5

Description	Current Estimated Replacement Cost (\$)	Annual Depreciation (\$)	Current Written Down Value (\$)	Accumulated Depreciation (\$)
Bulk Supply	190,825,523	2,217,505	124,664,073	66,161,450
Retail Supply	229,064,628	3,208,371	101,690,717	127,373,910
Total	419,890,151	5,425,877	226,354,790	193,535,360

5.1.6 Sustainability

GWCC's sustainability reporting includes the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion. The results are indicated in Table 5.1.6.

Asset Sustainability - Table 5.1.6

Annual asset consumption	Depreciation	\$5,425,877	1.29%
	Depreciable Amount	\$419,890,151	
Annual asset renewal	Renewal Expenditure	\$922,250	0.22%
	Depreciable Amount	\$419,890,151	
Annual upgrade/expansion	Annual Upgrade/Expansion	\$1,916,250	0.46%
	Depreciable Amount	\$419,890,151	



5.2 Routine Maintenance Plan

Routine maintenance is the regular ongoing work that is necessary to keep assets operating. This includes instances where portions of the asset fail and need immediate repair.

5.2.1 Maintenance Plan

Maintenance includes reactive, planned and cyclic work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management or supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspecting, assessing condition against failure or breakdown, prioritising, scheduling and actioning works followed by reporting to develop a maintenance history and improve maintenance and service delivery performance.

Goldenfields Water does not have a formal MMS but is considering the eventual purchase of software for this purpose. In the mean time, staff use excel spreadsheets with programs recording works such as inspections, flushing, cleaning of reservoirs etc.

Cyclic maintenance is replacement of higher value component or sub-component assets that is undertaken on a regular cycle. This includes repainting, building roof replacement, etc.

Maintenance expenditure trends are shown in Table 5.2.1.

Maintenance Expenditure Trends - Table 5.2.1

Year	Maintenance Expenditure (\$)
2008/2009	2,625,000
2009/2010	2,770,000
2010/2011	3,050,000

Goldenfields Water has recently commenced the break up of maintenance costs into reactive, planned and cyclic components. In 2010/11 the ratio of reactive maintenance to total maintenance was about 5.5%.

Maintenance expenditure levels are considered adequate to meet required service levels. Future revision of the AMP will include linking maintenance expenditures with required service levels.

Most maintenance and operations are carried out by Goldenfields Water staff. The exception is specialised electric and communication work which is outsourced. A memorandum of understanding is being discussed with RWCC regarding the possible sharing of a water treatment plant, to reduce costs to each party. Cost sharing with local authorities in the region may also be considered.

Water meters are currently read every quarter while many Councils read meters every six months. Reading meters every six months could significantly reduce the cost of meter reading and billing.

5.2.2 Summary of Future Maintenance Expenditures

Future planned maintenance expenditure is forecast to increase at about 0.45% per year at current values.

Current and forecast annual expenditure in 20 years time are \$3,569,456 and \$3,887,335 respectively.



5.3 Asset Replacement

Asset replacement comprises major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Expenditure in excess of that required to restore an asset to original service potential constitutes upgrade, expansion or new works.

5.3.1 Replacement Plan

Assets are considered for replacement as they near the end of their effective working life.

Projects are ranked by priority and scheduled in future works programs.

Replacement is generally undertaken using 'low-cost' methods where practical. The aim of 'low-cost' works is to restore the service potential or future economic benefit of the asset by renewing the assets at a cost less than full replacement cost.

Future replacement expenditure may increase in the longer term as the asset stock ages. In the past an annual figure was allowed for replacements which were undertaken in response to repeated breaks and leaks.

Goldenfields Water is now developing a more advanced renewal method for better determining the replacement program.

Asset replacement profiles (ARPs) for active, passive and combined assets are included in Appendix B.

A significant additional item to that shown on the ARPs is the replacement of water meters. As a water meter ages it tends to under read thereby

resulting in a loss of council revenue and an under estimation of water losses in the system. 15 and 20mm water meters have a useful life of about 12 to 15 years. On this basis approximately 60% of 8,208 meters need immediate replacement.

Replacement assets which warrant upgrading will be identified during modelling of the distribution and reticulation systems.

The ARPs do not match observed short term asset performance. Goldenfields Water intends to undertake a program of asset condition assessment after which the ARPs will be amended accordingly. Amendments will be included in future revisions of this AMP.

5.4 Creation/Acquisition/Upgrade Plan

New works are those that create an asset which did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs.

Assets may also be acquired from land developers at no cost to the Council.

5.4.1 Selection Criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as network modelling, Councillor or community requests, proposals identified in strategic plans and partnerships with other organisations. Candidate proposals are investigated to verify need and to develop a preliminary capital estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programs. Ranking will eventually include risk assessment. The current priority ranking criteria are shown in Table 5.4.1.



Priority Ranking for New Assets - Table 5.4.1

Criteria	Weighting
Inadequate water supply infrastructure in existing areas	50%
Development areas	25%
Non compliance with existing infrastructure	25%

5.4.2 Planned Expenditure for New and Upgraded Assets

Planned expenditure for new and upgraded assets is shown in Table 6.1.

The significant expenditure in 2012/2013 includes \$3,500,000 for additional storage at June. Goldenfields Water is currently undertaking the capital works required to improve the reliability and general standard of the system.

New assets and services will be funded from Council's capital works program and grants where available. The capital works program is updated annually. It is determined by:

- Recording pipe breakages on a GPS system and prioritising works accordingly;
- Developing, maintaining and reviewing a long term rolling replacement plan for all assets;

- Identifying potential system capacity deficiencies and incorporating remedial works in the capital works program;
- Maintaining water network models to identify system deficiencies and plan replacement and new works accordingly;
- Utilising the Asset Registers and pipeline breakage history to determine mains replacement needs and priorities;
- Analysing capital works projects before implementation to determine the optimum method of execution.

The intention is to develop a capital works program which provides assets to deliver required levels of service at optimum long term cost.

Pipelines repairs are being recorded. The information will included in the GIS system.

5.5 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal will be examined to determine possible alternate options for service delivery.

Cashflow projections from asset disposals will be developed in future revisions of this AMP.

5.6 Operation and Maintenance

Operation and maintenance involves:

- Developing effective predictive maintenance with the use of appropriate technology;
- Documenting Standard Operating Procedures (SOPs) and system specific documentation;
- Developing costings and a reporting system for effective cost management;
- Extending the asset management system to record and analyse asset condition and breakdown data;
- Ensuring that all operational staff are appropriately trained in correct operational and repair procedures;
- Implementing immediate actions to identify and correct any sources of contamination;
- Developing and maintaining a program of systematic pump and plant maintenance;
- Continuing to examine energy requirements and costs and incorporating optimum pump utilisation into SOPs;



- Evaluating and implementing, where appropriate, alternate operational strategies, including resource sharing, private sector involvement, and the like;
- Linking the asset registers to information on maintenance;
- Regularly assessing asset utilisation and cost effectiveness of ownership for disposal purposes.

The intention is to operate and maintain the system to deliver required levels of service cost effectively.

Goldenfields Water intends to purchase a thermal imaging camera to assist with condition assessment.

Procedures will be developed with respect to collecting data and updating the asset registers for new, replacement and upgraded assets, and collecting samples for drinking water quality testing and recording.

Neighbouring RWCC has offered to make documents available to assist with the process.

Backflow is being addressed through the introduction of a new policy, which requires the installation of backflow prevention devices with meters for properties rated as high risk. The requirement applies to commercial or industrial

properties and residential properties greater than one hectare in area. Rural properties are rated medium risk and must have a testable double check valve. Goldenfields Water will consider inspecting properties with swimming pools, troughs and other such hazards which may impact on the water supply.



6. Financial summary

This section summarises the financial requirements resulting from all the information presented in previous sections of this AMP. The financial projections will be amended as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

Planned operating and capital expenditure is shown in Table 6.1.



Planned Operating and Capital Expenditure - Table 6.1

Year	Planned Expenditure (\$)					
	Capital			Maintenance	Operating	Total
	New System Assets	Renewals	Plant & Equipment			
2012/13	3,595,000	1,764,000	1,861,500	3,569,465	3,570,703	14,360,668
2013/14	180,000	500,000	1,141,150	3,585,528	3,586,771	8,993,449
2014/15	1,820,000	925,000	864,150	3,601,662	3,602,912	10,813,724
2015/16	2,070,000	500,000	1,087,313	3,617,870	3,619,125	10,894,308
2016/17	570,000	500,000	1,000,000	3,634,150	3,635,411	9,339,561
2017/18	570,000	500,000	1,000,000	3,650,504	3,651,770	9,372,274
2018/19	570,000	500,000	1,000,000	3,666,931	3,668,203	9,405,134
2019/20	570,000	500,000	1,000,000	3,683,432	3,684,710	9,438,142
2020/21	570,000	500,000	1,000,000	3,700,008	3,701,291	9,471,299
2021/22	570,000	500,000	1,000,000	3,716,658	3,717,947	9,504,605
2022/23	570,000	930,000	1,000,000	3,733,383	3,734,678	9,968,061
2023/24	570,000	930,000	1,000,000	3,750,183	3,751,484	10,001,667
2024/25	570,000	930,000	1,000,000	3,767,059	3,768,366	10,035,425
2025/26	570,000	930,000	1,000,000	3,784,011	3,785,323	10,069,334
2026/27	570,000	930,000	1,000,000	3,801,039	3,802,357	10,103,396
2027/28	570,000	930,000	1,000,000	3,818,143	3,819,468	10,137,611
2028/29	570,000	930,000	1,000,000	3,835,325	3,836,655	10,171,980
2029/30	570,000	930,000	1,000,000	3,852,584	3,853,920	10,206,504
2030/31	570,000	930,000	1,000,000	3,869,921	3,871,263	10,241,184
2031/32	570,000	930,000	1,000,000	3,887,335	3,888,684	10,276,019



6.1.1 Sustainability of Service Delivery

Two key indicators for financial sustainability are:

- Long term life cycle costs;
- Medium term costs.

Long term life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation).

The annual average life cycle cost for the services covered in the AMP is \$8,995,342.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability. Life cycle expenditure includes maintenance and capital replacement (renewals) expenditure and will vary depending on the timing of asset renewals. Life cycle expenditure is currently \$5,333,465.

The difference between life cycle costs and life cycle expenditure indicates whether present consumers are paying their share of the assets they are consuming each year. The AMP will:

- Identify levels of service that the community needs and can afford;
- Develop the necessary long term financial plans to provide the service in a sustainable manner.

The life cycle gap for services is \$3,661,877 per year. The life cycle sustainability index is 0.4.

The AMP identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20 year period for input into medium term 10 year financial and funding plans based on providing the service in a sustainable manner. This expenditure relates to medium term costs.

Providing services in a sustainable manner will require the matching of projected asset replacements to meet agreed service levels with planned capital works programs and available revenue.

The difference between planned asset replacements and funding indicates whether changes are required to service levels and/or funding to eliminate the funding gap.

Goldenfields Water will manage the gap by developing the AMP to provide guidance on future service levels, the resources required to provide these services, and asset replacement expenditure in response to observed asset condition.

The plan covers the first ten years of the 20 year planning period. The total maintenance and capital expenditure required over the 10 years is \$65,154,322.



6.2 Funding Strategy

Goldenfields Water funds expenditures from user charges, grants and financial contributions from developers.

Capital contributions are reviewed on a regular basis and are regarded as a fair charge.

The increasing cost of asset replacement will require Goldenfields Water to secure additional grants and other Government funding in conjunction with cost reductions.

Pricing will be reviewed annually.

The estimated cost of meter replacements is \$1,970,000. All meters will be replaced and backflow prevention provided as necessary within five years. The meters associated with backflow prevention will be replaced first.

Goldenfields Water is establishing a system which will identify the assets identified for replacement from the asset replacement profiles for ranking based on the:

- Number of previous repairs;
- Cost of repair;
- Disruption to consumers;
- Inconvenience to the general public;
- Proximity to other replacement mains;
- Distance from a works depot.

The annual works program will then be determined.

The ranking system will differ depending on asset location. For example it may be preferable to replace a main within a central business district earlier than in an urban or rural area to reduce interruptions to business and inconvenience to the general public when repairs are required.



7. Asset Management Practices

7.1 Accounting and Financial Systems

Accounting and Financial Systems will be addressed in subsequent updates of the AMP.

Goldenfields Water's short term focus is on:

- Updating asset registers and revaluing assets as the basis for better planning and operation of the water supply elements;
- Establishing formal and detailed asset management and operational procedures.

7.2 Operational Practices

Goldenfields Water has a regular swabbing and flushing program to remove iron and manganese deposits from the mains.

This program is very well set out showing the tasks, personnel involved and dates for each activity. It includes an action to notify consumers in the appropriate time frame to meet council goals.

The use of public standpipes may have an effect on iron and manganese. 28 standpipes are provided for bulk water use. All of the standpipes have keys and are metered, but use is otherwise uncontrolled.

Goldenfields Water provide hydrants at about 60m intervals in the urban areas and at longer intervals in semi-urban areas.

Spacing in rural areas is adhoc, depending on consumer requests. The local rural fire service occasionally use hydrants for practice. Fire service personnel identify and report faults observed during such practices to Goldenfields Water.

Goldenfields Water intends to undertake a program based on testing hydrants every 3-4 years or so. Valves inspection will be undertaken in conjunction with hydrant testing.

7.3 Asset Registers

Goldenfields Water is currently revising and rationalising the passive and active registers.

Urban and semi rural assets are being defined by street intersections representing the logical extent of replacement mains by section.

Rural and trunk mains are being defined by 5 km long sections representing a practical and economic length in view of establishment and other costs associated with working in relatively remote areas.

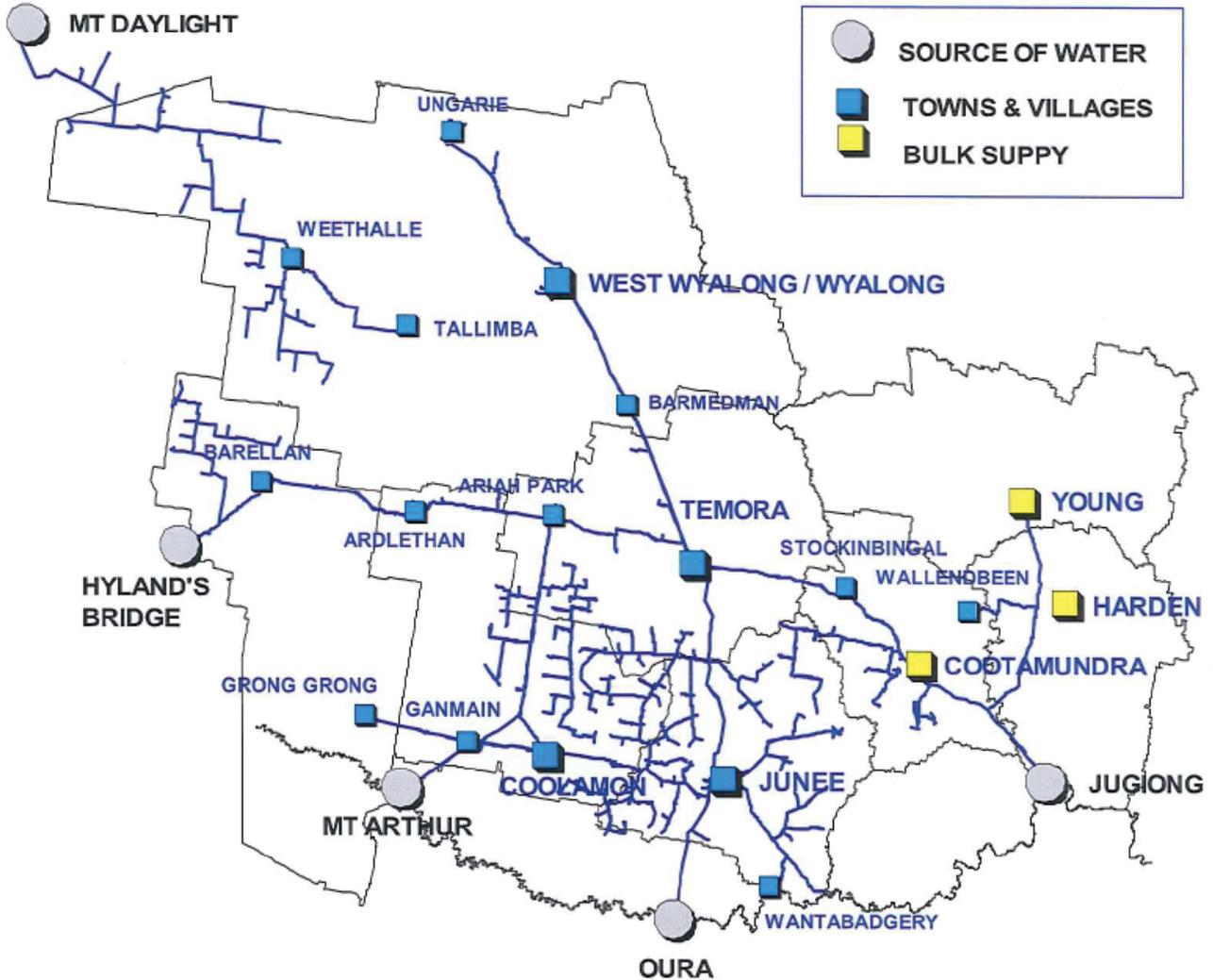
The active asset register is being extended to include separate entries for buildings, pumps, motors, switchboards, wiring, pipework, telemetry and treatment plant components.

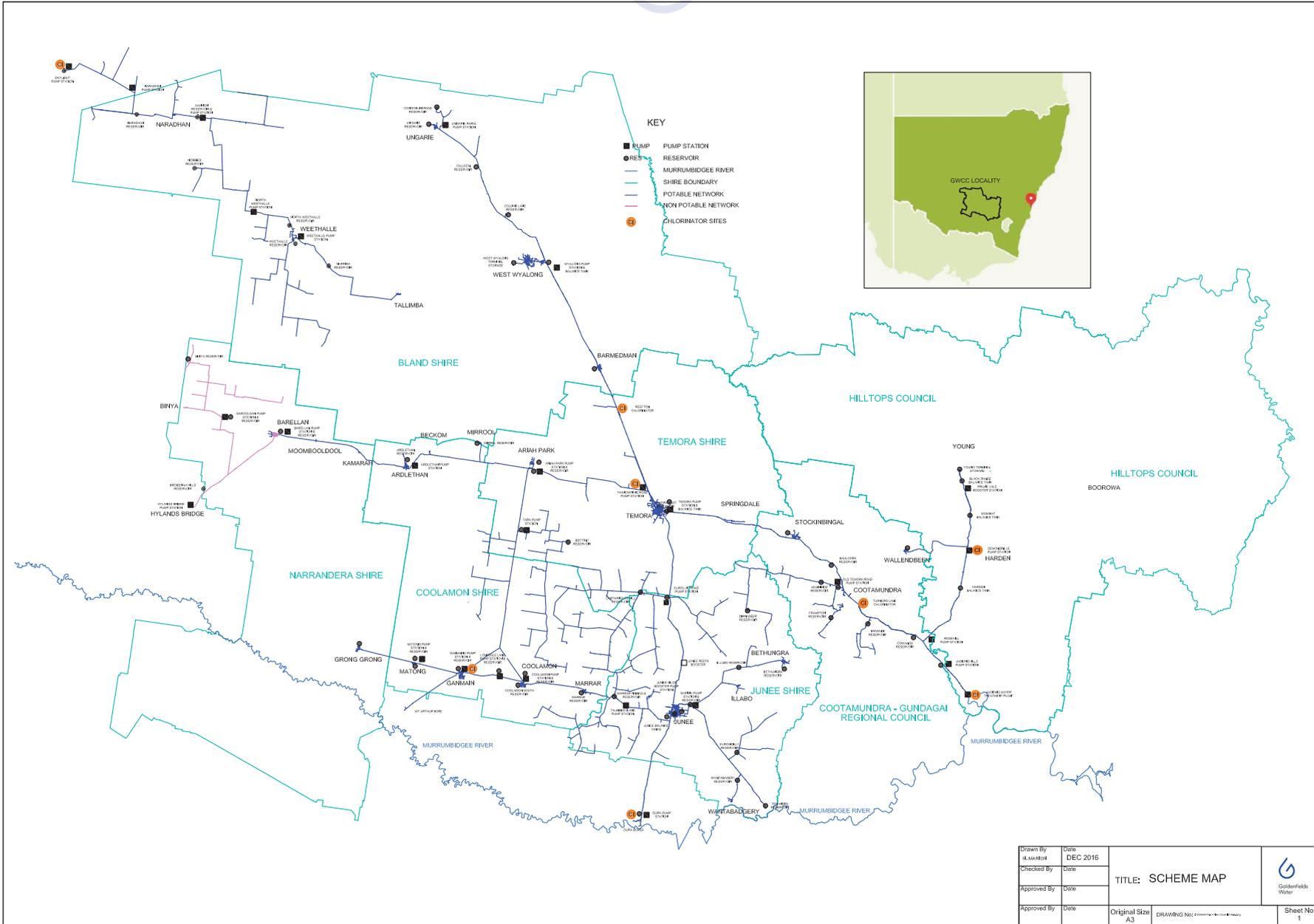
Assets will then be revalued and condition rated to provide more detailed information on annual depreciation and asset replacement times.



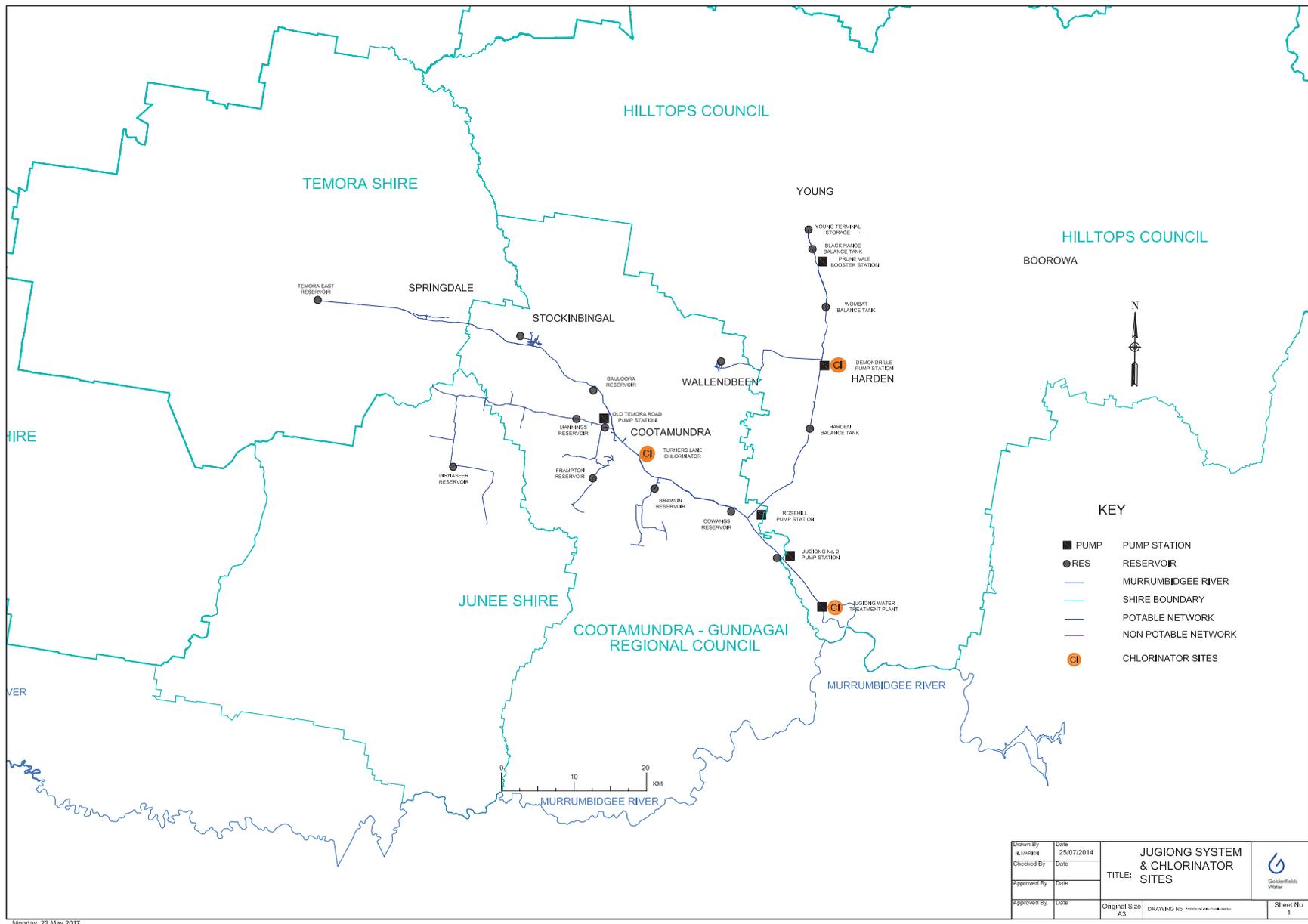
ASSET MANAGEMENT PLAN

APPENDIX A - SCHEMATICS

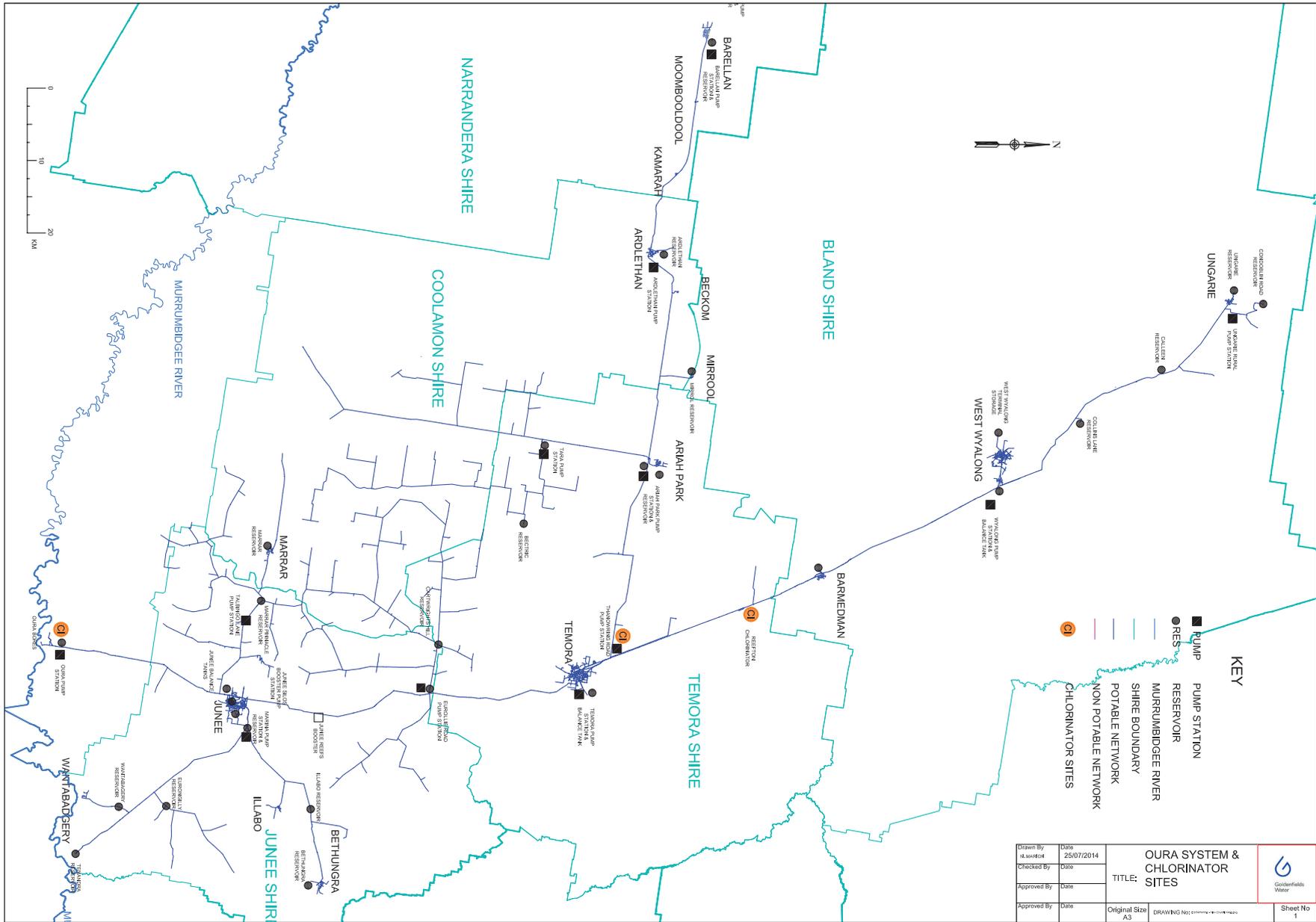




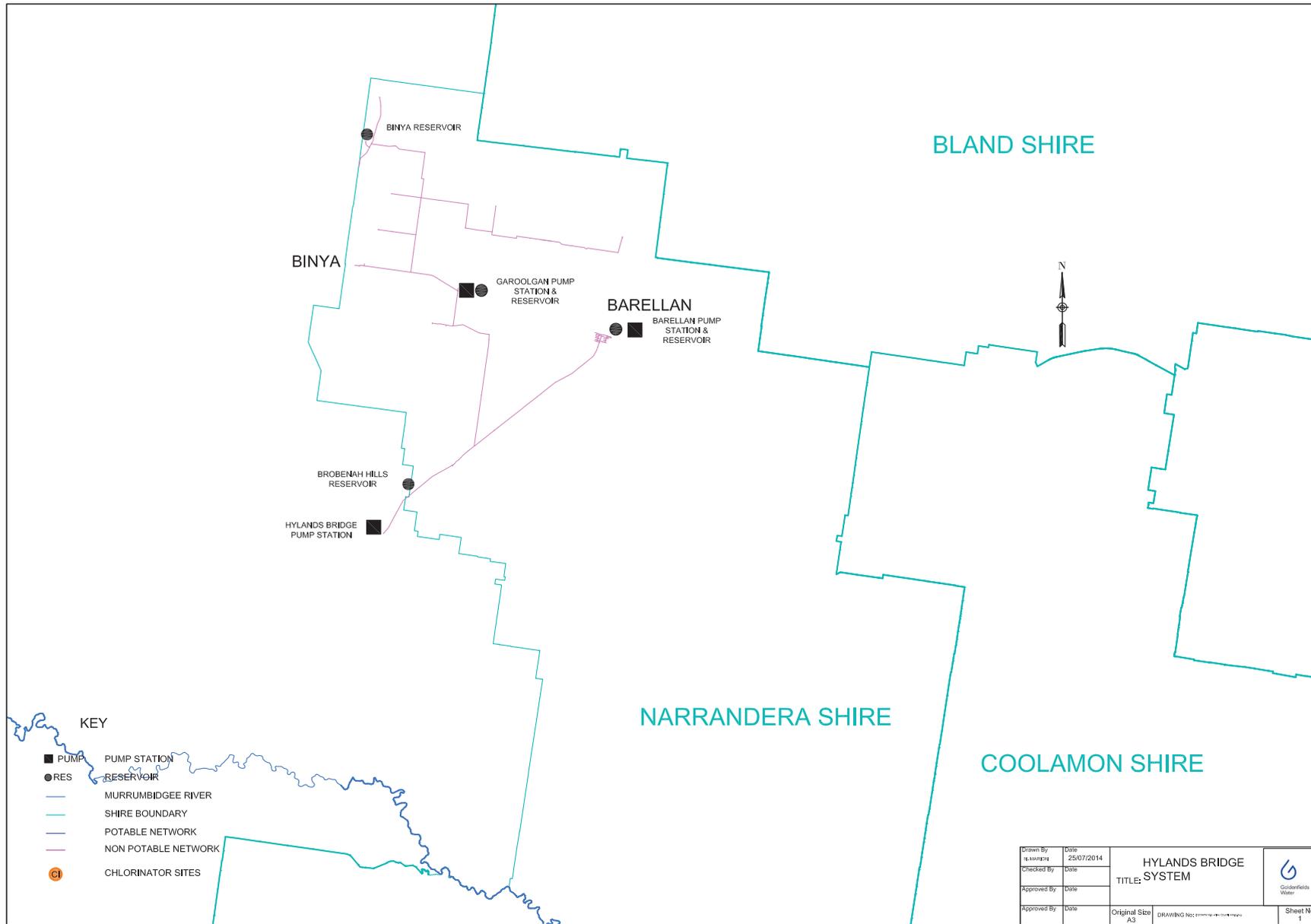
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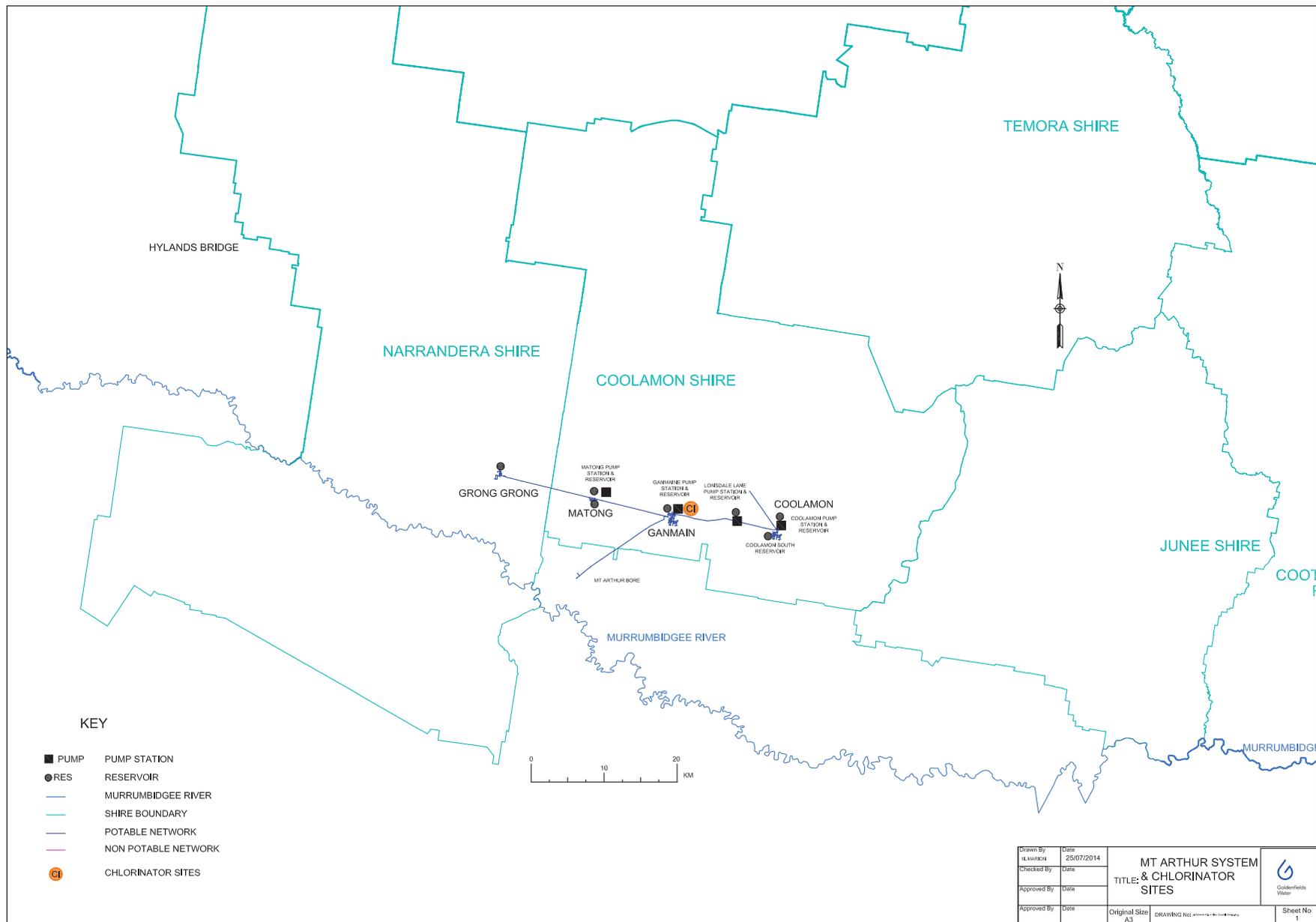


KEY

- PUMP STATION
- RESERVOIR
- MURRUMBIDGEE RIVER
- SHIRE BOUNDARY
- POTABLE NETWORK
- NON POTABLE NETWORK
- CHLORINATOR SITES

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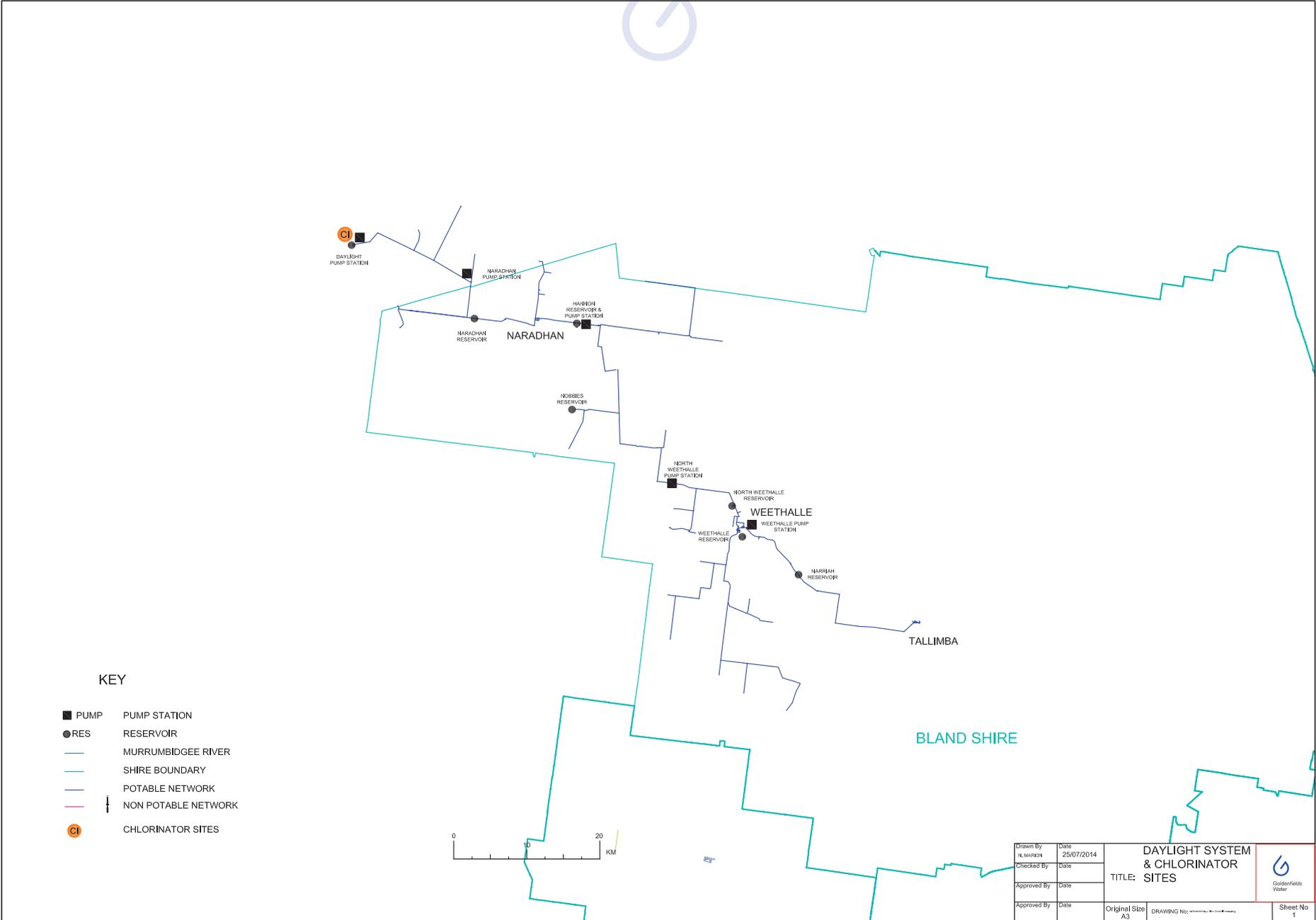


- KEY**
- PUMP PUMP STATION
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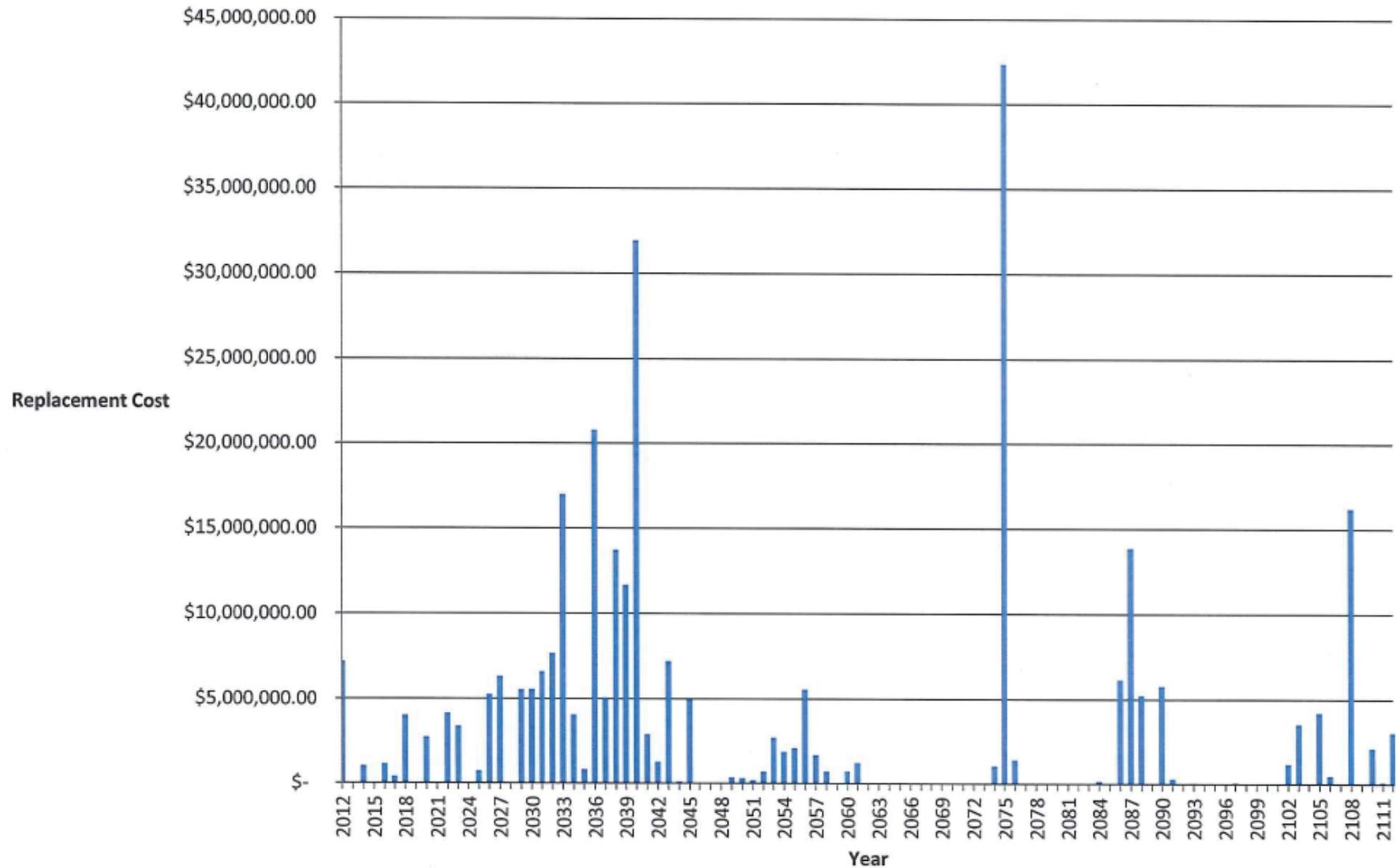


ASSET MANAGEMENT PLAN

APPENDIX B – ASSET REPLACEMENT PROFILES



Passive Asset Replacement Profile



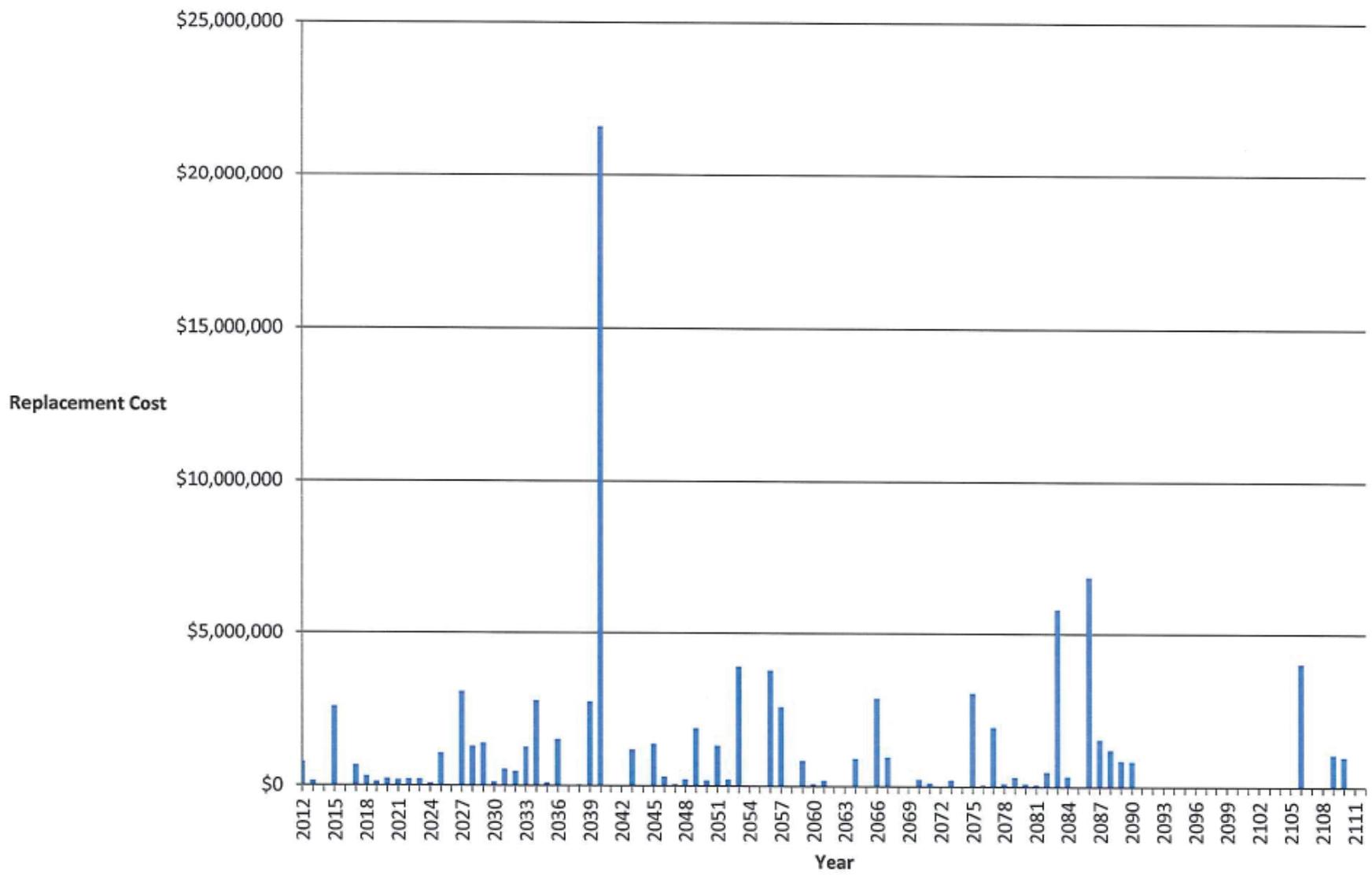


Goldenfields Water County Council Water Supply			
Passive Asset Register - 2011			
Expenditure - Totals sorted by year			
Year	Expenditure (\$)	Year	Expenditure (\$)
2012/13	7,216,554	2053/54	2,738,837
2014/15	1,028,736	2054/55	1,899,513
2016/17	1,168,897	2055/56	2,120,643
2017/18	411,516	2056/57	5,567,433
2018/19	4,026,881	2057/58	1,723,068
2020/21	2,767,146	2058/59	718,986
2022/23	4,159,270	2060/61	732,322
2023/24	3,404,923	2061/62	1,227,231
2025/26	741,565	2063/64	34,978
2026/27	5,260,784	2065/66	62,410
2027/28	6,344,544	2074/75	1,052,928
2029/30	5,542,168	2075/76	42,386,799
2030/31	5,553,956	2076/77	1,441,872
2031/32	6,622,449	2084/85	157,594
2032/33	7,677,821	2085/86	6,179,603
2033/34	17,015,484	2086/87	13,866,934
2034/35	4,054,594	2087/88	5,237,611
2035/36	836,230	2089/90	5,779,685
2036/37	20,793,953	2090/91	304,920
2037/38	5,064,644	2092/93	46,728

2038/39	13,731,343	2093/94	7,906
2039/40	11,698,819	2096/97	80,482
2040/41	32,008,800	2101/102	1,186,704
2041/42	2,921,043	2102/103	3,554,654
2042/43	1,300,637	2104/105	4,218,448
2043/44	7,224,206	2105/106	495,625
2045/46	90,418	2106/107	38,822
2046/47	4,971,240	2107/108	16,182,736
2049/50	366,610	2109/110	2,154,118
2050/51	321,553	2110/111	109,404
2051/52	194,083	2111/112	3,071,637
2052/53	710,771		



Active Asset Replacement Profile



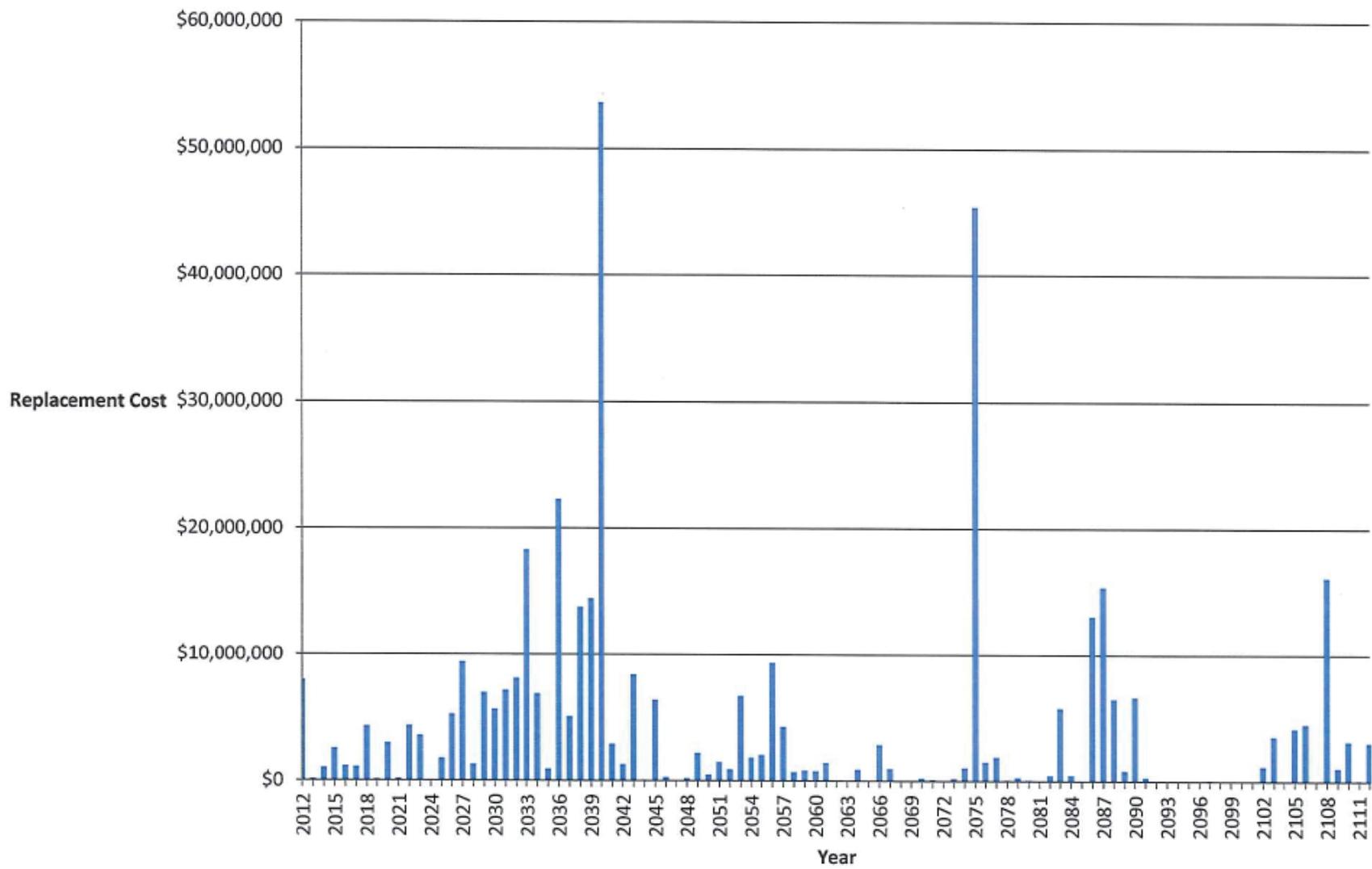


Goldenfields Water County Council Water Supply			
Active Asset Register - 2011			
Expenditure - Totals sorted by year			
Year	Expenditure (\$)	Year	Expenditure (\$)
2012/13	793,872	2050/51	189,216
2014/15	161,567	2051/52	1,333,152
2016/17	2,597,113	2052/53	218,160
2017/18	689,329	2055/56	3,936,239
2018/19	316,749	2056/57	3,810,385
2019/20	142,641	2058/59	2,597,184
2020/21	236,448	2059/60	850,032
2021/22	198,204	2060/61	69,602
2022/23	218,551	2063/64	194,747
2023/24	220,538	2065/66	930,096
2024/25	84,159	2066/67	2,883,024
2025/26	1,089,705	2069/70	976,666
2026/27	21,600	2070/71	238,320
2027/28	3,086,145	2072/73	122,688
2028/29	1,301,185	2074/75	221,472
2029/30	1,402,267	2075/76	3,063,888
2030/31	123,033	2076/77	53,799
2031/32	531,171	2077/78	1,947,888
2032/33	457,920	2078/79	105,984
2033/34	1,278,576	2079/80	314,640
2034/35	2,790,576	2080/81	105,120
2035/36	104,482	2081/82	65,808
2036/37	1,525,776	2082/83	478,800
2037/38	21,600	2083/84	5,779,296

2038/39	39,025	2085/86	338,112
2039/40	2,760,867	2086/87	6,857,568
2042/43	21,609,360	2087/88	1,550,448
2044/45	1,211,042	2088/89	1,222,272
2045/46	1,385,277	2089/90	858,096
2046/47	302,169	2105/106	832,464
2047/48	59,039	2108/109	4,052,160
2048/49	216,720	2109/110	1,077,723
2049/50	1,904,671	2110/111	1,006,704



Combined Active and Passive Asset Replacement Profile





Goldenfields Water County Council Water Supply			
Combined Active and Passive Asset Register - 2011			
Expenditure - Totals sorted by year			
Year	Expenditure (\$)	Year	Expenditure (\$)
2012/13	8,010,426	2056/57	9,377,818
2013/14	161,567	2057/58	4,320,252
2014/15	1,028,736	2058/59	718,986
2015/16	2,597,113	2059/60	850,032
2016/17	1,168,897	2060/61	801,924
2017/18	1,100,845	2061/62	1,421,979
2018/19	4,343,630	2063/64	34,978
2019/20	142,641	2064/65	930,096
2020/21	3,003,594	2065/66	62,410
2021/22	198,204	2066/67	2,883,024
2022/23	4,377,821	2067/68	976,666
2023/24	3,625,461	2070/71	238,320
2024/25	84,159	2071/72	122,688
2025/26	1,831,270	2073/74	221,472
2026/27	5,282,384	2074/75	1,052,928
2027/28	9,430,689	2075/76	45,450,687
2028/29	1,301,185	2076/77	1,495,671
2029/30	6,944,435	2077/78	1,947,888
2030/31	5,676,989	2078/79	105,984
2031/32	7,153,620	2079/80	314,640
2032/33	8,135,741	2080/81	105,120
2033/34	18,294,060	2081/82	65,808
2034/35	6,845,170	2082/83	478,800
2035/36	940,712	2083/84	5,779,296

2036/37	22,319,729	2084/85	495,706
2037/38	5,086,244	2086/87	13,037,171
2038/39	13,770,368	2087/88	15,417,382
2039/40	14,459,686	2088/89	6,459,883
2040/41	53,618,160	2089/90	858,096
2041/42	2,921,043	2090/91	6,612,149
2042/43	1,300,637	2091/92	304,920
2043/44	8,435,248	2093/94	46,728
2044/45	90,418	2094/95	7,906
2045/46	6,356,517	2097/98	80,482
2046/47	302,169	2102/103	1,186,704
2047/48	59,039	2103/104	3,554,654
2048/49	216,720	2105/106	4,218,448
2049/50	2,271,281	2106/107	4,547,785
2050/51	510,769	2107/108	38,822
2051/52	1,527,235	2108/109	16,182,736
2052/53	928,931	2109/110	1,077,723
2053/54	6,675,075	2110/111	3,160,822
2054/55	1,899,513	2111/112	109,404
2055/56	2,120,643	2112/113	3,071,637



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Water**