

Strategic Business Plan

Central Tablelands *Water*

2015

Version 3.1

ACKNOWLEDGMENT

This Strategic Business Plan is an update of the Plan prepared by Central Tablelands Water in 2010.

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Central Tablelands *Water*

Strategic Business Plan 2015

SUMMARY

Executive Summary

This Strategic Business Plan (SBP) has been prepared in accordance with the Integrated Planning and Reporting requirements of the Department of Local Government, Part 2 of Chapter 13 of the Local Government Act, the exemptions for County Councils as provided for in Part 9, Division 8 of the Local Government (General) Regulation 2005 and the NSW Water and Sewerage Strategic Business Planning Guidelines published by the NSW Office of Water.

The SBP covers the development and operation of Central Tablelands Water's Water Supply Schemes. It provides supporting information for Council's Integrated Planning and Reporting documentation.

Central Tablelands Water (CTW) was formed in 1944 for the purpose of water supply and operates under the provisions of the Local Government Act 1993.

Operating Environment Review

This review explores the internal and external conditions under which Council delivers services now, and those, which will be likely to prevail in the future. Details are given in Part A of this Business Plan.

Principal Issues

Current services are generally satisfactory. There are however, some issues, which need to be addressed. These are:

- Ensuring adequate water resources and supply services are available to support development
- Funding for infrastructure upgrade
- Improving communication with stakeholders and customers
- Maintaining full compliance with the NOW best practice management of water supply and sewerage guidelines

Some of the specific issues identified as important are:

- Urgency of replacement of Trunk Main K – Grenfell supply.
- Upgrade and modernisation of the Blayney Water Filtration Plant.
- Upgrade of Lake Rowlands Dam to meet current NSW Dam Safety requirements.
- Impact of additional water usage with major developments such as the proposed goat abattoir in Blayney.
- CTW/OCC Joint project linking Orange City Council with Central Tablelands Water, with the construction of a new pipeline from Orange to Millthorpe and the upgrade of the pipeline and associated infrastructure from Millthorpe to Blayney and from Blayney to Carcoar Water Filtration Plant.
- Provision of potable water supply to the villages of Caragabal, Neville, Newbridge and Barry over a 10 to 20 year period.

- Long-term planning for either the enlargement of Lake Rowlands by building a new dam 2.5 kilometres downstream of the existing dam or the possibility of taking over the use of the current State Water owned Carcoar Dam to provide water security to Central Tablelands Water, Orange, Cowra, Parkes and Forbes, as well as potential water security for existing and future gold mining operations and providing support for regional development generally.
- Local Government reform and the continued strong advocacy for ownership and control of water supply and sewerage assets to be retained by Local Government. In particular the strengths of the county council model include:
 - Exists under the Local Government Act and has the authority of legislation within which it operates and is accountable;
 - Caters for regional collaboration and the coordination of initiatives with regional and local significance based on a prescribed level of constituent council participation;
 - Enables enhanced capacity in strategic and operational functions (including sharing knowledge and expertise) by optimising resources and effort across multiple local government and catchment areas;
 - Offers a flexible funding framework for a shared service delivery model where all constituent councils within a region benefit from the services or programs delivered, and
 - Enhances regional prospects of success in securing soft funding and provides leverage in procurement.

Corporate Vision

Council's corporate vision is:

- **Central Tablelands Water sees its future as a Regional Water Authority, independent of other agencies. It sees itself as a responsible member of the communities it serves, aiding the development of the region. It will continue to develop further sources of water and continue to supply an economical and acceptable water supply to its customers, and it will do so in an ecologically sustainable manner. Central Tablelands Water will continue to evolve its method of operations to incorporate a sound commercial focus. It will do so without compromising on the services it provides, becoming more efficient and maintaining prices at a reasonable level.**

Corporate Mission

The corporate mission of the Council is:

- **Central Tablelands Water will develop a commercial focus as it operates in partnership with the communities it serves, fostering their development and growth, while maintaining both its level of service and its prices at an acceptable level.**

Council's corporate mission and vision place specific requirements on the water supply scheme. These are detailed in Part C of this Business Plan under Operating Environment Review.

Scheme Outline

The Central Tablelands Water County Council, a water supply authority constituted under Local Government Legislation was first proclaimed in 1944. The county area embraces the Shires of Blayney, Cabonne and Weddin and Cowra Shire rural consumers serviced from Trunk Main 'C'. Bulk water is also sold to Cowra Shire Council to service villages of Woodstock, Gooloogong and Pierce's rural scheme.

The Council currently has approximately 5,800 connections and provides potable water to around 12,000 consumers in 14 towns and villages.

A more detailed schematic of the water supply scheme is shown in Figure 1 on page 14 of this Business Plan.

Service Provision

Levels of Service

Council's primary objective with water supply services is to meet the adopted Levels of Service, which cover the following areas:

- Availability of service,
- Pressure,
- Service complaints,
- System failures,
- Response times and complaints,
- Water quality.

Levels of Service with predicted improvements are summarised at page V.

Objectives

Council has recognised five Key Result Areas that must be managed well to achieve success in the long-term provision of water supply services to its customers. These are:

- Customer service,
- Environment,
- Asset management,
- Human resources, and
- Finance.

Objectives and Performance Targets have been set in these Key Result Areas. These are summarised on page vi, and given in detail in Part B.

Actions

Strategies were identified for achieving the objectives, and then specific actions were listed for implementation of these strategies.

The notable actions and outcomes Council will take over the next 15 years are:

- Major Upgrade works at Blayney Water Filtration Plant – 2014/2016
- Construction of a low level water storage reservoir at Carcoar Water Filtration Plant – 2015/2016

- Reticulation mains renewal and dead-ends removal – ongoing annually
- Renewal and upgrade of Trunk Main K (42 Km) – 2015/2018
- Orange to Carcoar Pipeline (Joint Project CTW/OCC) - Incorporating the replacement and upgrade of Trunk Main D (19.7km) and Trunk Main F (8.5km) – 2015/2019
- Renewal and upgrade of Trunk Main U (33 Km) – 2020/2021
- Renewal and upgrade of Trunk Main C (73 Km) – 2023/2024
- Major refurbishment of electrical and mechanical equipment in Carcoar water filtration plant – 2022/2023
- Major Upgrade of Blayney Water Filtration Plant – 2027/2028
- Renewal and upgrade of Trunk Main B (6.5 Km) – 2023/2024
- Renewal and upgrade of Trunk Main A (4.5 Km) – 2028/2029
- Renewal and upgrade of Trunk Main P (3.0 Km) – 2026/2027
- Lake Rowlands Remedial Works – 2020/2021
- Refurbishment of Gooloogong Bore – 2021/2022
- Construction of new bore at Gooloogong – 2022/2023

Summary of Levels of Service Improvements

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target
AVAILABILITY OF SERVICE			
Normal Quantity Available:			
Domestic Annual	kL/tenement/	179	190
Total Annual Average Consumption	yr ML/yr	1525	1500
Pressure :			
Min. pressure when delivering 15 L/min	Metres head	20	20
Max. static pressure	Metres head	60	60
Consumption Restrictions in Droughts: Level of restriction applied through a repeat of the worst drought on record			
- Average duration of restrictions	% normal usage	0	0
- Average frequency of restrictions	No./ 10 yr period	0	0
Supply Interruptions to Consumers			
Planned (95% of time):			
- Notice given to domestic customers	Hours	48	48
- Notice given to commercial customers	Days	7	7
- Notice given to major industrial customers	Days	7	7
Unplanned:			
- Maximum duration	Hours	<12	<12
- Frequency	No./yr	2	<2
Temporary supply arrangements during interruptions	-	Where possible	Where possible
WATER QUALITY (Should meet Drinking Water Quality Guidelines of Australia, NHMRC&AWRCM 2004)			
Percentage Compliance with 2011 NHMRC / AWRCM Australian Drinking Water Quality Guidelines:			
Physical parameters	%	100	100
Chemical parameters	%	100	100
Total coliforms	%	98	98
Thermo-tolerant coliforms	%	100	100

For a full list of the levels of service, see Part A - Levels of Service

Objectives

Key Result Area	Objective	Performance Target
Customer Service	Provide services that are economically feasible and financially affordable and meet health regulations	Compliance with levels of service and action planning and meet performance targets
	Encourage infill developments serviced by existing infrastructure and extend potable water services to remaining unserved urban areas, and rural residential and industrial areas on a user pay basis	Review and update Development Servicing Plans (DSP) by 2017
	To ensure and encourage wise water use consistent with community expectations and to reduce system losses particularly due to seepage and leakage	Update Demand Management Plan by June 2017 Reduce consumption per residential property from 201 kL/year to 190 kL/year by 2018
	An equitable pricing policy that supports current and future service provision and encourages efficient water use on full cost recovery and user pays basis to maximise revenue	Maintain a policy of no cross-subsidies for all water usage. Maintain current full cost recovery.
	Provide services in a professional and efficient manner and maintain customer satisfaction.	Complete a new customer survey by June 2017
	A high level of community consultation in the delivery of water supply services and prior to major decisions.	Carry out community consultation for Trunk Main K (Grenfell) replacement by June 2016 Keep relevant stakeholders informed on progress of Lake Rowlands expansion proposal
Environment	Manage the water supply system in an environmentally responsible and ecologically sustainable manner	Update Council's IWCM plan (Strategy) by June 2018 Update Drought Management Plan by 2016

Asset Management	Scheme operation ensures facilities deliver quality, capacity and reliability to design requirements at the minimum long-term cost through development of procedures and guidelines to streamline operations with effective use of technology so as to achieve levels of service with due diligence	Undertake operations analysis by June 2016 Ongoing enhancement of the electronic asset management system
	Scheme maintenance ensures facilities can deliver design quality, capacity and reliability requirements at the minimum long-term cost.	Review maintenance strategy by June 2016
	Capital works program provides agreed levels of service at optimal life-cycle costs to meet social, economic and environmental considerations	Capital works constructed to ensure system meets agreed Levels of Service
Human Resources	Satisfy staffing needs and develop and maintain appropriate skill levels.	Review and update Council's Workforce Management Plan Annually. Review and update Council's salary structure by June 2016
Finance	Maintain sound financial management of the organisation by optimising long term (30 years) financial plans to provide required services at an affordable level and ensure full cost recovery.	Maintain quarterly budget reviews and annual review and updating of the 30 Year Financial Plan

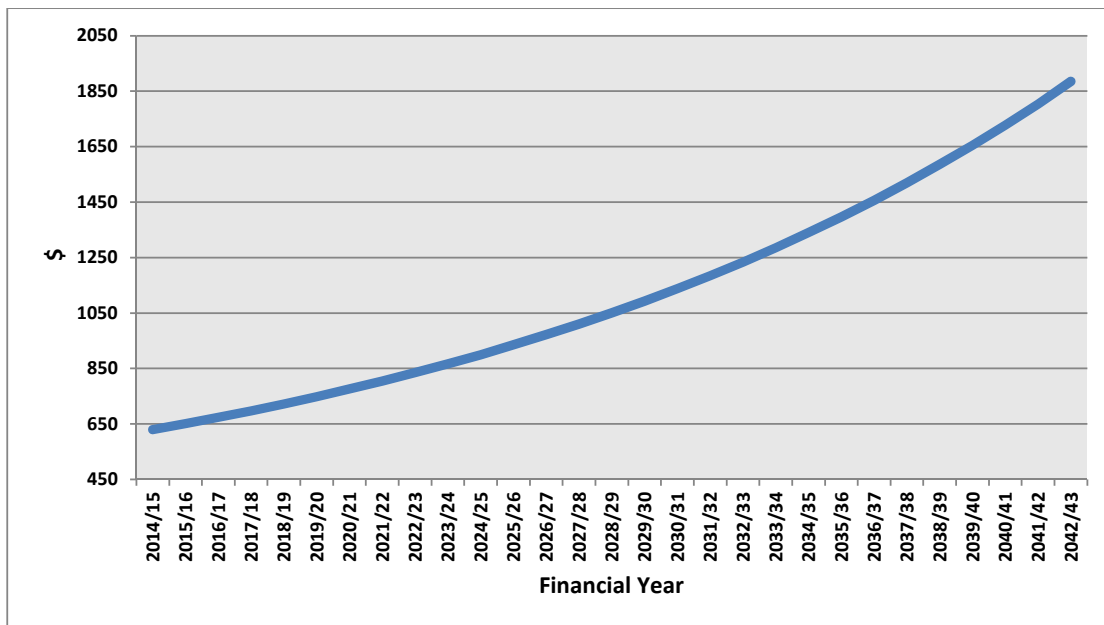
Summary of Projected Financial Position

Table below presents a summary of the Central Tablelands Water's projected financial position over the next 30 years at five-year intervals. The typical annual residential bill forecast for the same period is shown graphically below this Table. The values are all in 2014 dollars and indexed through with an estimated 3% CPI.

Summary of Projected Financial Position

2014/2015 \$ (000)	2015/16	2020/21	2025/26	2030/31	2035/36	2040/41
Estimated Total Revenue	5,702	7,021	9,031	11,116	15,070	20,069
Estimated Total Expenditure	5,557	6,171	6,861	7,706	8,643	9,668
Operating Surplus / (Deficit)	145	850	2,169	3,410	6,427	10,401
Acquisition of Assets	1,452	2,909	5,994	1,144	15,466	1,537
Principal Loan Payments	383	531	272	402	595	881
Borrowings Outstanding	2,754	413	9,169	7,806	5,045	1,402
Cash and Investments	6,915	4,778	8,055	17,659	38,263	92,342
Total Assets	66,323	80,900	105,675	124,666	146,055	153,536
Total Liabilities	3,781	1,604	10,549	9,106	6,900	3,552

Typical Residential Bills for Water Supply



Financial projections have been made considering that no subsidy will be available for the planned capital works during the forecast period. As financial planning has demonstrated that owing to the large capital works to be taken up in the near future and the Council plans to internally fund all the future works, Council has resolved to increase consumption charges annually 5%, which is 2% above an estimated CPI of 3%.

This level of charges is sufficient to maintain liquidity with a minimum of \$300,000 of cash in hand over the period. The financial plan does not provide for any new loan funding for planned capital works until the year 2022/23. Existing debt will be retired in year 2020/21. See Part - C for details.

Why This Plan Has Been Developed

The Local Government Act 1993 requires Local Water Utilities and Water Supply Authorities to prepare Integrated Planning & Reporting (IP&R) documents under the NSW Office of Local Government (OLG) guidelines. These documents include **Operational and Delivery Plans, Asset Management Plan, Workforce Management Plan, Long Term Financial Plan** and **Community Strategic Plan**. There are legislated exemptions for County Councils in regards to the Community Strategic Plan, however the Plan must have been developed having due regard to the community strategic plans of the county council's constituent councils and in consultation with those councils. The NSW Office of Water (NOW) also require Local Water Utilities (LWU's) to prepare SBP's in accordance with the NSW Water and Sewerage Strategic Business Planning Guidelines and updated every 8 years. The **Operational and Delivery Plans** must cover the Utility's business activities and must include items such as:

- Proposed objectives and performance targets;
- Strategies for their achievement;
- Proposed capital works program;
- Financial information;
- Revenue policy;
- Human resource activities;
- Environment protection plan;
- Asset replacement programs;
- Other specific planning information considered relevant.

Strategic Business Plans address single business activity, in this case the **water supply** services.

The difference between the plans is that the Strategic Business Plan has a long-term strategic approach focussing on a review of the whole of the operating environment for that particular service. Typically the Strategic Business Plan looks at a minimum of twenty years ahead while the Operational Plan and Long Term Financial Plan focuses on 3 and 10 years respectively.

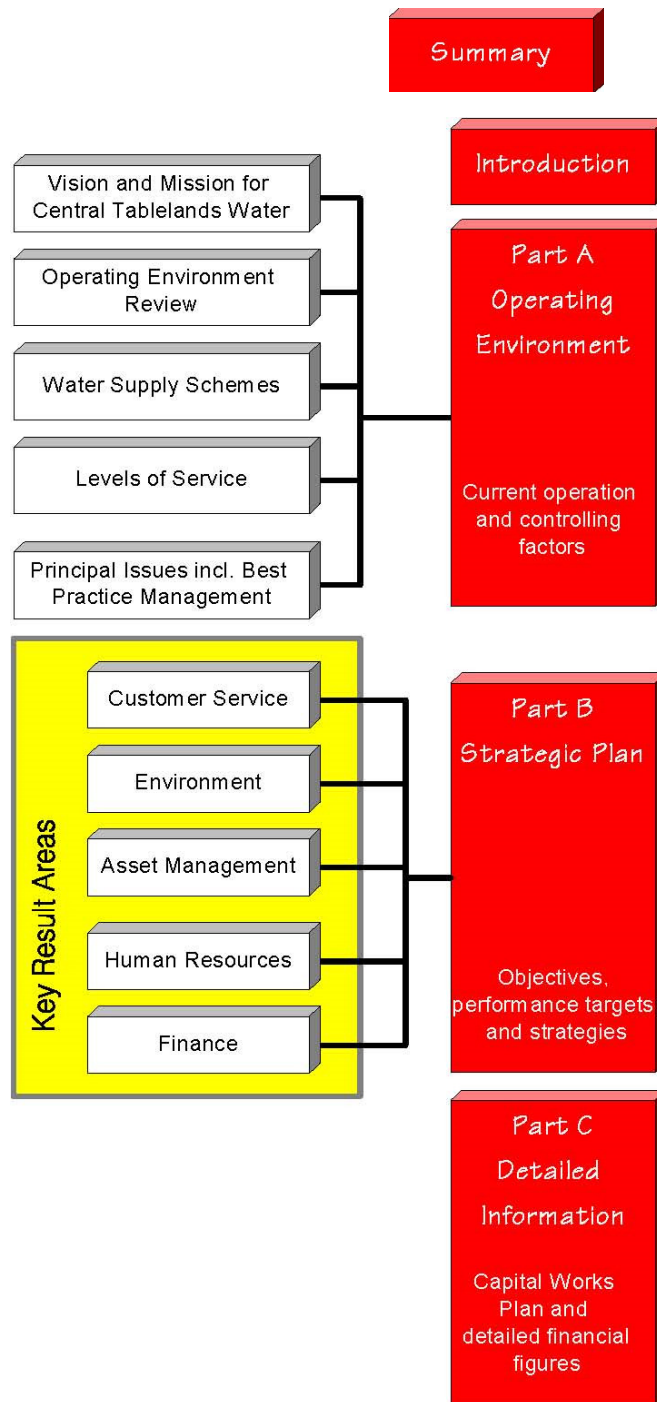
Strategic Business Plans are considered desirable for all councils but specifically the NSW Office of Water has now made them a prerequisite for the provision of financial assistance. Some other drivers for the production of strategic business plans include the need to meet requirements from:

- NSW Office of Local Government (OLG) – Competitive neutrality
- Council of Australian Governments (COAG) – National Water Reform, National Competition policy
- Local Government NSW (LGNSW) – Benchmarking
- Independent Pricing and Regulatory Tribunal (IPART) – Pricing Principles

The Plan also communicates scheme information to stakeholders and demonstrates that the scheme is being well managed.

Structure of this Plan

The strategic business plan is presented in three parts. The elements of each part are shown on the diagram below.



Part A of the Plan provides a review of the system and the operating environment prior to undertaking planning. Part A is the starting point of the planning process and comprises:

Vision and Mission of Central Tablelands Water looking to a 30-year planning horizon

- ✚ Regional Water Security
- ✚ Operating Environment
- ✚ Review of Existing Water Supply Schemes
- ✚ Levels of Service
- ✚ Principal Issues
- ✚ Best Practice Management.

Part B is the Strategic Plan for the water supply schemes, and **Part C** is the Detailed Information for achieving the Business Plan's performance targets.

COUNCIL'S VISION AND MISSION

This section contains Council's corporate vision and mission statements that indicate the future planning direction.

Strategic planning aims to optimise service delivery in terms of long term cost effectiveness and sustainability and the prime driver is Council's vision of the future and definition of a mission statement.

Corporate Vision

Council's corporate vision is:

- **Central Tablelands Water sees its future as a Regional Water Authority, independent of other agencies. It sees itself as a responsible member of the communities it serves, aiding the development of the region. It will continue to develop further sources of water and continue to supply an economical and acceptable water supply to its customers, and it will do so in an ecologically sustainable manner. Central Tablelands Water will continue to evolve its method of operations to incorporate a sound commercial focus. It will do so without compromising on the services it provides, becoming more efficient and maintaining prices at a reasonable level.**

Corporate Mission

The corporate mission of the Council is:

- **Central Tablelands Water will develop a commercial focus as it operates in partnership with the communities it serves, fostering their development and growth, while maintaining both its level of service and its prices at an acceptable level.**

The implications of Council's vision and mission statements are:

- To strive for regional development
- To achieve excellence in customer service
- To ensure a sustainable future
- To have a strong economic base
- To meet community expectations
- To maintain suitably experienced staff
- To provide necessary services efficiently
- To be dynamic and responsive to change
- To be environmentally committed and responsible

Since about 1997, Council has been lobbying the NSW State Government to grant the necessary approvals for the enlargement of Lake Rowlands from 4,500ML to 26,500ML.

The first submission to the NSW Government was as a result of approaches from two significant gold mining operations in the Orange and Blayney areas needing to improve their water security.

A number of studies were conducted at that time, the most significant being a foundation investigation study carried out by Rob Parker Engineering on a proposed new dam site 2.5 kilometres downstream of the existing dam wall. The study found that the site was suitable for a 26,500 ML roller compacted concrete dam.

The NSW Government was not forthcoming with any approvals at that stage and, in the meantime, one of the gold mining companies dropped out of the equation after they abandoned their operation at Blayney due to flooding from a fractured underground aquifer.

With the advent of the recent record drought, Council, Orange City Council and Cadia Valley Gold Mining Operations (Newcrest Mining Ltd) jointly funded an Economic Needs Study which was conducted by the Western Research Institute in Bathurst.

This study, completed in November 2006, once again highlighted the need for the expansion of Lake Rowlands to provide water security for the economic development in the Central West and the growth and development of Orange City.

The study was presented to the NSW Government in a further submission and in March 2007 the then Minister for Water, the Hon. Ian MacDonald MP, visited the proposed new dam site and was extremely impressed with the proposal and stated that, if his government was elected on the following Saturday, he would facilitate any submission made by the Water Authority (Central Tablelands Water). Minister MacDonald's government was re-elected but the necessary approvals have not been forthcoming.

Once again, with the record drought being felt right across the Central Tablelands and Central West, water shortage and water security became an increasingly alarming issue and, as a result, the Centroc group of Councils, of which Council is a member, convinced the NSW State Government to fund a \$500,000 Water Security Study for the Central West.

This study, which was championed by the previous Minister for Water and former Premier, the Hon. Nathan Rees MP, was completed in October 2009 (see Appendix E) and in its findings it was once again found, and recommended, that the option of enlarging Lake Rowlands and construction of associated transfer pipelines as the best means of providing water security to the Central West through to 2059.

The current situation finds Centroc in the position of continuing to lobby the State and Federal Governments to support the recommendations of the report, provide the necessary approvals (State) and provide capital funding.

There is also now a further development that is currently under investigation by the NSW State Government that would offer a better alternative than the option of enlarging Lake Rowlands. The investigation has initially involved a \$1 million feasibility study into the building of a dam on the Belubula River at one of two locations known as the Needles Gap and Cranky Rock, both near Canowindra.

The NSW Deputy Premier and the Minister for Water have issued a joint media release advising that the preliminary study has now been completed and that the Cranky Rock location has been found to be the best location to build a 700GL dam and that a more detailed study will now proceed involving environmental impact, hydrology, geotechnical and concept design.

The media release reads as follows:

CRANKY ROCK PREFERRED SITE FOR NEW CENTRAL WEST DAM

NSW Deputy Premier Troy Grant and Minister for Natural Resources, Lands and Water Kevin Humphries today released a preliminary study by Water NSW that recommends Cranky Rock as the most suitable site for a new dam in the Central West.

*.....Mr Grant said the scoping study, **Water Security for Regions: Belubula and Lachlan River Dam Investigation**, found the Cranky Rock site could enhance regional security.*

“Just seven months ago the NSW Liberals & National Government announced a plan to construct the first dam in Western NSW in almost 30 years” Mr Grant said.

A Belubula River dam will cater for future population growth in the region, while also helping local communities improve agricultural productivity and combat drought conditions. Further detailed analysis will now be undertaken to determine if Cranky Rock should be the site of our next inland dam”

Mr Humphries said the Cranky Rock solution avoided the engineering challenges and significant environmental considerations associated with the Cliefden Caves at the alternative Needles Gap location.

“Cranky Rock was chosen from 15 sites investigated in the Belubula and Lachlan catchments. A large dam of up to 700 gigalitres at Crank Rock has the potential advantages of increasing water security for central councils and other users throughout the Lachlan Valley,” Mr Humphries said.

“A Cranky Rock water supply would allow Carcoar Dam to be networked into Central Tablelands Water, allowing it to extend the network and provide back-up drought supplies and secure water to a number of towns beyond the current network.

The initial high level study took into account the economic, social and environmental factors, with further investigations to include in-field investigations and a cost benefit analysis.”

Member for Orange Andrew Gee said the report was an important first step in securing a new, reliable water supply for the Central West.

“I congratulate community members who contributed to the report and helped the Government find this solution,” Mr Gee said.

The Government will continue to ensure local landholders are closely consulted throughout all stages of the project’s development.

As mentioned in the above media release, construction of a 700GL dam at Cranky Rock on the Belubula River would allow the current 35,800ML Carcoar Dam to be networked into CTW for urban use. This complete proposal, if successful would create an extra 735,800ML of water storage and provide urban water security for the Central West compared to the extra 22,000ML that would be created with the enlargement of Lake Rowlands.

This SBP has not been prepared with the view that the enlargement of Lake Rowlands or the Cranky Rock dam will proceed. If and when either proposal occurs, the SBP will need to be reviewed as there could be a significant change in governance arrangements with the distribution of water from the increased storage facilities.

In a further development, the NSW State Government has announced that a total of \$325 million has been reserved for regional water security in the 2015-16 State Budget. As a result, following an invitation from the Government for Expressions of Interest for funding from the Restart NSW program, Orange City Council (OCC) approached CTW to explore the possibility of submitting a proposal linking Orange to Millthorpe and Carcoar Water Treatment Plant via a potable water supply pipeline. This proposal was originally identified under the Centroc Water

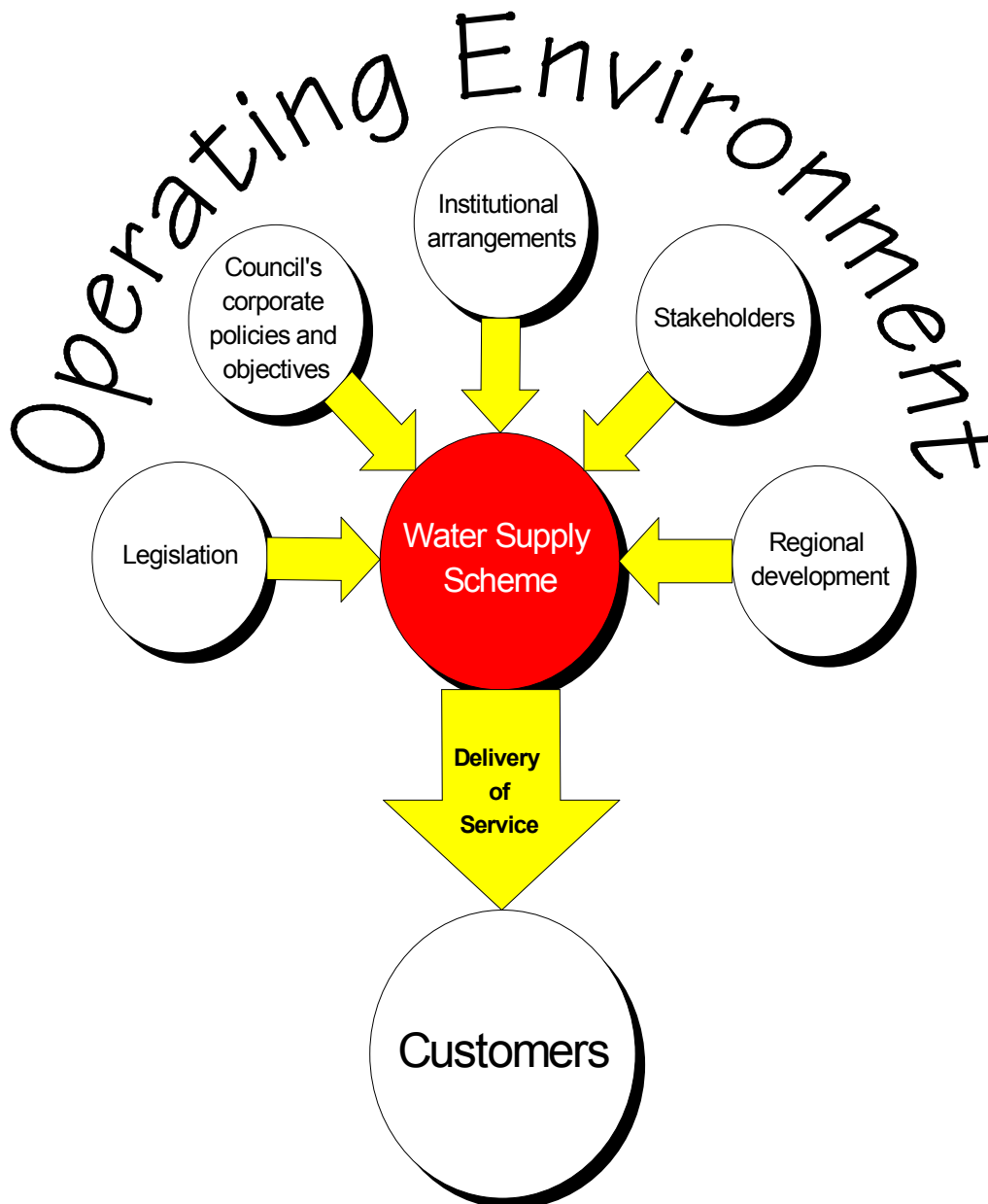
Security Study as one of the recommended infrastructure strategies to assist in securing water for the Central Western Region.

At Council's October 2014 Meeting it was resolved as follows: *"That Council formally endorse the letter of support for Orange City Council's Expression of Interest for funding under the Restart NSW Water Security for Regions Program."*

On 8 February 2015, the NSW Deputy Premier and Minister for Regional Infrastructure and Services Troy Grant and Minister for Natural Resources, Lands and Water Kevin Humphries announced the approval of \$21.2 million of funding for the CTW and OCC proposal for a potable water supply pipeline from Orange to Blayney and Carcoar Water Filtration Plant. Ultimately, the project would connect CTW and OCC water systems and allow the two way movement of water. In times when CTW is short of water, potable supplies could be transferred from Orange. In the event of system failure in the Orange System, potable water could be transferred from the CTW system to Orange. The cost to CTW for the upgrade of pipelines and pump stations from Millthorpe to Blayney and Carcoar WFP is estimated at \$17.31m with a Council contribution of approximately \$2.5m from forecasted (2018/2019) budgeted reserves. Therefore, Council is now seeking \$14.81m or 86% from the Restart NSW Water Security for Regions Program.

At its meeting on 8 April 2015, Council formally resolved: *"That approval is given to proceed with the Central Tablelands Water and Orange City Council Water Supply Pipeline Project under the Restart NSW Water Security for Regions Program."*

The delivery of water supply services to the scheme’s customers is subject to a large number of constraints, requirements, guidelines and other factors, which collectively are referred to as the operating environment. The five major elements of the operating environment are shown in the chart below.



In expanding Council's vision for a 30-year planning horizon for water supply services, changing service requirements due to the following key factors influencing the operating environment are to be accounted for:

Growth and Development

- A steady population growth is expected concomitant to the expected commercial and industrial growth. Population growth is also due to migration from nearby cities of Orange and Bathurst to Blayney and Cabonne due to availability of more affordable land. Overall, a net increase in water demand is forecast.

Commerce and Industry

- Council expects possible growth and expansion in agro-processing industries and in mining and manufacturing sector within the constituent Councils. The major expansion of the Nestle pet food processing factory in Blayney, the proposal to construct and operate a goat abattoir in Blayney and the proposed development of a major gold mining operation near Blayney will augur well for the development of the Blayney Shire. Expansion could drive the rate of new residential developments and the water demand.

Public Health and Environment

- Inadequacy of medical services is an impediment to growth in the region. Major hospitals for the region are located in Orange and Bathurst.

Transport

- The service areas of Central Tablelands Water are well connected to Sydney by road. The upgrade of the Great Western Highway and the possible resurgence of rail, with the possible re-opening of the Blayney-Demondrille line, are expected to drive growth of industrial properties in the region.

Government Legislations/Policies

- Council considers that more regulation, stringent enforcement and fewer subsidies from Government are expected to impose heavy burden on Council responsibilities.
- Water allocation changes in the Water Management Legislation means that Council will be constrained while seeking increased allocation to meet growing water demands.
- The future of the current structure and operating environment of the Council is under threat with the release of the NSW Government's response to the recommendations of the Local Government Independent Review Panel. The NSW Government is supporting the formation of Joint Organisations of Councils (JO) and voluntary mergers. The JO proposal identifies that County Councils would not be full members of the JO but rather a subsidiary of the JO. This proposal could risk seeing the GP Council's considering that County Councils are subservient to the JO and its member councils, this should not be tolerated and County Councils should be allowed to retain their own autonomy and be full members of any JO formed in their regional area.

This section describes the main components of the existing water supply schemes, and the plans for their future development

Existing Schemes

The Central Tablelands Water County Council, a water supply authority constituted under Local Government Legislation was first proclaimed in 1944. The county area embraces the Shires of Blayney, Cabonne and Weddin. Bulk water is also sold to Cowra Shire Council to service the villages of Woodstock and Gooloogong and Pierces Rural Scheme. Cowra Shire rural ratepayers serviced from Trunk Main 'C' are treated as consumers of Central Tablelands Water.

The Council currently has approximately 5,800 connections and provides potable water to around 12,000 consumers in 14 towns and villages.

Source

The main water source of the Council is Lake Rowlands. The unique slab and buttress dam constructed across the Coombing rivulet, a tributary of the Belubula River, forms this lake.

The gross storage of the dam currently is 4,500 ML. The storage catchment area is about 197 square kilometres and the surface area of the dam, when full, is approximately 8 square kilometres. If raised to its original design height the storage would be 10,900 ML. However, this is not considered as an option as engineering advice has determined that, after more than 50 years since construction, raising the existing dam wall is not a feasible proposition. Since about 1997, Council has been pursuing the NSW Government for approval of an option to build a new dam 2.5 km downstream with an increased storage capacity of 26,500 ML. Whilst Council has not been successful with this proposal to date, a State Government funded Water Security Study (see separate item under *Water Security p7*) carried out on behalf of the Central Regional Organisation of Councils (CENTROC), of which Council is a member, recommended the enlargement of Lake Rowlands as the preferred option to provide water security to the areas of CTW, Cowra, Forbes, Parkes and Orange as well as having the potential to service additional water demands of the Cadia Valley gold mines operation and any other commercial or industrial development considering establishment in the Central Tablelands/Central West Region, however, this option has now been superseded by a much larger proposition under investigation by *Water NSW* to build a 700GL dam on the Belubula River (see detail under *Water Security p7*)

Various groundwater bores supplement Lake Rowlands water during summer. Bogolong Dam near Grenfell, previously owned by Central Tablelands Water and previously used as a back-up supply for Grenfell during summer, was taken out of service in the year 2000 due to poor water quality and ownership transferred to Weddin Shire Council in 2014.

Treatment

Lake Rowlands becomes stratified in summer due to temperature differences and atmospheric conditions. The thin surface layer is continuously mixed due to surface winds and the thick bottom layer is relatively stagnant. Water in these two layers has markedly different physical and chemical characteristics. The water in the stagnant bottom layer has high concentration of iron and manganese. During winter, the stratification becomes less distinct as the relatively warmer bottom layer rises to the surface. This is a natural phenomenon and is known as 'turnover'. Mixings of poor quality water could render the whole body of water unfit for use as a raw water source.

To de-stratify the dam storage, Council resorts to artificial recirculation by means of supplying compressed air through perforated hoses in the dam. De-stratification also serves as a pre-treatment, as the aeration causes iron and manganese to settle out and higher quality raw

water enters the water treatment plants.

Central Tablelands Water currently operates two water filtration plants, one at Blayney and the other at Carcoar. These filtration plants ensure that the water produced by the Council meets NHMRC and Australian Drinking Water Guidelines, 2011.

The Grenfell filtration plant has not been in operation since Bogolong Dam was taken out of service due to poor water quality.

Blayney Water Filtration Plant:

Blayney filtration plant was built in the year 1966. The manually operated dual media filters have the capacity to deliver 6 ML/day of water.

Other unit operations and processes adopted in this plant are:

Coagulation with liquid alum dosing and flocculation

- Clarification
- pH correction
- Chlorination
- Fluoridation

Carcoar Water Filtration Plant:

Carcoar filtration plant is a Dissolved Air Flotation (DAF) plant constructed in the year 2002 with a design capacity of 9.5 ML/day. The plant has been able to deliver as high as 13 ML/day.

Other unit operations and processes adopted in this plant are:

- Coagulation and flocculation
- Clarification
- pH correction
- Chlorination
- Fluoridation

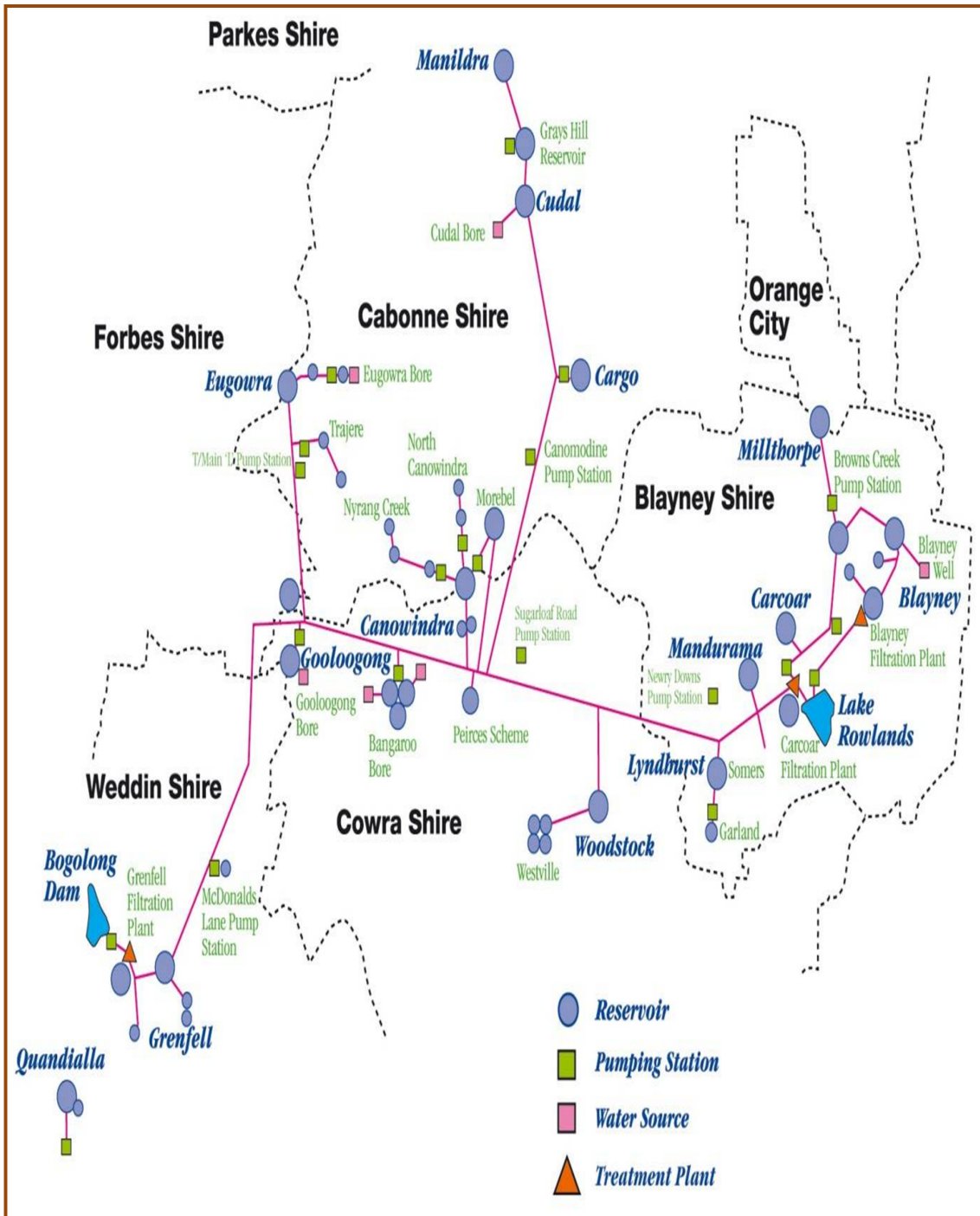
Assets Summary

Council has installed an electronic asset register ('BizeAssets') in which all of Council's major infrastructure assets have been identified and mapped. In early 2014, Council completed and recorded an inventory and condition assessment of all infrastructure assets. Council has now engaged consultants to update Council's Asset Management Plan and develop a Quality Assurance Program.

The current (June 2014) replacement cost of the water supply assets stands at \$119,879 Million (\$20,668/assessment), cash and investments were \$5.73 Million, debt was \$3.50 Million and turnover was \$5.30 Million (excluding capital works grants.)

Details of the condition of Council's Water Supply assets are presented in Appendix G

Figure 1 – Service Area map of Central Tablelands Water



Future Development

Growth Projections

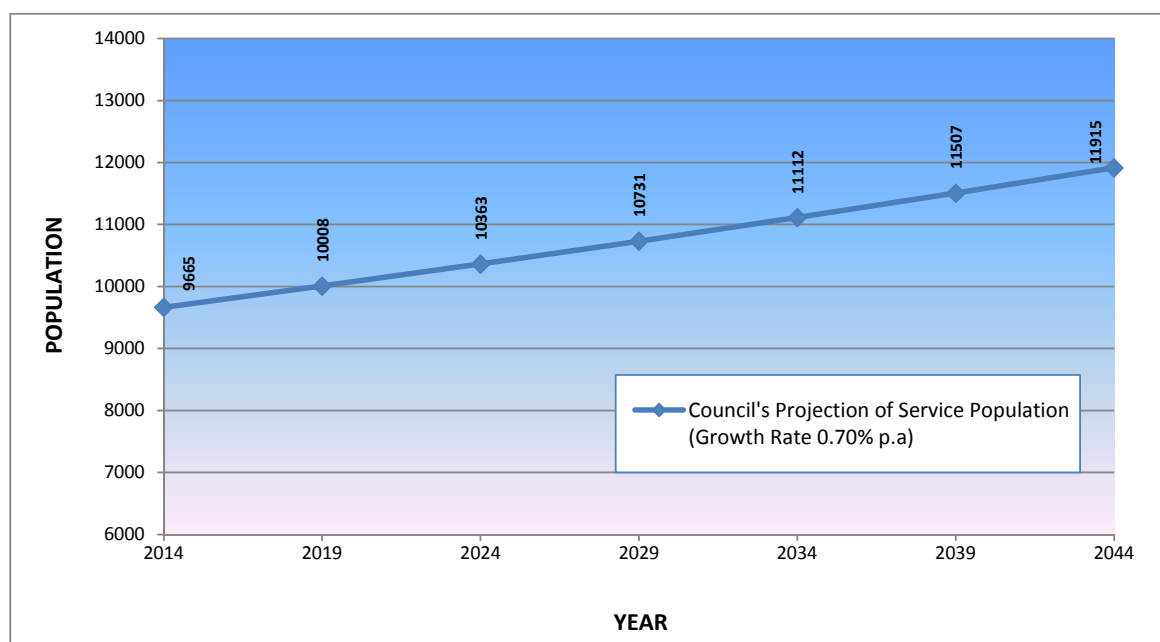
Growth in services of Central Tablelands Water, to a large extent will be dependent on the growth of constituent Shire Councils. The expected growth in new industrial development will also necessitate expansion of services by the Council. The Table below provides the projected growth of the customer base over the next 30 years

Constituent Councils 2013/14	Current Assessments		Future Assessments		Current Supply (ML/year)	Future Supply (ML/year)
	R	NR	R	NR		
Blayney	1,969	288	2,427	355	475	585
Cabonne	1,825	293	2,250	361	616	759
Weddin	1,120	239	1,380	294	290	358
Cowra (Bulk supply)	220	20	271	25	144	178
Total	5,134	840	6,328	1,035	1,525	1,880

R – Residential; NR – Non-residential

Central Tablelands Water is optimistic with its predictions believing that the economic development strategies in place in the constituent Shire Councils should result in maintaining the present population over the next thirty years with a likely estimated percentage increase (see Figure below).

Figure 2 –Projection of Council’s Service Population



The financial model has used an average assessment growth rate of 0.70% for the projection period. The projected number of assessments for financial modelling purposes is based on the 5,974 (Residential: 5,134; Non-residential: 840) assessments in 2013/14 and factored up a pro-rata in line with the adopted growth rate.

Capital Works Program

The following is a summary of the major capital works planned for Central Tablelands Water over the next 15 years. The justification for why they have been planned is also shown below.

Proposed Improvement	Year	Justification
Blayney Water Filtration Plant Upgrade	2014/2016	Renewal
Carcoar Water Filtration Plant Low Level Storage	2015/2016	New
Renewal & Upgrade of Trunk Main K – 42 km (Grenfell)	2015/2018	Growth related
Orange to Carcoar Pipeline (Joint Project CTW/OCC) Incorporating the replacement and upgrade of Trunk Main D and Trunk Main F	2015/2019	New
Lake Rowlands Remediation	2020/2021	Flood Upgrade 1/100,000yr
Renewal & Upgrade of Trunk Main U – from Trunk Main C to Cudal (33 Km)	2020/2023	Growth related
Renewal & Upgrade of Trunk Main C – from Mandurama to Trunk Main U (40 Km)	2023/2026	Growth related
Renewal & Upgrade of Trunk Main C – from Trunk Main U to Gooloogong (33 Km)	2026/2027	Growth related
Reticulation Mains renewal and dead ends removal	2014 onwards	Age and Water Quality
Major refurbishment of Electrical and Mechanical equipment in Carcoar Water Filtration Plant (CWFP)	2022/2024	Renewal
Renewal & Upgrade of Trunk Main 'B' – from CWFP to Mandurama (6.5 Km)	2023/2025	Growth related
Refurbishment of Gooloogong Bore	2021/2022	Renewal
Construction of new bore at Gooloogong	2022/2024	Renewal
Major Upgrade - Blayney Water Filtration Plant	2023/2024	Renewal
Renewal and Upgrade of Trunk Main P (3 Km)	2026/2028	Growth related
Renewal and Upgrade of Trunk Main A (4.5 Km)	2028/2030	Growth related

Stakeholders

Stakeholders are parties within service area of Central Tablelands Water who have an interest in the water supply schemes and their operation. The expectations of the stakeholders have a significant impact on the development and operation of the schemes.

Stakeholders include:

Councillors,	Pensioners,
Technical Management Staff,	Commercial and Industrial Consumers,
Council Employees,	Tourists,
Property Owners/Ratepayers,	Constituent Councils,
Residents/Families,	WBC Alliance,
Neighbouring Councils,	Government,

Special Interest Groups.

A review of stakeholder satisfaction to identify any perceived service gaps is presented in Appendix C together with the results of a customer survey.

Details of current and target Levels of Service are provided in this section

The Levels of Service:

- Define explicitly the standards required from the water supply system,
- Are an expansion of the mission statement,
- Will largely shape Council's detailed planning.

The Levels of Service define the deliverables and are the driving force for the water supply schemes' management and development. Achieving the target Levels of Service is the PRIMARY GOAL.

While minimum standards in some areas such as water quality, noise, odour and sludge management are covered by statutory and license requirements, the community may desire levels of service, which are more stringent than the regulatory requirements. These levels of service may be seen as reflecting local community aspirations. There are also operational levels of service relating to service reliability, responsiveness to complaints, etc, which are not covered by regulation.

The current and target levels of service, which the Council aims to achieve, are shown overleaf. As Council and customers are satisfied with the current Levels of Service provided, majority of the target levels of service remains unchanged.

It should be noted that while the current Levels of Service are the target, which Council aims to meet, they are not intended as a formal customer contract at this stage. Rather Council's responsibility is to achieve these levels and then to achieve them more cost effectively through a process of continual improvement.

Levels of Service

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target
AVAILABILITY OF SERVICE			
Normal Quantity Available:			
Domestic Peak day	L/tenement/day	1600	1400
Domestic Annual	kL/tenement/yr	179	190
Total Annual Average Consumption	ML/yr	1525	1500
Total Peak Daily Consumption (Potable)	ML/day	10	10
Fire Fighting:			
Compliance with the Water Supply Investigation Manual* (AS 2419.1 classifications 2,3,4 & 9 with floor area less than 1000 m ²)	% urban area served	100	100
Pressure :			
Min. pressure when delivering 15 L/min	Metres head	20	20
Max. static pressure	Metres head	60	60
Consumption Restrictions in Droughts:			
Level of restriction applied through a repeat of the worst drought on record			
- Average duration of restrictions	% normal usage	0	0
- Average frequency of restrictions	No./ 10 yr period	1	0
Supply Interruptions to Consumers			
Planned (95% of time):			
- Notice given to domestic customers	Hours	48	48
- Notice given to commercial customers	Hours	48	48
- Notice given to major industrial and institutional customers	Days	7	7
Unplanned:			
- Maximum duration	Hours	12	12
- Frequency	No./yr/customer	2	<2
Temporary supply arrangements during interruptions	-	Where possible	Where possible

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target
Supply Failure:			
Priority 1 (Defined as failure to maintain continuity or quality of supply to a large number of customers or to a critical use at a critical time) - During working hours - Out of working hours	Hours Hours	1 2	1 2
Priority 2 (Defined as failure to maintain continuity or quality of supply to a small number of customers or to a critical use at a non-critical time) - During working hours - Out of working hours	Hours Hours	3 4	3 4
Priority 3 (Defined as failure to maintain continuity or quality of supply to a single customers)	Working Days	1	1
Priority 4 (Defined as a minor problem or complaint, which can be dealt with at a time convenient to the customer and the Council)	Weeks	1	1
Customer Complaints: - Personal/ Oral - Written Note: Times apply for 95% of occasions	Working Days Working Days	5 5	5 5
Service Provision: Time to provide a domestic individual connection to water supply in serviced area (95% of times)	Working days	10	10
WATER QUALITY (Should meet Drinking Water Quality Guidelines of Australia, NHMRC&AWRCM 2012)			
Microbiological Parameters:			
Total coliforms	CFU/100ml	2	2
Thermo-tolerant coliforms	CFU/100ml	0	0
Sampling frequency	Samples/month	22	22
Physico-chemical Parameters:			
pH	Unit	7.5	7.5
Turbidity	NTU	<1.0	<1.0
Fluoride	mg/L	1	1
Free available chlorine (WTP)	mg/L	-	-
Free available chlorine (Reticulation)	mg/L	0.6	0.6
Sampling frequency	Samples/year	365	365

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target
Percentage Compliance with 2012 NHMRC / AWRCM Australian Drinking Water Quality Guidelines:			
Physical parameters	%	100	100
Chemical parameters	%	100	100
Total coliforms	%	98	98
Thermo-tolerant coliforms	%	100	100

Note: the Levels of Service are the targets, which Council aims to meet; they are not intended as a formal customer contract.

Typical water quality analysis reports are included in Appendix H.

Looks at the key concerns facing the Council in the future.

In a workshop session of Councillors and senior Council staff conducted in 2005 a number of issues were identified as being important to the future operation of the water supply schemes and these issues are still relevant. Below is a list of major issues and where they were addressed in this Strategic Business Plan.

Issue	Section where this is addressed
Ensuring adequate water resources and supply services are available to support development	Objective 1 – Levels of Service Review Objective 2 – Areas Serviced Objective 3 – Demand Management Objective 10 – Capital Works
Major infrastructure upgrade and funding	Objective 10 – Capital Works Objective 12 - Finance
Improving communication with stakeholders and customers	Objective 5 – Customer Relations Objective 6 – Community Involvement
Increasing developer charges to match the costs of service provision	Objective 4 – Service Pricing
Implementation of best practice management guidelines	Objective 1 – Levels of Service Review Objective 3 – Demand Management Objective 4 – Service Pricing Objective 12 - Finance

Some of the specific issues identified as now being important during the workshop session are:

- CTW/OCC Joint project linking Orange City Council with Central Tablelands Water with the construction of a new pipeline from Orange to Millthorpe and the upgrade of the pipeline and associated infrastructure from Millthorpe to Blayney and from Blayney to Carcoar Water Filtration Plant.
- Urgency of replacement of Trunk Main K – Grenfell supply
- Investigate the possibility of providing a potable water supply to the villages of Caragabal, Neville, Newbridge and Barry
- Impact of additional water usage with major developments such as the proposed goat abattoir in Blayney.
- Long-term planning for a new dam downstream of Lake Rowlands, or alternatively, with the proposal to build a new dam on the Belubula River at Cranky Rock, acquiring the use of Carcoar Dam from State Water NSW to provide water security to the local government areas of Orange, Cowra, Parkes and Forbes as well as potential water security for future gold mining developments and regional development in general.

BEST PRACTICE MANAGEMENT






NSW Office of Water Best Practice Guidelines

In May 2004, the then Department of Energy, Utilities and Sustainability (DEUS) prepared *Guidelines for Best-Practice of Water Supply and Sewerage* pursuant to section 409(6) of the Local Government Act 1993. The *2012/2013 NSW Water Supply and Sewerage Performance Report*, issued by the NSW Office of Water, shows that Central Tablelands Water's is 100% compliant with Best Practice requirements. A summary of Council's compliance is as follows:

Issue	Status
Strategic Business Plan (including Financial Plan)	Yes. Completed in 2010. This document represents the update of the 2010 Strategic Business Plan and Financial Plan.
Water Supply Pricing	Yes.
a. Full cost recovery	Yes.
b. Complying Residential Charges	Yes.
c. Complying non-Residential Charges	Yes. Initial DSP adopted in February 2005 with commercial developer charges. DSP was reviewed and updated in 2012/2013.
d. DSP with Commercial Developer Charges	
Annual Performance Reporting (by 15 September)	Yes. <i>Performance Reporting Forms</i> are completed prior to September each year and issues in the <i>Performance Reporting Check List</i> are addressed.
Integrated Water Cycle Management	Yes. IWCM Stage 1, the Evaluation Study, was completed in February 2009 and Stage 2, the Detailed Strategy, was approved by NOW in 2014.
Demand Management	Yes. A Demand Management Plan was prepared and adopted by Council at its April 2010 meeting. The Plan will need to be updated in 2015.
Drought Management	Yes. An updated Drought Management Plan was prepared and adopted by Council in 2012. Council also participated in the development of a Regional Drought Management Plan in 2012.

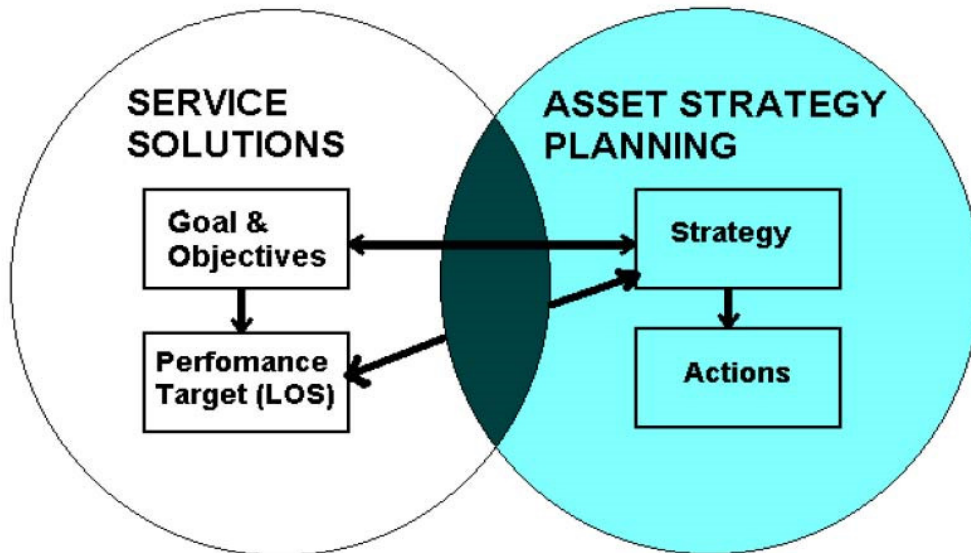
Part B of the Plan provides a detailed description of **Service Provision Objectives, Strategies, Performance Measures** and **Actions** in the key result areas in which Council must perform successfully to fulfil its corporate objective for water supply.

Council has developed five key result areas in Service Provision Strategies covering:

-  Customer Service
-  Environment
-  Asset Management
-  Human Resources
-  Finance

Part C contains a more detailed examination of selected service provision areas.

The relationship between 'Service Solutions' and 'Asset Strategy Planning' can be represented as follows:



The progression from 'Identifying Service Goals' to 'Achieving Service Goals' is summarised as follows:

SERVICE SOLUTIONS	Identifying Service Goals
Objective (Goal)	Defines how key result areas contribute to service goals
Performance Targets	Expected Outcomes
IMPLEMENTATION	Achieving Service Goals
Strategies	The plan for achieving the objective(s)
Actions	Specific tasks to implement strategies and achieve objective(s)
Responsibility	Person in charge of task completion
Cost	Implementation (Imp) – One off cost Ongoing – Cost incurred annually over a number of years

Service Planning

There is a relationship between the Levels of Service (LOS) to be provided to consumers and the actions that will be undertaken by Council. The following table shows the relationship between each of the objectives and related Levels of Service. As such, it would be expected that any changes to current LOS would be addressed in the indicated objectives.

The following Table is a summary of how the Levels of Service map into the key result area action-planning framework.

OBJECTIVES	LEVEL OF SERVICE
Service Management	Sustainability
Area Served	Availability of Service
Pricing	Availability – user pays Rebates – pensioners
Demand Management	Restrictions Availability – Quantity
Customer Relations	Availability – Water Wise Restrictions Interruption advice Complaints/Enquiries
Community Consultation	Service pricing Environment
Environmental protection	Mains flushing Sludge disposal Dam – Foreshore Management
Operations	Water quality – compliance Restrictions Interruptions – scheduled Service connection
Maintenance	Water quality – compliance Fire fighting – failures Interruptions – planned and unplanned
Capital Works	Water quality – compliance Availability – capacity Fire fighting – pressure Pressure Restrictions Interruptions – replacement program
Human Resources	Interruptions – staff on call Response
Financial	Affordability - model

Abbreviations Used

In addition to the general abbreviations listed in Appendix A, the following abbreviations have been used in the Action Plans presented in this section of the plan.

GM General Manager

DOTS Director Operations & Technical Services

DFCS Director Finance & Corporate Services

NAE No Additional Expenditure (above current expenditure)

This section details Central Tablelands Water's objectives relating to customer service, including Levels of Service, customer relations, community involvement, pricing and demand management.

The **Customer Service Plan** covers activities, which involve interaction between Council, its customers and the wider community.

This Section of the Plan covers the following areas:

- The Levels of Service provided to customers;
- Areas without water supply services;
- Management of demand for water;
- The pricing of services (including developer charges);
- Customer relations with Council, and
- Community consultation initiatives.

Levels of Service Review

The Levels of Service discussed in part A, are designed to reflect an optimisation of the desired service provision, what is affordable, and the system's capability. These considerations take into account legislative requirements, industry standards and customer demands.

This section reviews the services currently provided by the Council's water supply schemes. In addition to identifying areas where improvement is necessary, the review also refers to aspects of the operation that are being performed well.

The Levels of Service objective should enable the community to be aware of, and endorse the Levels of Service provided. As a public document, this report provides the necessary background information.

To demonstrate continuous improvement, Council will seek to provide the target Levels of Service in the most efficient manner. A number of items are of particular importance and these will be addressed under the relevant key result areas.

Under the NSW Office of Water (NOW) Best Practice Management Guidelines, a performance review is required to demonstrate that Council is either achieving the Level of Service or improving towards achieving the target levels. Monitoring and benchmarking are needed to help Council determine if their methods are appropriate or more effective than other Water Authorities. Performance data is forwarded to NOW each year and a TBL report is received back the following year that is communicated to Council by 31 August.

A benchmarking exercise needs to be conducted to ensure Levels of Service are comparable to others in the industry at present. Generally, Council has been performing well in respect of the Levels of Service, notably:

- Water quality from the WTP is considered to be good
- Compliance with microbiological water quality is maintained at 100%.

Objective 1: Levels of Service Review (Performance Management)
Provide services that are economically feasible and financially affordable and meet health regulations.
Performance Targets Compliance with levels of service and action planning and meet performance targets
Strategy Maintain scheme performance

Objective 1: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Review and update Strategic Business Plan		Every 8 years	GM	10	8 year NAE
Public display of SBP and adoption by Council		Every 8 years	GM		NAE
Implement and monitor SBP Action Plan		Ongoing	GM		See Objectives 2-12
Monitor and review LOS targets and report performance to NOW	Annually (Aug)		GM		NAE
Monitor key performance indicators and TBL reports to Council	Annually (Aug)		GM		NAE
Input and review of special schedules for Office of Local Gov in the financial statements	Annually (Oct)		DFCS		NAE
State Water allocation reporting for compliance of licence conditions		Annually	DOTS		NAE

Areas Serviced

This section of the Customer Service Plan addresses Council's intentions in the provision of services for the next thirty years. Table below presents the current and future service areas.

Towns/ Villages	ET		Water Service System	Reserve Capacity (Peak demand ETs)
	Current	Future		
Blayney Shire:				
Blayney	1426	1758	Blayney system	1833
Carcoar	131	161	Carcoar system	141
Lyndhurst (including Somers and Garland)	159	185	Carcoar system	129
Mandurama (incl. Somers)	131	162	Carcoar system	126
Newbridge, Barry, Neville	143 (estimate)	160 (estimate)	Future (10-20 years) - Provisional	-
Millthorpe	419	516	Blayney system	48
Cabonne Shire:				
Canowindra (including Morebel, North and South Canowindra, and Nyrang Creek)	1071	1320	Carcoar system	564
Cargo	149	184	Carcoar system	56
Cudal	223	275	Carcoar system	120
Manildra	274	338	Carcoar system	219
Eugowra/Gooloogong	401	494	Carcoar system	208
Weddin Shire:				
Grenfell	1264	1558	Carcoar/ Gooloogong systems	516
Quandialla	95	95	Quandialla system	165
Caragabal, Bimbi	113 (estimate)	113 (estimate)	Future (15-20 years) - Provisional	-
Cowra – Woodstock and Gooloogong	240	296	Carcoar system	288

The extension of water supply services is dependent on a range of factors, the most important being:

- The growth in rural settlements;
- The impact on levels of service to existing customers;
- The environmental impact of the works, and
- Cost to customers associated with extending services.

When extending services, Council will:

- Need to treat all shire residents as equal for the provision of services;
- Need to consider residents expectation of service, and
- Determine need for community consultation when considering new development areas or backlog programs.

Objective 2: Areas Serviced
Encourage infill developments serviced by existing infrastructure and extend potable water services to remaining unserved urban areas, and rural residential and industrial areas on a user pay basis
Performance Targets Review and update Development Servicing Plans (DSP) by June 2018
Strategies Encourage urban and rural developments to maximise use of available resources

Objective 2: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Identify infill areas to optimise utilisation of existing and future infrastructure development	July 2015	June 2016	DOTS	NAE	
Identify new service areas	July 2015	June 2016	DOTS	NAE	
Undertake local surveys – Blayney villages – Cabonne villages – Weddin villages	As required		GM	See Objective 6– Community involvement	
Undertake design and construction of new service	As required		DOTS	See Objective 10 – Capital works	
Update DSP	July 2018	Every 5 years	GM	See Objective 4 – Service Pricing	

Demand Management

This section of the Plan outlines Council's intention in the management of water demands. Demand management falls partly in the Customer Service Plan and partly in the Asset Management Plan.

Demand management is aimed at reducing the water consumption, through elimination of waste and improved efficiency. It is not Council's intention that customers ration their water use as Council's policy to provide unrestricted supplies of water still stands. Rather, it aims to educate customers to use water wisely and take necessary steps to reduce wasteful practices.

Reducing the water demand has the potential to:

- Reduce the operating costs of the system; and
- Defer the need to augment the system and to develop new water sources.

In addition to saving money and reducing the charges to customers, demand management provides environmental benefits by optimising the use of valuable water resources.

Central Tablelands Water demand projections indicate that in a 'business as usual' scenario, water extraction will increase by about 20% by year 2035. With demand management measures implemented, Council estimates a reduction of up to 10%. The following demand management measures have been, or are planned to be implemented:

- Continue with the policy of not allowing the use of sprinklers and fixed hoses between the hours of 10.00am and 5.00pm.
- Monitor water extraction from Lake Rowlands and assess the water losses upstream of the water filtration plants – Current unaccounted for water (UAFW) due to system losses/ leakages is 9.3 % (2013/2014). Council's policy to replace water meters every 10 years or 7,500 kL, whichever is earlier, also has contributed to this low level of UAFW.
- Communication with and education of customers
- Use of reclaimed water

The Demand Management Plan addressing the issues expected in the foreseeable future was completed in January 2009 and adopted at the April 2010 meeting of Council.

Objective 3: Demand Management
To ensure and encourage wise water use consistent with community expectations and to reduce system losses particularly due to seepage and leakage
Performance Targets Update Demand Management Plan in 2016/2017 Maintain consumption per property at no more than 190 kL/year
Strategies Update Demand Management Plan Encourage alternative water usages for major industries/ public areas including parks and playgrounds

Objective 3: Action	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Examine a range of long term demand management measures including feasibility of stormwater harvesting in Blayney	July 15	June 16	DOTS	15	
Update demand management plan including benefit/cost analysis and investment schedule	July 16	June 17	GM	Included above	
Implement and promote identified recommendations <ul style="list-style-type: none"> - Customer education - Subsidised water efficient appliances - Subsidised rainwater tanks 	As required		GM		NAE NAE NAE
Strategy 2					
Encourage stormwater reuse at industrial sites where feasible					Refer Objective 7-Environment
Encourage non-potable water usage by industries and other high water users					Refer Objective 7-Environment

Service Pricing

This section of the Plan outlines Council's intentions regarding the pricing of water supply services.

Council's pricing policy will conform to the following general principles:

Equity - It is considered equitable that people pay for the cost of the services they use. In 1994, Council adopted a two-part water tariff structure that comprises a standing access charge based on the size of service connection and a usage charge for actual water consumption by customers. This complies with the pricing principles of the NOW.

Financial - provision of adequate cash flows to meet operating costs and to fund future capital works (as determined in the financial plans).

Customers - provision of a service of desired quality and reliability at a fair and affordable price.

Cross subsidies – Maintain a policy of no cross subsidies.

Community service obligations - provision of services to pensioners, disadvantaged groups and general community amenities, to be recognised.

Other - simplicity of pricing structure for ease of understanding by customers and stability of income.

Tariff structure - Maintain a two-part tariff structure that comprises a standing access charge based on the size of service connection and a usage charge for actual water consumption. The access charges are proportional to the square of the connection size as recommended by NOW. Access charges for 2014/15 and 2015/16 are presented in the following Table.

Service connection size (mm)	Number of assessments	Access charge (\$)	
		2014-2015	2015-2016
Unconnected		0	0
Vacant (built-upon, disconnected)		100	100
20		200	200
25		313	313
32		512	512
40		800	800
50		1250	1250
80		3200	3200
100 and above		5000	5000
Quandialla (Connected and Unconnected 20mm). Other sizes as above .		200	200

Non-rateable properties such as schools, churches and other designated institutions get 50% rebate for the access charges. Water usage charges for years 2013/14 and 2014/15 are as follows:

Customer	Usage Charge (cents) per kL	
	2014-15	2015-16
Residential	225	236
Non-Residential	225	236
Industrial	225	236
Quandialla	225	236
Standpipe sale (per kL)	610	610

Developer Charges

The development contributions charged under Section 64 of the Local Government Act are shown in the following table:

	2014-15 (\$/ET)	2015-16 (\$/ET)
Council has adopted the Section 64 Guidelines for the Determination of Equivalent Tenements (ET) developed by the NSW Water Directorate.	8,557	8,700
Capital Contribution Charge for developments on existing vacant land, <u>not subject to subdivision (in-fill blocks)</u>	3,974	4,040
Quandialla (for each year, or part thereof after 2001/02)	464	464

Objective 4: Service Pricing
An equitable pricing policy that supports current and future service provision and encourages efficient water use on full cost recovery and user pays basis to maximise revenue
<p>Performance Target</p> <p>Maintain full implementation of S64 developer charges as determined by the Developer Servicing Plan (DSP).</p> <p>Maintain nil cross-subsidies for water usage.</p>
<p>Strategies</p> <p>Water charges adjusted annually to meet financial planning revenue goals.</p> <p>Review of developer contributions through update of DSP.</p>

Objective 4: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review level of revenue from charges		Ongoing	DFCS		NAE
Adjust and adopt tariffs to suit financial model projections.	June 2015	Ongoing	DFCS		NAE
Strategy 2					
Review and update developers contribution and DSP		Every 5 years	GM		25/5years
Public display of DSP update		Every 5 years	GM		NAE

Customer Relations

This section of the Plan outlines Council's intentions in customer relations to ensure its customers are satisfied with the water supply service provided.

In the area of customer relations the aim is to maintain good customer relations through the provision of a quality service, keeping customers informed of Council's intentions, and responding to customer and community needs. Council believes it operates a service that is reliable, has good quality water and provides a quick response to problems with the system.

Customer satisfaction can be measured in a variety of ways to give a valid indication of the extent to which customers feel satisfied with the type, quality, cost and performance of service provided. Keeping customers informed is agreed by Council to be important for good customer relations. Methods employed include:

- Media releases as required
- Public meetings (as required)
- Customer Surveys sent out with water bills
- Customer contact – phone and front desk
- Councillors' feedback
- Display of Plans and Documents within the Integrated Planning & Reporting requirements.
- Display of Annual Reports and Strategic Business Plan
- Newsletters, Information brochures and flyers;
- Council Website

Adherence to the published Levels of Service is important and advance notification of any planned failure to comply with the levels of service should be given wherever possible.

Council intends to implement a customer focused, socially responsive communications system for service provision issues. An electronic complaints record system does exist, which is being monitored by the General Manager. The Council will record problems and complaints and analyse them to identify where conditions are deteriorating. Actions will then be taken to improve these situations.

In previous workshops in which Councillors and senior management were represented, the following needs vis-a-vis customer relations were identified:

- Surveying for feedback on current levels of service
- Developing a complaints system to record problems and track progressive improvements
- Staff training as part of Council-wide initiative
- Notifying customers of any changes in the levels of service

Objective 5: Customer Relations
Provide services in a professional and efficient manner and maintain customer satisfaction.
Performance Targets
Complete customer survey by June 2017
Strategies
Continuous improvement of customer service mechanisms

Objective 5: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review customer feedback system	July 15	June 16	GM	NAE	
Analyse and monitor feedback system and report to Council		Ongoing	GM		NAE
Staff training on customer relations		Ongoing	GM		NAE
Distribute Newsletters/ Media Releases/ Publish statistical information in Annual Report		Ongoing	GM		NAE
Strategy 2					
Conduct community survey	2016/2017	Every 5 years	GM		NAE
Customer consultation/ communication through random customer calls		Ongoing	GM		NAE

Community Involvement

This section of the Plan outlines Council's intentions in involving the community in decision-making during the development of schemes. Community consultation is not only highly desirable in terms of major capital works, but there are requirements under the Environmental Planning and Assessment Act and the Local Government Act, which need to be satisfied. The aims of community consultation are to:

- Develop ownership of the service delivery issues by the community, and to gain agreement that action is required;
- Ensure that the concerns of the community, particularly social and environmental concerns, are taken into account;
- Allow the community to propose options it wants evaluated and ensure that the costs associated with decisions are acceptable; and
- Demonstrate to the community that Council is making the best decisions after the proper evaluation of all the issues.

Methods used by Council to consult the community include:

- Community meetings / Presentations (e.g. as for Quandialla scheme);
- Community Radio;
- Public meetings (for major issues);
- Media releases;
- Newsletters; and
- Liaise with constituent Councils

Periods of public display, public comment and notices to ratepayers and business groups to advertise the opportunity to comment are typical. Proposed water supply works that would benefit from community consultation include:

- Supply to new villages
- New dam downstream of Lake Rowlands/possible take-over of Carcoar Dam
- Long service interruptions
- New pricing policy and developer charges implementation
- Backlog works and major extension of services
- Works in sensitive environment
- Major renewal and maintenance works to critical assets such as trunk mains

Following points need to be considered when undertaking community consultation:

- Members of community who are not directly affected by a project may also have concerns;
- There must be a balance between due process and risks in order that a satisfactory level of progress can be maintained;
- While community consultation on projects is highly desirable, it can be a lengthy process and project lead times need to be programmed to take account of this.

In future, Council intends to maintain the existing methods of consultation for all major capital works or decisions. The process of consultation can be started by the General Manager and utilise various methods for obtaining community views. These can then be analysed by officers so that Council can resolve to endorse or amend the project brief.

Objective 6: Community Involvement

A high level of community consultation in the delivery of water supply services and prior to major decisions.

Performance Targets

Carry out community consultation for Trunk Main K (Grenfell) replacement by June 2016

Strategy

Establish and implement consultation procedures.

Identify future projects/ major decisions requiring consultation.

Objective 6: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Document procedures for community consultation and review appropriateness	July 15	June 16	GM	NAE	
Advise customers of major projects/decisions - Trunk main replacements - Pricing policy - Developer Charge	As required		GM	NAE	
Review of prospective consultation program and report to Council	As required		GM	NAE	
Strategy 2					
Trunk Main replacement program - Trunk Main K - Trunk Main U - Trunk Main C	Jan 16 Jan 20 Jan 22	Jun 16 Jun 20 Jun 22	GM	NAE	

This section details Central Tablelands Water's objective relating to environmental protection.

The Environment objective addresses Council's intentions in managing the water scheme to minimise the impact on the environment, protect environmentally sensitive areas and promote ecological sustainability.

It is recognised by Council that a responsible, region-wide approach to environmental protection and sustainable development is needed. Council's programme will focus on identifying sensitive areas and undesirable outcomes. The driver is simply the need for the improvement of existing practices.

Council's vision is to conserve and enhance the natural environment through sustainable management practices. It also intends to develop, review and expand its environmental management plan. As part of its development, the following will need to be considered:

- People want water quality suitable for a diverse range of water uses;
- Achieving environmental objectives should strengthen, not threaten the local economy;
- Local knowledge and enthusiasm for sustainability should be harnessed, and
- The recognition of climate change and its potential effect on the community.

The current water supply scheme has a minimal impact on the surrounding environment. Council intends to ensure this impact level is maintained.

Council effectively addresses the following main environment related issues of water supply services in accordance with EPA/DEC guidelines:

- Handling of chemicals used in the water filtration plants (WFPs)
- Handling and disposal of backwash water and sludge from the filtration plants
- Ensuring water services are included in the State of the Environment Report

Following are the major environmental achievements of the Council:

- Council has joined the *Bottled Water Alliance* and has adopted a policy of promoting the advantages of drinking clean safe tap water against the disadvantages and environmental damage caused with the use of bottled water.
- Council has joined with its WBC Alliance partners and is a joint signatory to a *Sustainability Charter* which, among other things, states that '*Our rural communities are founded on a strong respect and appreciation for the land, natural environment, climate and their communities*'. A copy of the charter is provided in Appendix D.
- Council continues to review energy usage in an effort to identify potential savings
- Council has installed variable speed drives on all large, energy-hungry equipment
- Optimisation of backwash recycle process in WFPs has ensured no wastage of water on the site
- Removal of all willow trees within the catchment area of Lake Rowlands controlled by Council and re-vegetation with approximately 10,000 native species and an ongoing annual programme of planting of native species on Council owned land within the Blayney Filtration Plant precinct.
- The majority of Council's 40 odd reservoirs are operating under solar power for the operation of the telemetry network

OBJECTIVE 7: ENVIRONMENT
Manage the water supply system in an environmentally responsible and ecologically sustainable manner
<p>Performance Targets</p> <p>Update the Drought Management Plan by June 2018</p> <p>Reduce and minimise Council's exposure to Green House gas emissions and Council's carbon footprint.</p>
<p>Strategies</p> <p>Identify and minimise impact on environment through appropriate proactive measures</p> <p>Develop energy management goals and performance indicators</p> <p>Promote catchment management priorities</p>

Objective 7: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Identify opportunities and encourage use of alternative water supplies	June 2015	June 2017	DOTS	Refer Objective 3 – Demand Management	
Off-site water sludge disposal	2015	Ongoing			50
SOE reporting in annual report	June 15	Every 3 years	GM		NAE
Update Drought Management Plan	Jan 17	June 18	GM	10	
Strategy 2					
Develop and adopt energy management goals and performance indicators		Ongoing	DOTS	5	

Objective 7: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 3					
Lake Rowlands catchment protection					
– Ensure there is no re-growth of willow trees and continue with annual revegetation of dam area		Ongoing	DOTS		NAE
– Liaising with Blayney Shire Council regarding development control in the catchment		Ongoing	GM		NAE
– Investigate possible increase in solar energy usage and use of excess pressure to drive mini hydro schemes	July 15	June 16	DOTS	NAE	

Climate Change

As previously mentioned, Council has joined with its WBC Alliance partners and is a joint signatory to a *Sustainability Charter* (see Appendix D). Council recognises that environmental sustainability and the need to eliminate the impact that unsustainable practices have on climate change are important and integral to best practice management of water supply and sewerage activities.

Also, as a member of the Central Region Organisation of Councils (Centroc), Council participated in a study to identify opportunities to reduce the carbon impact of the planned water security infrastructure and to promote the adoption of renewable energy in the region. This study was carried out on behalf of Centroc by consultants MWH.

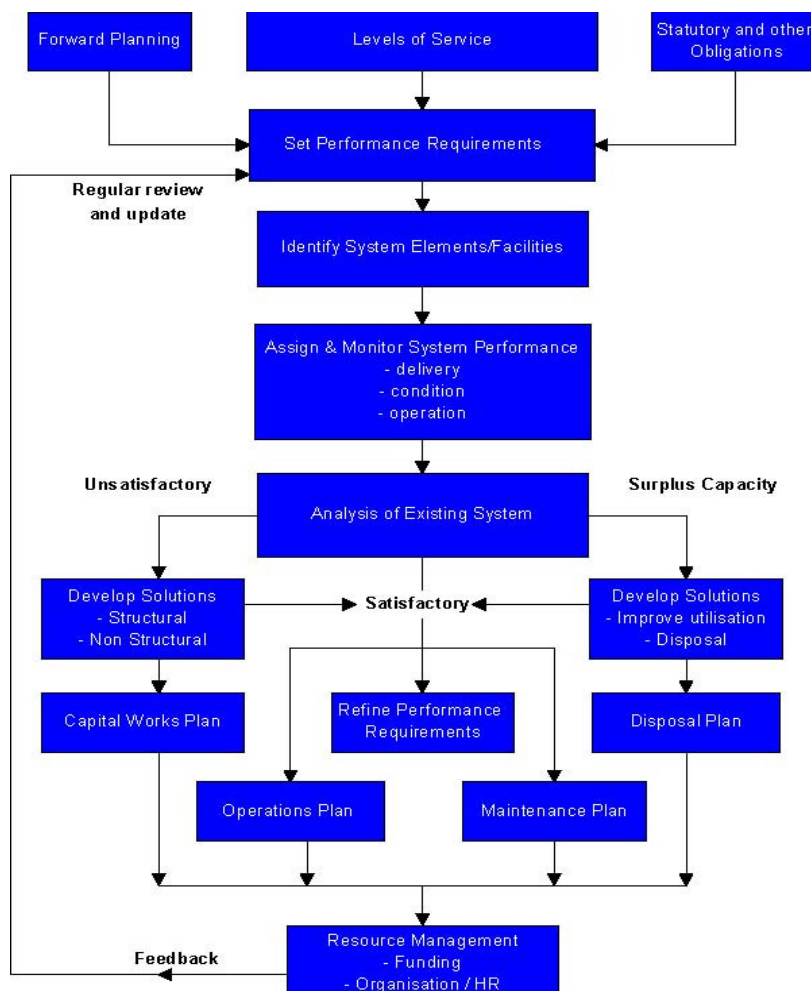
In a further effort to minimise Council's effect on climate change and reduce its carbon footprint, action in the following areas is planned to be pursued:

1. Ongoing media publicity and mail outs to consumers highlighting the environmental damage and carbon emissions caused by the manufacture of plastic bottles and the ever increasing use of bottled water;
2. Investigate the possibility and viability of increased use of solar power on council buildings such as water filtration plants and pump stations;
3. Take up the option of green power at all of Council's contestable sites;
4. Investigate the viability of using council's excess water pressures to drive mini hydro schemes with possible feed back into the electricity grid;
5. Planting of approximately 2,000 trees annually around the foreshores of Lake Rowlands and the land within Blayney Water Filtration Plant to eventually obtain carbon credits and to practice good foreshore management;
6. Arrange for consultants to conduct a new secure yield analysis of Lake Rowlands to be sustainable with the CSIRO's changing climate predictions.

This section details Council’s objectives relating to the operation, maintenance and development of the physical assets that comprise the water supply schemes

The Asset Management Plan (see Appendix G) contains information that Council will use in managing its water supply assets throughout their whole life cycle. This includes asset creation, operation, maintenance, replacement and disposal.

Figure 3 - Best Practice Asset Management Approach



This type of asset portfolio warrants significant investment of resources for its management. Current Government policy is directed towards lifecycle asset management. Solutions in the past have often been capital intensive so there is potential generally to reduce capital works costs for councils over the long term. The ‘best practice’ flow chart describes a methodology for improving asset management planning. Some of the benefits of implementing this type of model are:

- Appropriate asset solutions;
- Optimal balance of capital works and maintenance;
- Maximisation of asset life and utility; and
- Cost effective and sustainable asset management.

This model is not intended to reflect the structure of the Asset Management Plan but rather provides a guide for continuous improvement. This business plan develops objectives and strategies for the management of:

- Operations;
- Maintenance; and
- Capital Works.

Each of these components of the Plan deals with separate issues relating to the Scheme, but since they are interlinked several combinations of structured and non-structured solutions could result in providing the same level of service.

The Plan identifies both current and projected capital works to satisfy future demands in terms of growth, improved Levels of Service and replacement of existing assets. Anticipating the need for asset replacement is vital given the significant investment of resources involved and the need to ensure funds are available. Under the Total Asset Management approach a schedule of expected capital works is estimated into the future. This is used in the financial plan to ensure that required funds are available when needed. Appropriate operation and maintenance activities have also been identified, to suit the desired level of service delivery. Identified activities include documentation of the rules and procedures at system and facility level.

Council intends to adopt a total asset management approach for the scheme's management to ensure that assets are managed as effectively as possible i.e. optimisation of the whole of the asset lifecycle rather than focusing on asset creation alone. The implementation of an asset management database will provide a vital repository for Council's asset related information such as: asset location, aerial photographs, financial and asset costs, construction and acquisition details and other asset attributes such as dimensions. Key functions of the system include:

- Maintenance history;
- Maintenance planning;
- Operations management;
- Condition rating;
- Capital works planning;
- Asset disposals; and
- Customised reporting.
- Asset Values

Asset Values

The details of asset values of water supply schemes of Central Tablelands Water are provided in Appendix G.

Figure 4 - Operations Flowchart

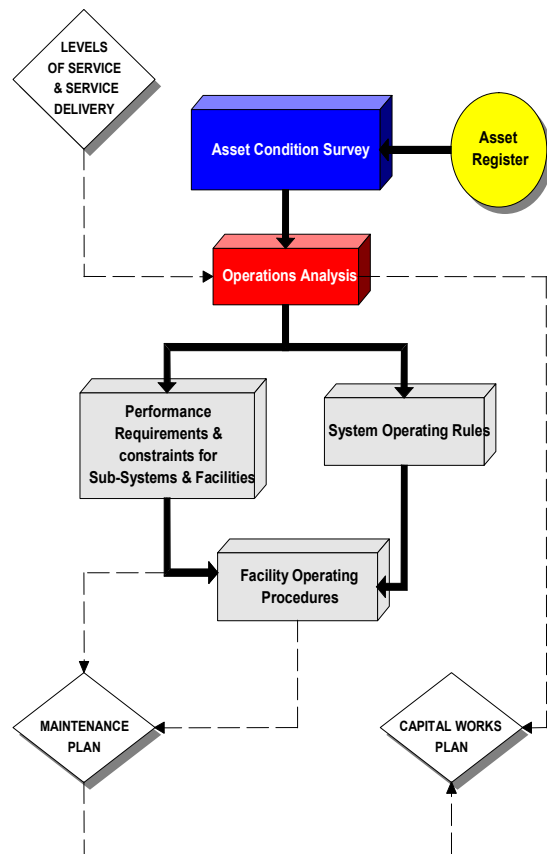
This section of the Plan outlines Council's strategy for operation of the water supply schemes in the future. The function of an operations plan is to ensure that the service objectives are achieved at the least cost, with minimal interruptions to services.

Provision of the agreed Levels of Service to customers is dependent on the efficient and effective running of water supply operations. An operations analysis will interface the operations and capital works plans by identifying what level of service the existing assets can provide and what additional works are needed to bridge any gap between existing and desired services.

The operations plan is based on knowledge of the system assets and as such there are ongoing requirements for maintaining an appropriate asset register and for investigating the condition of key elements of the systems that affect the ability to deliver the desired Levels of Service. Contingency plans (emergency response plans) should be developed where the impact of failure is significant. The existing inspection and maintenance procedures are appropriate; however the utilisation of improved technology needs to be investigated.

Asset condition surveys required include inspection for main breaks in the water supply system. The Asset Register should be updated as an integral part of this recording process.

There are various documentation requirements for water supply operations. Operating rules and procedures for both normal condition and breakdown contingencies need to be established. These should include system performance requirements and constraints, and cross reference to specific plant operations manuals.



Council recognises that a monitoring telemetry system leads to best operating efficiency and improves resource utilisation. Further operations planning requirements for the Council are:

- Maintaining an effective Assets Management System that will enable identification of conditions of assets from assets register and maintenance reports;
- Addressing the increasing operating costs; and
- Compliance with WHS requirements

Main operational issues include the following:

- Optimisation of operations to reduce cost. Council's pumping, treatment and OM costs are significantly above the State median level.
- Monitoring of operational performance
- Updating operating procedures

Work health and safety hazards in the Council's water operations include:

- Bacterial contamination
- Falling into storages/ reservoirs
- Falling of structures
- Moving heavy mechanical parts
- Chemical exposures and handling
- Injuries due to sharps
- Electrical injuries
- Confined spaces

As part of Council's ongoing commitment to Work Health and Safety requirements, all staff have been thoroughly briefed on the amendments to the WH&S Act, Local Government Act 1993 and the Protection of the Environment (Operations) Act 1997. The following table summarises the WH&S performance of the Council during last 3 years.

WHS performance indicator	2012/13	2013/14	2014/15
Lost time due to injury (Hrs)	0	0	0
No. of workers compensation claims	0	0	0

OBJECTIVE 8: OPERATIONS
Scheme operation ensures facilities deliver quality, capacity and reliability to design requirements at the minimum long-term cost through development of procedures and guidelines to streamline operations with effective use of technology so as to achieve levels of service with due diligence
Performance Targets Undertake operations analysis by June 2015 Maintenance and update of Council's electronic asset management system - Ongoing
Strategies Maintain sound asset management practices Maintain and update Operations Plan

Objective 8: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Maintain and update electronic asset management system		ongoing	DOTS	NAE	NAE
Update asset valuation	June 17	Every 5 years	DFCS		10/5year
Identify and assess condition of assets - Civil - Mech.& Elec.		Ongoing	DOTS		NAE
Strategy 2					
Update Operations Plan - Operations analysis including WATSYS analysis - Document procedures and practices	July 15	June 16 Ongoing	DOTS DOTS	15 NAE	
Annual review and implementation of recommended operational changes		Ongoing	DOTS		NAE

Figure 5 - Maintenance Flowchart

The Maintenance Plan is to ensure that the Operations Plan's outputs, reliability and availability of the sub-systems, facilities and components are achieved in the most cost effective manner. The most important factor is identification of the risk to system performance from failure of each asset. This leads to a minimum performance standard for each asset.

Records should be kept of maintenance and operations requirements. The aim is to reduce delays or periods of reduced service. Determine the limit of acceptable substandard operation and determine the cost effective breakeven point.

The most cost effective strategy should be identified as either:

Scheduled maintenance -fixed time or condition based;

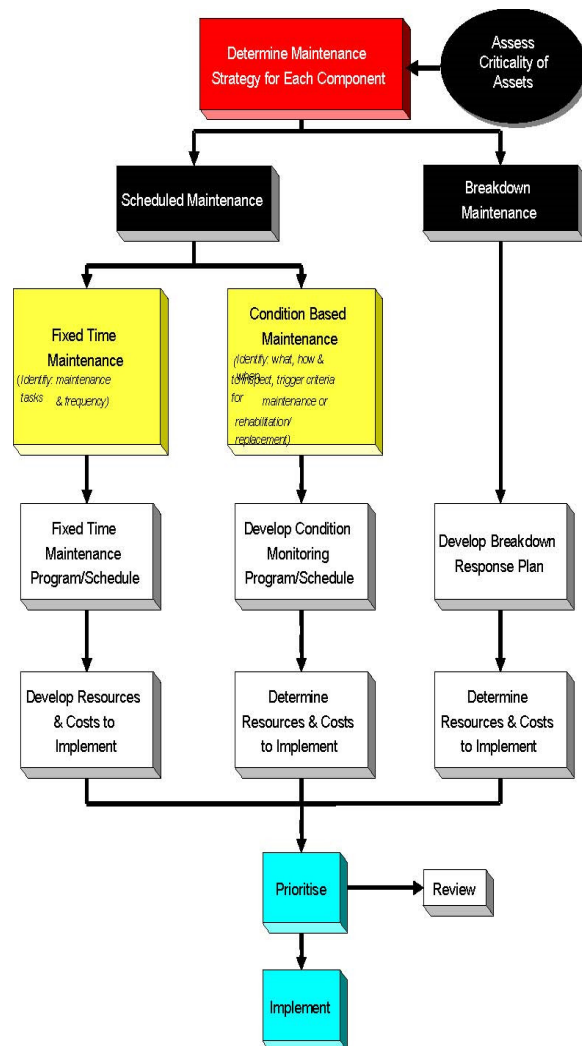
Reactive maintenance -failure based.

The thrust of the Government's total asset management guidelines is to make the best use of existing assets by implementing systematic maintenance and rehabilitation plans. It could therefore be that increased maintenance costs will result from a critical review of the maintenance area. This in turn would be expected to be more than compensated for by a reduction in the need for capital works.

A complete assessment of the system is needed for the development of sound strategies to ensure the Levels of Service are not jeopardised by failure to address maintenance problems. A maintenance plan is needed to incorporate appropriate maintenance schedules and procedures. This should include references to specific plant maintenance manuals.

The Maintenance Plan has to consider the following information and issues on the existing system:

- Criticality analysis of systems is required to identify components of high risk
- Need for spare parts inventory
- The need for refresher training of key staff dealing with mission critical functions.



OBJECTIVE 9: MAINTENANCE

Scheme maintenance ensures facilities can deliver design quality, capacity and reliability requirements at the minimum long-term cost.

Performance Targets

Review maintenance strategy by June 2016

Strategies

Implement and review appropriate maintenance strategy to meet levels of service requirements

Maintain current detailed Maintenance Plan

Objective 9: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Asset criticality assessment and updating maintenance strategy		Ongoing	DOTS		NAE
Maintain work order management system		Ongoing	DOTS		NAE
Undertake maintenance cost analysis for renewals		Ongoing	DOTS		NAE
Review Contingency Plans <ul style="list-style-type: none"> - Lake Rowlands emergency management plan - Water treatment plants and Pump stations 	July 15 Completed	June 16	GM DOTS	10 NAE	
Strategy 2					
Update detailed Maintenance Plan <ul style="list-style-type: none"> - Predictive maintenance for critical assets - Scheduled maintenance for less critical assets - Breakdown maintenance strategy 		Ongoing	DOTS		NAE

Capital Works

The capital works plan should make an assessment of scheduled work for growth, non-growth, and rehabilitation works over a 30-year period.

The Capital Works Plan is of crucial importance because water supply infrastructure is capital intensive and the construction and renewal of facilities can have a significant impact on Council's overall finances.

In the process of preparing the Capital Works Plan, the following points have been considered:

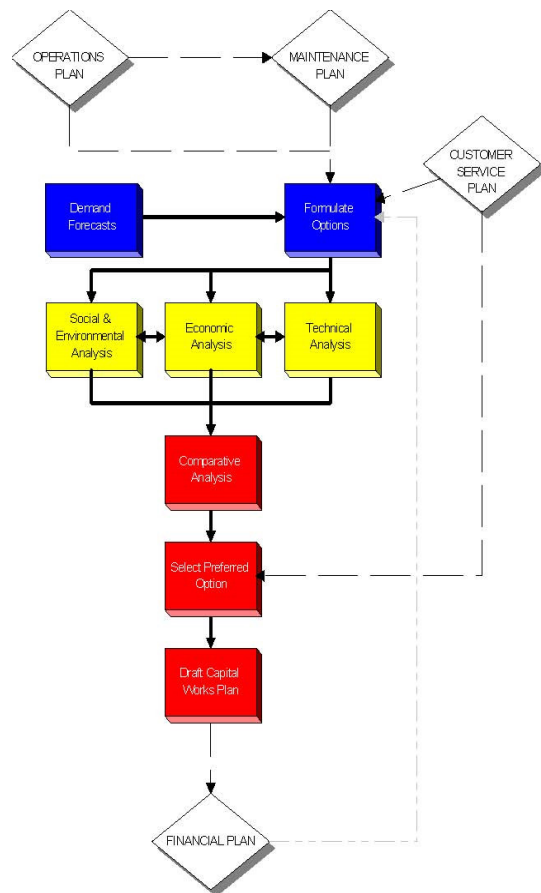
- The development of water supply schemes is a long-term investment, and must be integrated with Council planning policies.
- The capital works strategy needs to be regularly updated to take account of changing conditions.
- Consideration of the costs and benefits of alternative options.
- Acceptance by the community of the development proposals and costs.

A summary of the 30-year capital expenditure program is shown on p16 of Part A of this Plan and in Appendix I.

On the forward budget for the water supply scheme the following specific issues have been addressed:

- Removal of dead ends in the water supply network
- Replacement of ageing pipes
- Complaints about water quality (taste and odour)

Figure 6 - Capital Works Flowchart



Objective 10: Capital Works
Capital works program provides agreed levels of service at optimal life-cycle costs to meet social, economic and environmental considerations
Performance Targets Capital works constructed to ensure system meets agreed levels of service.
Strategy Implement capital works plan

Objective 10: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Update 30-year Capital Works Plan			GM	Refer Part C – Detailed information	
Review capital works plan as part of IP&R document requirements on an annual basis	Annually		GM		NAE
Undertake economic analysis to determine preferred capital works options	As required		GM	Included in project costs	
Engage consultants for design and preparation of tender documents	As required		GM	As per capital works plan	

This section details Council's objectives relating to the development of human resources required for operating the water supply service

The Human Resources Plan is to ensure that Council has the appropriate staff numbers with the necessary skills to meet current and future requirements. If these are in order, Council's Levels of Service can be met.

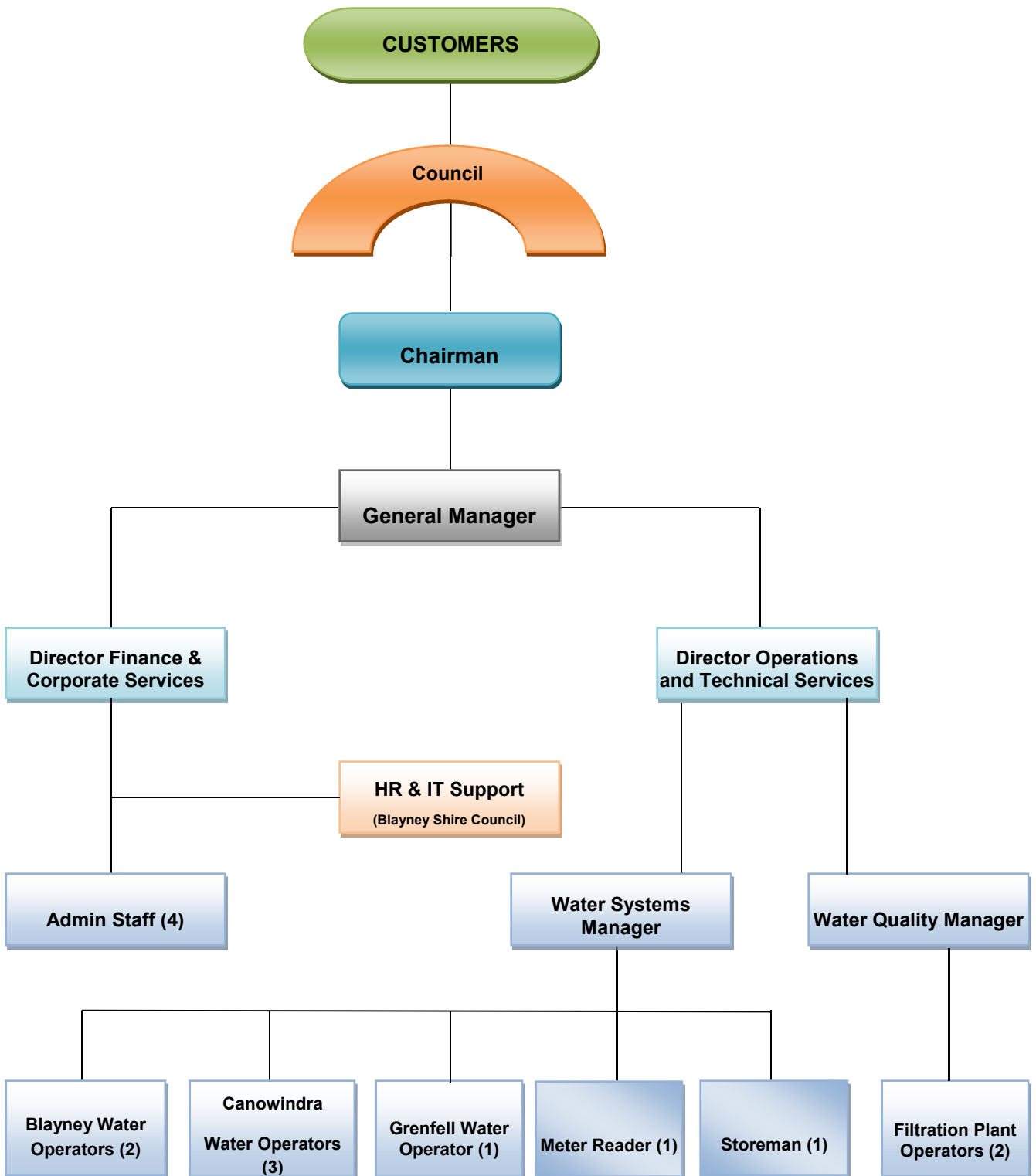
Central Tablelands Water has staff strength of 19, who together operate, maintain and administer the water supply schemes. The General Manager is responsible for the scheme operation. The organisational structure is shown in Figure 7 on the following page.

Council's organisation structure is shown in the following pages.

In a workshop session where Councillors and senior Council staff were represented, the following points were considered important:

- There is the need to ensure operators are familiar with all current practices including WH&S requirements; and
- Need to ensure an up to date training program is in place for all staff (in particular training the water treatment plant operators).
- Succession planning for senior technical staff

Figure 7 – Central Tablelands Water’s Organisational Structure



OBJECTIVE 11: HUMAN RESOURCES

Satisfy staffing needs and develop and maintain appropriate skill levels.

Performance Targets

Develop and implement HR Plan by December 2015

Strategy

Maintain current HR Plan

Objective 11: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Document HR Plan – Review Position analysis – Review Needs (resources/skills) analysis	Jan 15	Dec 15	GM	NAE	
Document and implement training and retraining plans	Jan 15	Dec 15	DOTS	NAE	
Undertake annual performance review	Annually	Ongoing	GM/DOTS/DFCS		NAE

This section details Central Tablelands Water's objectives relating to the business operation and financial management of the water supply funds

The purpose of the Financial Plan is to enable Council to determine the revenues needed to meet the Levels of Service over the long term and effectively manage the cash flow.

Legislation requires separate accounting for water supply services and elimination of cross subsidisation with any other of Council's activities where possible. Any cross subsidy deemed necessary by Council should be explicitly noted.

Commitment by Council to provide the Levels of Service described in this document requires collection of revenues of the order shown in the detailed tables and graphs in Part C. Estimates of the cost of activities in the action plan have been developed by the General Manager and Director Finance & Corporate Services and represent the best projection of future costs possible at this time. Actual billings will depend on the levels of developer charges and pricing structure adopted.

Generally, recurrent operating costs should be covered by the annual water supply charges. Capital funds are drawn from the following four sources:

- Developer charges;
- Government grants;
- Annual water supply charges / cash; and
- Possible Loan Borrowings.

There is pressure to provide a suitable financial plan because NOW requires that the existing financial plans be updated to evaluate the impacts of the proposed capital works on the water charges.





In accordance with the NOW Financial Planning Guidelines, Council has developed its long-term financial models and established a steady price path. This will be used to set the pricing structure in accordance with the NOW Best Practice Management Guidelines.

Council will update its financial model annually as part of its ongoing planning review process.

Objective 12: Finance
Maintain sound financial management of the organisation by optimising long term (30 years) financial plans to provide required services at an affordable level and ensure full cost recovery.
Performance Targets Quarterly review and annual updating of financial plan
Strategies Maintain current Financial Plan

Objective 12: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review cost projections for the Long Term Financial Plan, with the aim of reduction in the costs of operations and maintenance	Annually		GM/DOTS/DFCS		NAE
Update Financial Plan	Annually		GM/DFCS		NAE
Agree on price path for setting the tariff in accordance with the NOW guidelines and financial model projections.	Annually		GM/DFCS	See objective 4 - Service Pricing	

Part C of the plan provides more detailed information about select elements of the plan. Included in this section is information on:

-  Financial Management
-  Projected Cost Schedules
-  Financial Model Outcomes
-  Operating Environment Review

Contains a summary of the financial modelling process and the input data used.

Overview of Financial Planning

The objective of financial planning is to model the full life cycle costs for the preferred service planning option and to determine appropriate funding strategies and to ensure that the services remain affordable in the long term.

By taking a long-term view, financial peaks and troughs can be smoothed to provide the basis for a consistent charging policy and to highlight any current impact of future actions.

A 30-year planning horizon has been adopted as recommended in the NSW Office of Water (NOW) Guidelines.

To establish a financial plan various scenarios are explored in order to determine the best funding strategy.

It is important to identify a logical progression of asset creation, rehabilitation, and replacement over at least 20 years in order to develop a working perspective for the management of these infrastructure assets which have expected lives of up to one hundred years.

The preferred model presented here assumes that no government grants are available to Council, as they will have already received the entitlement.

The overall goals of financial modelling are to optimise a long term funding strategy to meet the demands of the capital works programme and day to day operations, while ensuring a minimum level of cash liquidity and a stable level of average residential charges.

Australian Accounting Standards Board (AASB) reporting for the financial statements requires that all funds be declared as assets under cash and investments in the statement of financial position. Also that, assets are valued on the basis of current replacement cost and depreciated according to their remaining lives compared with their expected lives.

All capital works estimates in the text are quoted in real (2015) dollars unless specified otherwise. The output data also is quoted in real dollars.

When assessing affordability, note that a \$1 charge now will be equivalent to \$1.80 in 20 years time, assuming a 3% annual inflation rate.

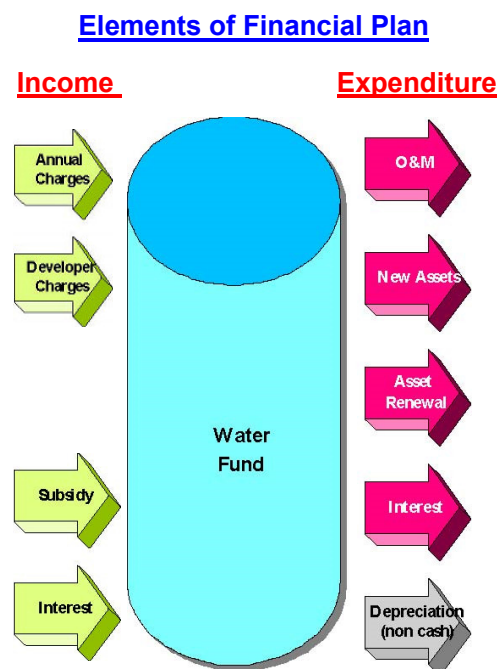
A summary of the results is included on the following pages and detailed input and output data are available in the Appendices.

Model Description

The financial plan forecasts income streams to match projected expenditure. The diagram below illustrates the main elements, which affect the financial plan.

The financial modelling undertaken in this plan aims to:

- optimise the long term funding strategy,
- meet the demands of the capital works program and other life cycle costs of the system assets,
- ensure a minimum level of cash liquidity, and
- provide a forecast of the typical residential annual charges over the long term.



Financial Plan Methodology

Input data for the model is sourced from three main areas:

- Special schedules for past financial performance
- Estimates for uncontrollable variables e.g. interest rates, growth, inflation
- Projected capital works, and operations and management expenses

All other criteria being met, the financial plan seeks, after an initial adjustment, to model, in real dollars, the lowest steady level of charging possible. Actual bills will depend on Council's pricing structure but this is indicative of the affordability of the services and shows the performance requirements for long-term stability.

A number of variables and assumptions have to be entered into the model and these are first agreed to by Council. They include the following:

Developer Charges

In accordance with the *Section 64 of the Local Government Act 1993*, the *Guidelines for Best-Practice of Water Supply and Sewerage* prepared by the NOW, and, in accordance with Council's Developer Servicing Plan (DSP), new connections in subdivisions have to pay a developer charge for the benefits being received by connecting to the system. The developer charge for 2015/16 is \$8,700 per ET and is subject an annual CPI increase. A capital contribution charge applies to all new connections that are not subject to subdivision, in other words 'in-fill' blocks. The contribution charge for 2015/16 is \$4,040 per ET and that is also subject to an annual CPI increase.

Growth Projections

An average connection growth rate of 0.70% per annum has been used for financial projections by the plan.

Inflation

Average long-term inflation has been assumed as 3.0% per annum.

Interest Rates

A borrowing rate of 6.5% and investment rate of 5.5% have been used in this analysis

Revenue from non-residential customers

The revenue split is the ratio of residential to non-residential revenues. This is determined from the special schedules. If a significant change is envisaged (e.g. increased income from bulk water sales) then the split can be adjusted to match. In 2013/2014, residential (including rural) charges accounted for 51% of water supply revenues.

Performance Measures

Council's minimum service criteria will have an impact on the level of charges required e.g. Minimum cash levels, which is generally assumed to be 10% of annual revenues (excluding restricted revenues). For the financial models, \$300K (real 2014\$) has been considered as minimum cash level.

Expected life of assets

The default average life of system assets is based on the weighted average of long-lived structures and shorter-lived mechanical plant. The average life of water and sewerage assets is currently estimated to be approximately 70 years. The life of assets controls the depreciation, which is a non-cash expense. It directly affects the need for future asset renewal works planned, which is part of the capital works program.

Grants and Subsidy for Capital Works

The State Government provides financial assistance to local government water supply and sewerage schemes through the Country Towns Water, Sewerage and Drainage Program. Councils can apply for funding of up to 50% of Improved Level of Service (ILOS) capital works if their average residential charge is more than \$350 per annum. The financial plan in this case has assumed no subsidies as no ILOS and backlog works have been scheduled in the capital works plan.

Ongoing recurrent costs: Management, Operations and Maintenance

By default, the plan increases historical operation and maintenance expenses on a pro rata basis with respect to growth. This has been overridden where Council provided revised estimates i.e. where the action plan requires new initiatives or where new works require additional operating resources.

The capital works plan and projected operations and management expenses also form a significant component of the inputs. These are shown in the section 'Projected Cost

Schedules’.

Assumptions and Limitations

The projections of the financial plans are based on past financial performance. Allowance is made for new initiatives, future water charges forecasts, and maintenance of sustainable levels of service as identified in the strategic planning process.

The depreciation is shown in the operating statement but this is not a cash item. The financial plan manages the cash flow but keeps a running tally of cumulative depreciation so that Council can appreciate the potential future liability for maintaining the value in the system and levels of service. By planning ahead and making optimum use of existing assets, a more cost-effective and efficient service should result.

Average annual residential charge is used as the performance measure representing overall revenue requirements from residential customers. This should not be confused with pricing. Pricing, i.e. distribution of the charges according to consumption or special customer groups, is the subject of a separate revenue planning exercise.

The financial plan is not a substitute for normal budgeting (that is, short-term financial planning). The model assumes that all expenses and income occur at the beginning of the year and is therefore not appropriate to track cash flow throughout the year. It is important, however, that the budgeting process is carried out within the framework of the long-term financial plan.

The Capital Works Plan provides a guide for estimation of long-term operation and maintenance costs. It is accepted that the level of confidence in these projections reduces with time but it is important to identify as many future commitments and liabilities as possible.

On-going Review

Over time, changes in the plan variables can have a significant impact on the plan’s accuracy and this has implications for Council’s forward planning. It is recommended that the plan be revisited regularly to ensure that they retain their currency. Where Council has an active capital works program that requires subsidy then annual updates are recommended.

PROJECTED COST SCHEDULES

This section looks at the projected capital works and recurrent expenditure for the next 30 years.

CAPITAL WORKS

Growth works -	Work required to increase the capacity of facilities, to service new subdivision.
Improved level of service works - (backlog works)	Works to provide better public health and environmental standards, better service, higher reliability, or an extension of services to unserved existing development. Works in this category may be eligible for Government grants.
Asset renewal works -	Renewal/replacement of existing assets, which have aged and reached the end of their useful life.

RECURRENT COSTS

Management -	Reflects true overheads associated with providing this service.
Operations and Maintenance -	It is assumed that the current level of costs shown in the Financial Statements reflects a realistic level of expenditure for the current schemes. The projections assume costs increased in proportion to the growth.
Model cost overrides	Additional costs are included where specific activities have been identified in future years. This includes new initiatives plus additional costs associated with new Capital Works.

The expected capital and recurrent cost expenditures are presented in the following pages. Projections are in real (2015) dollars.

FINANCIAL PLANNING OUTCOMES

Contains summary of the financial planning assumptions and outcomes

Results of Planning Process

Financial projections have been made considering that no subsidy will be available for the planned capital works during the forecast period. Financial planning has demonstrated that, owing to the large capital works to be taken up in the near future and the Council plan to internally fund all these works, the volumetric (consumption) charge on all residential and rural water accounts has to be increased by 5% each year which is 2% above an estimated CPI of 3%.

This level of charges is sufficient to maintain liquidity with a minimum of \$ 300,000 of cash in hand over the period. The financial plan does not provide for any new loan funding for planned capital works until the year 2022/23. Existing debt will be retired in year 2021/22

Figure 8 – Typical Residential Bill

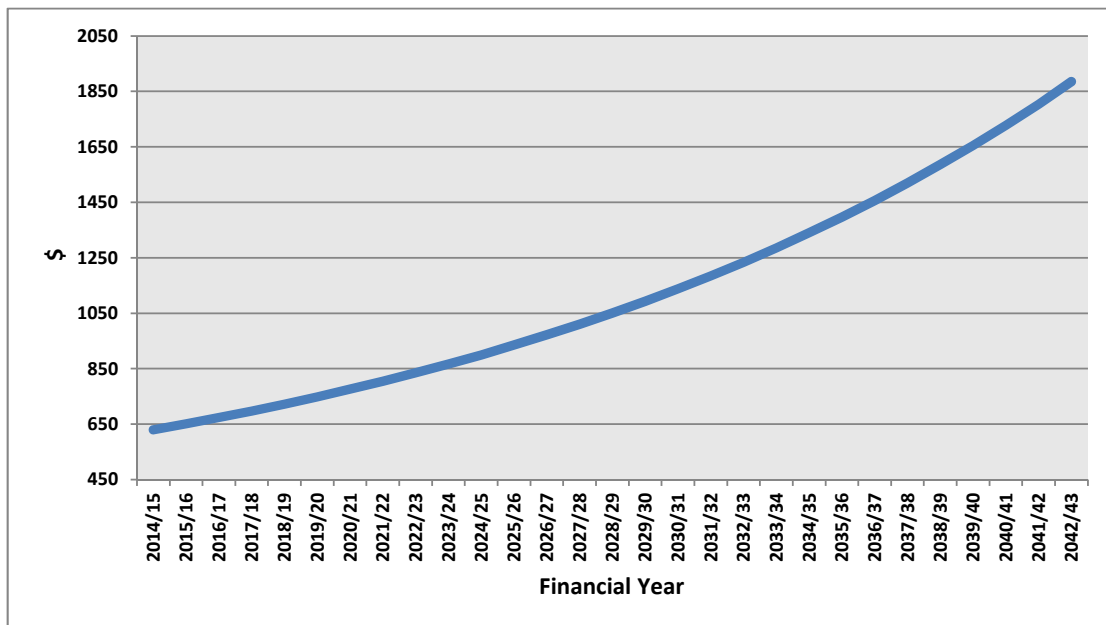


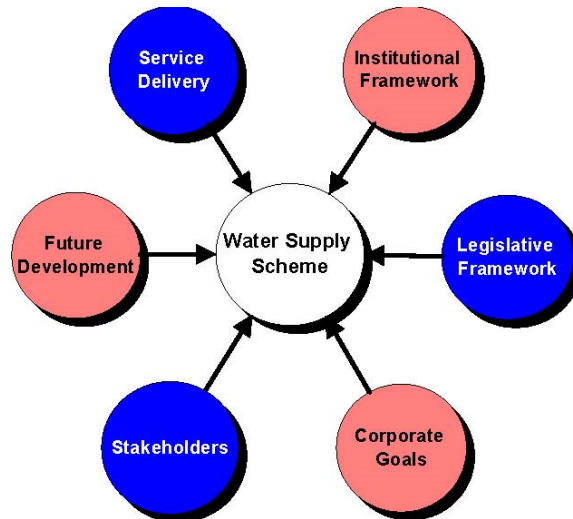
Figure 9 - Projected Financial Results

2014/15 \$ (000)	Revenue and Expenses			Capital Transactions		Financial Position					Typical Residential Bills
	Financial Year	Total Revenue	Total Expenses	Operating Result (Before Grants)	Acquisition of Assets	Principal Loan Payments	Cash and Investments	Borrowings	Total Assets	Total Liabilities	
2014/15	5,756	5,755	1	1,387	359	6,410	3,137	64,838	4,134	60,704	630
2015/16	5,702	5,557	145	1,452	383	6,915	2,754	66,323	3,781	62,542	651
2016/17	5,960	5,929	31	3,553	409	5,451	2,235	69,971	3,403	66,568	674
2017/18	6,166	5,735	431	3,569	437	4,103	1,908	73,635	2,998	70,637	697
2018/19	6,388	5,827	561	3,071	466	3,438	1,442	76,786	2,564	74,222	722
2019/20	6,674	6,046	628	1,110	497	4,910	944	77,916	2,100	75,816	748
2020/21	7,021	6,171	850	2,909	531	4,778	413	80,900	1,604	79,296	776
2021/22	7,322	6,336	985	3,425	413	4,462	0	84,414	1,226	83,188	805
2022/23	7,901	7,326	275	4,129	215	13,273	9,895	88,653	11,116	77,495	835
2023/24	8,240	7,456	785	3,441	232	13,079	9,671	92,183	10,097	81,211	867
2024/25	8,591	7,637	954	7,133	251	9,322	9,430	99,516	10,077	88,746	900
2025/26	9,031	6,861	2,169	5,994	272	8,055	9,169	105,675	10,549	95,126	935
2026/27	9,283	7,072	2,210	4,350	293	8,589	8,886	110,140	10,307	99,833	972
2027/28	9,953	7,254	2,399	2,184	317	11,615	8,851	112,373	10,045	102,328	1010
2028/29	10,117	7,357	2,760	7,485	344	9,619	8,250	120,066	9,758	110,308	1051
2029/30	10,701	7,580	3,122	3,355	372	12,318	7,893	123,505	9,446	114,059	1093
2030/31	11,116	7,706	3,410	1,144	402	17,659	7,806	124,666	9,106	115,560	1138
2031/32	11,740	7,943	3,797	1,280	435	23,328	7,088	125,967	8,736	117,231	1185
2032/33	12,496	8,146	4,349	1,214	470	29,703	6,636	127,199	8,333	118,866	1234
2033/34	13,294	8,257	5,037	1,270	508	36,798	6,147	128,488	7,894	120,593	1286
2034/35	14,151	8,506	5,645	1,628	550	44,219	5,617	130,145	7,418	122,727	1340
2035/36	15,070	8,643	6,427	15,466	595	38,263	5,045	146,055	6,900	139,155	1397
2036/37	16,038	8,908	7,129	1,366	644	47,622	4,426	147,441	6,336	141,105	1457
2037/38	16,523	9,132	7,391	1,525	696	57,155	3,757	148,990	5,724	143,266	1520
2038/39	17,642	9,248	8,394	1,449	753	67,867	3,032	150,461	5,059	145,402	1586
2039/40	18,811	9,523	9,287	1,493	814	79,521	2,249	151,976	4,337	147,639	1655
2040/41	20,069	9,668	10,401	1,537	881	92,342	1,402	153,536	3,552	149,984	1728
2041/42	21,411	9,959	11,451	1,584	953	106,260	485	155,143	2,700	152,443	1804
2042/43	22,847	10,222	12,625	1,631	0	122,462	0	156,798	2,281	154,517	1885
2043/44	24,379	10,423	13,956	111,680	0	26,831	0	271,803	2,349	269,454	1970

(The above figures are in 2014/2015 \$ terms)

OPERATING ENVIRONMENT REVIEW

The delivery of water supply services to the scheme's customers is subject to a large number of constraints, requirements, guidelines and other factors, which collectively are referred to as the operating environment. As part of the business planning process, a review was carried out to examine how the surrounding environment impacts on Council's operation of its water schemes. The six major elements of the operating environment are shown in the chart below. Progressive review of these elements provides increasing definition of the operating environment.



Institutional Arrangements

Central Tablelands Water is a County Council. There are limited recognised options open to Council to restructure its institutional arrangements. The purpose of this review is to anticipate change; to look ahead at possible future outcomes and ask what strengths Council should be developing so it can meet these challenges.

The Federal Industry Commission Report on the Australian Water Industry indicated that there should be an efficient use of resources in the water industry – natural, physical and financial. Their 1992 recommendations were wide-ranging and covered matters such as pricing and structural reforms. This has been followed up by the NSW Government's Competition Policy and the Independent Pricing and Regulatory Tribunal's Pricing Principles for Local Water Authorities. In addition, the Local Government Association has issued a guideline to self-regulation, which suggests ways Council can improve its service delivery.

The following options were considered in the 2005 strategic workshop and their relevance to Central Tablelands Water was deemed to be as follows:

- **County Council:** Already a County Council. Council sees possibility of it being the Water Authority for the whole of Cabonne Shire Council by including the towns/ villages of Molong, Cumnock and Yeoval in the CTW network.
- **Corporatisation:** where Council would set up its operations and register as a company. Workshop participants viewed this would be inappropriate because the size of their operations is too small.
- **Privatisation:** where Council would sell off its complete structure (assets, interests, etc) to a private individual or company who would then operate as they saw fit. Council sees no possibility of privatisation and hence considers this option as not applicable.

Council would like to continue with its current institutional arrangement while open to becoming a full member of any proposed Joint Organisation development as suggested by the Local Government Independent Review Panel. Council remains an advocate of amalgamating local water utilities into a regional County Council model based on the Lachlan catchment.

Legislative Framework

Numerous Acts influence the way in which Council can provide water supply services to the community. Appendix B provides a discussion of the relevant legislation and the specific implications it has for Council's operations.

Corporate Policies

Central Tablelands Water currently has the following corporate policies that have an impact on the operation of the water supply scheme.

Corporate Policies	Impacts
Ensure that services provided are in accordance with the requirements set by Council	Reliable and consistent service Customer consultation
Extend service to urban residential areas and rural residences Encourage Infill developments	Economic systems Reduced headworks charges (currently \$4,040 instead of \$8,700)
Support WH&S and EEO principles	Socially responsible
Non-potable supplies to industrial areas	Optimal resource management and environmental benefits Extended life and capacity of Filtration Plants
Water saving devices (rebates) policy	Demand Management
Backflow prevention policy	Protection of quality of water supply
Developers contribution policy (detailed in DSPs) for full cost recovery	Improved levels of service

Stakeholder Analysis

Council's water supply service must satisfy the needs of several stakeholder groups including customers, visitors, commerce and industry, and government. Appendix C examines these groups and evaluates Council's current performance. In general Council is performing well with the exception of perceived high tariff by customers.

The primary objective of Council is to provide a sustainable high level of service.

Future Demands

Central Tablelands Water's services will need to be augmented to meet future demands. Only unserviced areas, which are economically feasible, will be connected.

Changes	Council Actions
<p><i>Customer Growth Rate</i> Current growth rate is expected to be sustained</p>	<ul style="list-style-type: none"> • Need to ensure services can meet demand
<p><i>Commercial Growth</i> Active promotion by constituent Councils of development potential will increase business growth.</p>	<ul style="list-style-type: none"> • Identify and develop new sources and extend services to cater to the growth areas
<p><i>Environmental Changes</i> Greater focus on environmental issues</p>	<ul style="list-style-type: none"> • Maintain the focus on environmental issues in line with community expectations
<p><i>Service Culture</i> Council obligations to consumers</p>	<ul style="list-style-type: none"> • Continuously improve services and meet increasing customer expectations
<p><i>Technology Changes</i> Low cost water supply schemes</p>	<ul style="list-style-type: none"> • Take advantage of new technologies to achieve cost effective operations
<p><i>Government Policy</i> Ongoing changes</p>	<ul style="list-style-type: none"> • Keep abreast of changes in Government policy and Acts accordingly

Service Delivery

The General Manager is responsible for the provision of water supply services to the County Council. Service delivery is provided on a day-to-day basis with the use of in-house resources.

In its 2010 workshop, Council considered various methods of service delivery including the following:

Full Service Contract

Advantages

- There is the possibility that the operating cost of the water supply system would be lower under a full service contract due to the competitive aspect of letting a contract.
- There would be a reduction in the staff required by Council to manage the water supply operations.
- There could possibly be a productivity improvement resulting from the competitive aspect of letting the full service contract.
- There would be a transfer of the risk associated with operating the water supply system.
- Attractive for high-end technology operations.

Disadvantages

- As a result of having all operations under a full service contract Council would lose some of the control and flexibility it currently has over the operations of the services
- By having the operations of the scheme on a full service contract there is the possibility of having profits put ahead of customers.
- There would be a different set of problems associated with the management of the full service contract.
- Requires a complete culture change.

Council still has the view that this option is not applicable in view of its institutional arrangement.

Part Service Contract

Advantages

- Some degree of control over the scheme operations can be retained.
- The part service contract is carried out in a specialist area therefore providing the best service.
- Ability to segment and assess current practices/performance

Disadvantages

- There would be a loss of expertise in specialist areas
- Council would become reliant on the availability of specialists for work in these areas.
- Possibility that profit would be put before customer service.
- A comprehensive maintenance management system and information would be required.

Council carries out the majority of work in-house, particularly day-to-day operation and maintenance work. Some items of work which are contracted out include:

- Water testing;
- Operator training;
- Telemetry maintenance and upgrade;
- Electrical and some Mechanical maintenance;
- Strategic advice;
- Training; and
- Major engineering design and capital works (traditionally done in conjunction with the State Authorities and/or by tendered contract).

There is also the possibility of contracting out: asset inventory and condition surveys.

Council will continue with the current practice and will monitor the situation.

B.O.O.T.

Advantages

- No large up front capital investment by the Council is required.
- The risk involved with the construction of new capital works is transferred.
- At the end of the B.O.O.T. period the Council is left with the asset.
- Has potential for cost effectiveness.

Disadvantages

- The political and operational implications may be severe if the operator fails to perform satisfactorily or fails completely.
- Ensuring appropriate processes and outcomes requires specialist expertise.
- Community acceptance of the BOOT scheme may be hard to achieve
- The developer's profit and risk must be paid for as part of the overall project

Council is still of the view that this option can be considered if subsidy or grants are not available for major capital works requiring huge capital investment. Currently there is no such capital work in the pipeline.

Shared Resources

Advantages

- There would be a reduction in the number of resources required by Council, as these would be shared with the other organisations.
- By sharing the resources associated with the provision of the water supply services with other organisations economies of scale would be achieved.
- May enable specialist expert team to be established and used on a regional basis.

Disadvantages

- The co-ordination and commitment of other organisations is hard to get.

Council is open to consider this option if need arises.

Conclusion

As can be seen from the discussion, Council is still of the view that only the part service contract and service share options will hold any real possibility or advantages to them.

Therefore, the present strategy is to continue with its current service delivery arrangements which is a combination of in-house delivery and part service contract, and if need arises in the future, the service share option.

Appendix A

Abbreviations

Appendix B

Legislative Framework

Appendix C

Stakeholder Review & Customer Survey

Appendix D

Environment – Sustainability Charter

Appendix E

MWH – Water Security Study

Appendix F

Performance Indicators

Appendix G

Assets Details & Asset Management Plan

Appendix H

Typical Water Quality Analysis Report

Appendix I

Detailed Projected Financial Statements

The following list of abbreviations may be used in the Strategic Business Plan.

BOD	Biochemical oxygen demand, a measure of 'strength' of organic pollutants in wastewater/ sewage.
CBD	Central business district
CC	Construction certificate.
CRC	Current replacement cost. The cost to replace existing assets with new assets that will provide the same service function.
CSO	Community service obligation.
CWP	Capital works program.
DA	Development application.
DCP	Development control plan.
DEUS	Department of Energy, Utilities and Sustainability
DLWC	Department of Land and Water Conservation.
DPWS	Department of Public Works and Services.
DSP	Developer Servicing Plan
DUAP	Department of Urban Affairs and Planning.
EEO	Equal employment opportunity.
EIS	Environmental impact statement.
EP	Equivalent population.
EPA	Environment Protection Authority.
ET	Equivalent tenements.
LEP	Local environment plan.
NFR	Non-filterable residue (also refers to as suspended solids), a measure of fine particle pollutants in wastewater.
NH&MRC/ AWRC	National Health and Medical Research Council / Australian Water Research Council.
NOW	NSW Office of Water
SEPP	State Environmental Planning Policy.
STP	Sewerage treatment plant (also referred to as STW).
TCM	Total catchment management.
WTP	Water treatment plant (also referred to as WFP).
WDCC	Written down current cost. The current replacement cost less the accumulated depreciation to date.
WHS	Work Health & Safety

Legislative Framework

Central Tablelands Water is a County Council delivering water supply services in the Shires of Blayney, Cabonne and Weddin under the authority of the Local Government Act, 1993. Council has embraced the principles underlying this Act as being of benefit to the community it serves. Community consultation and involvement in decision-making has been increased in line with the Act in the last few years.

Several other Acts also affect Council's scheme. These generally fall into three main categories as follows:

Act	General Implications for Council
1. Pricing	
Local Government Act 1993 Esp. Sections 64 and 428	Determining developer charges: <ul style="list-style-type: none"> • provide a source of funding for infrastructure required for new urban development • provide signals regarding costs of urban development and encourage less costly forms Need to be more accountable. Need for better asset management.
Environmental Planning and Assessment Act 1979	Determining developer charges. Requirement for LEP and DCP's. Council control of service approvals.
Water Management Act 2000 Progressively replaces the previous Water Act 1912, Water Authorities Act 1987 and 10 others including irrigation, rivers and foreshores Acts)	Determining developer charges. Water rights, licences, allocations.
Independent Pricing and Regulatory Tribunal Act 1992	Gives powers to the Independent Pricing and Regulatory Tribunal to inquire into and regulate prices. IPART has developed a set of consistent pricing principles to be adopted by local government authorities. Charging guidelines. Trend towards a user pay system in the industry.

2. Environmental Protection	
Protection of the Environment Operations Act 1997 Brings together: - Clean Air Act 1961 - Clean Waters Act 1970 - Pollution Control Act 1970 - Noise Control Act 1975 - Environmental Offences and Penalties (EOP) Act 1989	Regulating pollution activities and issue of licenses as well as the monitoring of and reporting on waste output. Council is required to be “duly diligent” in undertaking the scheme operations
Soil Conservation Act 1938	Conserves soil resources and farm water resources and the mitigation of erosion and land degradation. Preservation of watercourse environments.
Environmental Planning and Assessment Act 1979	Encourages the proper management of natural and man-made resources, the orderly use of land, the provision of services and protection of the environment.
Catchment Management Act 1989	Promotes the coordination of activities within catchment areas. Council believes this Act has implications for the management of river water quality and quantity. Requirement for ongoing management plan.
Water Management Act 2000	The act provides for sustainable and integrated management of NSW’s water sources. Water rights, licences, allocations.
3. Health and Safety	
Public Health Act 1991	Prevention of the spread of disease. Effluent disposal methods. Delivery of quality water.
Work Health and Safety Act 2011	Council’s responsibility to ensure health, safety and welfare of employees and others at places of work. Likely be cost implications Impacts all operations. Note public safety – insurance.

Local Government Act 1993

Council delivers water supply services to its residents via authority delegated under the Local Government Act 1993 (This Act is currently under review). The Minister for Natural Resources, Land & Water administers the parts of this Act dealing with water supply.

The Act confers service functions on councils. These include the provision, management and operation of water supply works and facilities. The Act provides Councils with broad powers to carry out their functions, and a "Council may do all such things as are supplemented or incidental to, or consequential on, the exercise of its functions" (section 23 of the Act).

Some particular parts of the Act relating to water supply are:

- Section 60 – Councils must receive approval from the Minister for Natural Resources, Land & Water for the construction or augmentation of, or any operational changes to water treatment plants, dams, and wastewater infrastructure
- Section 64 - developer chargers. (Under this section of the new Act, a Council may use the relevant provisions of the Water Supply Authorities Act to obtain water supply and sewerage developer charges.)
- Section 68 - Council approval of plumbing works;
- Sections 634-651 - water supply, sewerage and drainage offences; and
- Water, Sewerage and Drainage Regulations, which cover matters from the "old" ordinance 45 and 46.

The role of the Minister for Public Works in regard to water supply, sewerage and drainage as covered in Sections 56-66, has now passed to the Minister of Water. The Minister's role is generally along the lines of Part XIV of the 1919 Act, and it includes matters such as construction of works, hand over and vesting of work, approval of dams and treatment plants, directions to councils concerning dams and treatment plants, action during emergencies, and the appointment of an administrator.

Environmental Planning and Assessment Act 1979

This Act is the principal planning instrument in NSW, and it specifies the environmental considerations required in all development activities. It also governs the procedures of all proposals that have an effect on the environment. Its objectives are to encourage the proper management of natural and man-made resources, the orderly use of land, the provision of services, and the protection of the environment.

The Act is administered by the Minister for Planning.

The Act requires that all proposals, activities, and functions which are investigated, designed, planned, constructed, and operated by councils should be studied during all stages for their environmental impact on the basis of scale, location and performance.

Catchment Management Act 1989

The objectives of this Act are:

- To coordinate policies, programs and activities as they relate to total catchment management;
- To achieve active community participation in natural resource management;
- To identify and rectify natural resource degradation;
- To promote the sustainable use of natural resources; and
- To provide stable and productive soil, high quality water and protective and productive soil and vegetation cover within each of the State's water catchments.

The Act is administered by the Minister for Natural Resources, Land & Water.

The Minister may establish Catchment Management Committees to promote and coordinate the implementation of total catchment management policies and programs. Any works planned and undertaken by this Committee are subject to normal planning approval. It has no authority over Council.

Soil Conservation Act 1938

The objective of the Soil Conservation Act is the conservation of soil resources and farm water resources and the mitigation of erosion and land degradation.

The Act is administered by the Minister for Natural Resources, Land & Water.

Public Health Act 1991

The Public Health Act 1991 consolidates previous Acts relating to Public Health and provides for the prevention of the spread of disease.

The Act is administered by the Minister for Health.

Under Section 14 of the Act, the Director-General or any authorised officer of the Department of Health may inspect water supply and sewerage works where the Director-General deems it necessary in the interest of public health. The Director-General may report to the Minister for Natural Resources, Land & Water whenever any danger to public health could be removed or diminished. The Minister may then take appropriate action.

Public Works Act 1912

This Act provides the authority for the Department of Water to construct water supply and sewerage works within the Council's area.

The powers of the Minister for Public Works, particularly with respect to acquisition of land for water and sewerage works have been transferred to the Minister for Natural Resources, Land & Water.

Water Management Act 2000

Replaces the previous Water Act 1912, Water Authorities Act 1987 and 10 other Acts (including irrigation, rivers and foreshore acts).

This Act, administered by the Minister for Natural Resources, Land & Water, covers matters such as water rights licences, water allocation, water sharing as well as recognition of water for environmental health requirements.

Details have been set out in "Developer Charges Guidelines for Water Supply, Sewerage and Stormwater" pursuant to section 306 (3) of the Water Management Act 2000. Council should consider these guidelines previously issued by the Minister for Land and Water Conservation, who is now the Minister for Natural Resources, Land & Water.

Independent Pricing and Regulatory Tribunal Act 1992

The Independent Pricing and Regulatory Tribunal (IPART, previously Government Pricing Tribunal) was set up to determine and advise prices and pricing policies for government monopoly services.

The Tribunal currently has powers to set prices for Sydney Water, Hunter Water and Gosford and Wyong Councils. This includes service usage charges and developer contributions.

The Tribunal does not intend, in the near term, to regulate prices for water supply and sewerage services in country NSW. Instead it has released *Pricing Principles for Local Water Authorities*, which sets out pricing recommendations for Councils to adopt in the pricing of their services.

Work Health and Safety Act 2011

This revised Act details Council's responsibilities to ensure health, safety and welfare of employees and others at places of work. All of the scheme's operational activities are impacted on by this Act. This act is administered by the Work Cover Authority.

Protection of the Environment (Operations) Act

This Act came into effect in July 1998 and consolidated existing legislation to eradicate the duplication of powers and overlapping use of resources.

The Act brought together what used to be five separate pieces of legislation:

- Clean Air Act 1961;
- Clean Waters Act 1970;
- Pollution Control Act 1970;
- Noise Control Act 1975; and
- Environmental Offences and Penalties Act 1989.

The legislation also incorporates major regulatory provisions of the Waste Minimisation and Management Act.

Other Government Initiatives

- Efficient Operation** The NSW Office of Local Government is concerned that councils generally are well managed.
- Federal Government** The Federal Industry Commission Report on the Australian Water Industry is concerned to ensure efficient use of resources - natural, physical and financial. Its 1992 Report's recommendations were wide-ranging and covered matters such as pricing reforms and structural reforms (e.g. amalgamation of authorities).
- Competition Policy** In 1995 the Council of Australian Governments (COAG) ratified the National Competition Policy. Of particular significance to the functions of Central Tablelands Water is the application of competitive neutrality to operations. The purpose of this is to have councils *“operate under similar competitive pressures to those experienced by the private sector”*.
- The NSW Government has embraced these principles and set in motion a number of policies to increase the efficiency and the competitiveness of this type of business area. (Refer to the NSW Government Policy Statement on the Application of National Competition Policy to Local Government.)
- Asset Management** The NSW Government, which has ultimate responsibility for water and sewerage in the State, is concerned to ensure that the \$7 billion asset base in country towns' water supply and sewerage schemes under the care of Local Government is well managed.
- Financial Assistance** The NSW Government has been providing grants for the development and improvement of water supply and sewerage schemes in country areas, under the Country Towns Water, Sewerage and Drainage Program, which is now administered by the NOW.
- The Minister for Natural Resources, Land & Water has made changes to the subsidy provisions. The main changes are the requirement to implement best industry management practices and the withdrawal of subsidies for growth related capital works. These changes are outlined in the publication Country Towns Water, Sewerage and Drainage Program: Technical and Financial Assistance Available to Councils.
- Pricing and Developer Charges** In July 1993, a new Local Government Act was enacted. Section 64 of the new act specifies that councils apply development contributions in accordance with the provisions of the Water Supply Authorities Act. Section 25 (formerly under Section 27 which no longer exists) of that act authorises the water authority to levy a charge on a developer towards the cost of works serving the development. These works may be existing, projected, or both.
- Guidelines are issued from time to time by the Minister for Natural Resources, Land & Water. These guidelines, which include a methodology for calculating development contributions, were issued in February 2003.

Best Practice Management

The NSW Government encourages best practice for all LWUs. The purpose of best practice management is:

To encourage the effective and efficient delivery of water supply and sewerage services; and

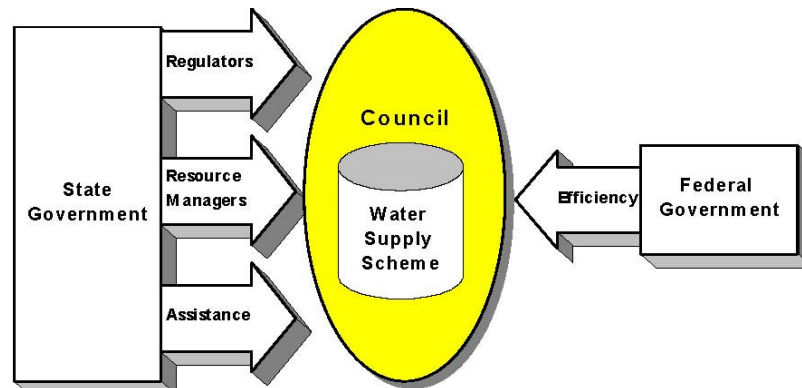
To promote sustainable water conservation practices and water demand management throughout NSW.

From 1 July 2004, compliance with the six best practice criteria is mandatory for payment of a dividend from the surplus of an LWU's water supply and sewerage businesses and future financial assistance under the *Country Towns Water Supply & Sewerage (CTWS&S)* program.

Stakeholders are individuals and organisations with an interest and/or equity in the water supply services provided by Council. Stakeholders have different expectations, and the extent to which Council meets these expectations varies.

Institutional Stakeholders

A large number of government departments and agencies have interest in, and impact on, the management of the water supply schemes, as shown in the chart below.



Local Government

The water supply undertakings are an integral part of Council's operation. Council has the ultimate responsibility for the development, operations, maintenance and performance of the scheme. As the owner of the undertaking, Council is also responsible for any liability of the water supply scheme.

State Government

The State Government has a significant impact on the water supply scheme. Various government agencies fill a role in one or more of the following areas.

Regulators

These are the agencies that are largely responsible for administering the various acts listed in the preceding section. Of particular significance to the water supply scheme are the Independent Pricing and Regulatory Tribunal (IPART), which is urging councils to adopt the pricing principles outlined in Pricing Principles for Local Water Authorities, and the Environment Protection Authority (EPA) who regulates environmental protection, issues licences to discharge effluent and administers the various pollution control acts. Council discharges effluent from sewage treatment plants under licence from the EPA.

The NSW Office of Water, while nominally a resource manager, has a special role in the development of water supply schemes, setting standards and guidelines and administering the Government grants program (refer below).

Resource Managers

These are the agencies responsible for managing the State's resources, such as water resources, forestry and land.

Assistance

The State Government has been providing financial and administrative assistance for improvements of water supply and water supply schemes through the Country Towns Water Supply and Sewerage Program. Under the newly introduced guidelines, assistance is generally available for servicing backlog areas and improving standards, but not for augmentation works required to accommodate growth. This program is administered by the NOW.

Other assistance is in the form of services, such as the professional services provided by the NSW Public Works.

Federal Government

The Federal Government has no direct bearing on the water supply scheme. Indirectly, the Federal Government is taking the initiative on reforming the way services are delivered to the community by Government agencies in order to improve efficiency.

Stakeholder Analysis

Stakeholders are individuals and organisations with an interest and/or equity in the water supply services provided by Council. Stakeholders have different expectations, and the extent to which Council meets these expectations varies.


The table next page lists the major stakeholders, their general expectations and the comments of Council as to the standing of water supply operations.

Stakeholder	How to judge success?	How does Council rate its service? 1 – Poor 10 - Excellent	How do stakeholders rate the service 1 – Poor 10 - Excellent
General Users			
Property Owners/ Consumers	- Water charges/ value for money	9	7
	- Levels of Service	9	9
Residents/ Families	- Quality services	9	8
	- Public health standards met and maintained		
	- Guaranteed service		
	- Reasonable cost		
	- Palatability of water		
Pensioners	- Rebates	9	9
	- Quality services		
	- Public health standards met and maintained		
	- Guaranteed service		
	- Reasonable cost		
	- Palatability of water		
Commercial and Industrial customers	- Quality	10	9
	- Sufficient supply		
	- Guaranteed service		
	- Reasonable cost		
Other Users			
Environmental groups	- Environmental responsibility	10	10
	- Minimisation of wastage		
	- Environmental sustainability		
Tourists	- Quality and quantity of service	10	10
	- Aesthetics		

Stakeholder	How to judge success?	How does Council rate its service? 1 – Poor 10 - Excellent	How do stakeholders rate the service 1 – Poor 10 - Excellent
Council			
Councillors	<ul style="list-style-type: none"> - No complaints - Good public profile - Security of supply 	9	8
Council employees	<ul style="list-style-type: none"> - Recognition for work - Safe workplace – Competency/training - Security - Pride in workplace/ schemes - Support 	10	9
Engineering Services Department	<ul style="list-style-type: none"> - Efficient service - Chargeable service - Working relationship - Timeliness - Innovation and technology - Informed advice 	8	9
Government			
OLG	<ul style="list-style-type: none"> - Accountability - Financial stability 	9	9
NOW	<ul style="list-style-type: none"> - Efficient operations - Performance - Best practice management 	8	7
DEC /EPA	<ul style="list-style-type: none"> - Environmental requirements - Sludge disposal 	9	9
Others (Dept. of Health)	<ul style="list-style-type: none"> - Water quality - Catchment management 	10	9

Sustainability Charter

‘Creating Sustainable Rural Communities’



The WBC Strategic Alliance (Alliance Councils) including Wellington, Blayney, Cabonne and Central Tablelands County Councils are committed to sustainability.

Our rural communities are founded on a strong respect and appreciation for the land, natural environment, climate, and their communities.

The Alliance Councils are in a unique position where, with the proper consultation with our communities, we can ensure that our regions are enhanced and promote development and growth that meets the needs of our present generations without compromising the ability of future generations to meet their own needs.

This requires us to work together to improve the quality of life of all members of our community in ways that are sustainable and to respect cultures, customs and social values in our actions.

This is our Sustainability Charter.

We will take care of:

- Ourselves;
- Each other; and
- Our environment.

We show our commitment herewith:

- Choices we make;
- Actions we take; and

- Respect we show for the community and its values.

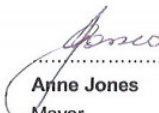
We are responsible for:

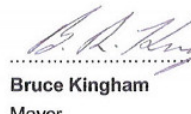
- Implementing the principles of sustainability in the Alliance area;
- Balancing the need for development and growth with these sustainability principles;
- Making a positive contribution;
- Improving the quality of life; and
- Setting an example ourselves.

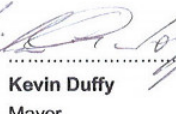
We all aim to:

- Achieve social, economic and environmental sustainability;
- Recognise climate change and its potential effect on our communities
- Ensure our environments are safe, secure, adaptive and diverse;
- Value community as our most important asset;
- Share knowledge, engage and build mutual understanding; and
- Work towards positive environmental outcomes and the more efficient use of our resources.

Signed on behalf of the Alliance Councils in the month of *September* 2009, as our commitment to sustainability in our communities.


Anne Jones
 Mayor
 Wellington Council


Bruce Kingham
 Mayor
 Blayney Shire Council


Kevin Duffy
 Mayor
 Cabonne Council


John Farr
 Chairman
 Central Tablelands
 County Council



WBC Strategic Alliance
Final 2 September 2009

Sustainability Charter

MWH – Water Security Study, October 2009

Executive Summary (extract)

In response to the worst drought on record for the region, Centroc (Central NSW Councils), of which Central Tablelands Water is a member council, undertook to complete a Water Security Study to investigate and recommend solutions to improve water supply security across the Centroc region. The study, completed in October 2009, had two components:

1. Component 1: An audit of existing infrastructure for bulk water supply; and
2. Component 2: An options paper for improving water supply security.

The Component 1 report characterised the current bulk water supply assets and infrastructure of the region. This report was finalised in August 2009.

This Component 2 report documents the options for improving town water supply security across the region.

The approach to this study was built on three key principles:

- Stakeholder engagement – consultation was undertaken to seek the views of stakeholders in order to improve study outcomes. Stakeholders were consulted in setting the objectives and criteria for this project as well as in defining and assessing the options and strategies that have been studied;
- Consideration of the economic, social, environmental (triple bottom line – TBL) impacts of the choices for water security improvement to inform decision making. This framework was used by the project team and stakeholders to understand the relative performance of options and strategies as well as the trade-offs in decision-making; and
- The integration of the management of water resources, recognising the need for holistic approaches to water management.

Establishing the extent of the need for water security improvement was the first step necessary to develop an effective long term, region-wide water security strategy for the Centroc region. Three main steps were taken to establish the need for water security improvement:

1. Forecasts of the expected demands for water from each of the towns for the next 50 years (until 2059) were developed. Forecasts took into account expected growth in each town and the potential to improve the efficiency of urban water use;
2. A model of the surface and groundwater resources of the region was developed. The model was designed to be able to determine the likely water resources available under both the current climate sequence and the changes in this sequence that may come about as a result of climate change.
3. The integration of the demand for water and the availability of water in the model to assess the level of water supply security for each town under both current climate and a climate change impacted sequence.

As a result of this assessment, it was determined that, over the 50 year planning horizon, the following towns require a water security improvement:

Condobolin	Forbes	Oberon	Cowra	Bogan Gate
Orange	Koorawatha	Tottenham	Clifton Grove	Bendick Murrell
Trundle	Parkes	Brundah	Tullamore	Peak Hill

Greenethorpe	Lake Cargellico	Wellington	Mogongong	Murrin Bridge
Geurie	Wattamondara	Tullibigeal	Mumbil	Cumnock
Lithgow	Nanima	Yeoval	Portland	

Identifying and assessing the relative performance of options to improve water security for the next 50 years was the second step necessary to develop an effective long term, region-wide town water security strategy for the Centroc region. Five main steps were taken to establish the most appropriate options for water security improvement:

1. A long-list of potential options was identified with stakeholder input. In consultation with stakeholders, over 80 individual options were developed for consideration. Options considered included demand management programs as well as infrastructure options including dams, pipelines and pumps. In addition, options that had mutual benefit to other water users, such as the irrigation and mining industries, were also identified.
2. A short-list of options for further investigation was determined utilising the TBL criteria, and the input of stakeholders.
3. Scenarios (themed groupings of short-listed options) were developed to allow comparisons between approaches for water security improvement to be made.
4. Developing region-wide strategies based on the outcomes of each of the preceding steps.
5. Sensitivity testing the preferred region-wide strategy to understand the impact of climate change, potential increases in the cost of energy, potentially greater populations, potential differences in infrastructure costs and the potential of demands from other sectors (such as mining) on the preferred strategy.

Water Conservation and Demand Management

Underpinning each of the strategies developed was the need for efficient town water demands. The following program of water conservation measures is recommended as the basis for a region-wide water conservation and demand management strategy:

- Residential retrofit of inefficient water fixtures, including providing customer support for replacements;
- Continuation of the Water Efficiency Labelling and Standards Scheme (WELS);
- Implementation of Permanent Low Level Restrictions on outdoor water use;
- Continuation of the BASIX program for new residential developments;
- Continuation or expansion of Water Conservation Education programs to improve efficient water use;
- Audit of Non-Residential Water Users to identify leaks and potential areas for improvement in efficiency;
- System Water Loss Management which aims to identify and repair leaks in water supply and distribution system; and
- Review of water supply and sewerage services pricing structure to follow the best-practice guideline of 25:75 Fixed to Variable Charge Ratio.

It is important to note that some of the elements of this program are already in place in a number of the member Council areas (compare the baseline against the current programs) and this has been taken into consideration in deriving the forecasts. It is considered that these Councils may be able to take a lead role in assisting with the design and implementation of this program across the region.

The water demand forecasting and conservation modelling work demonstrated that it is expected that this water efficiency program will offset the additional water demands associated with growth across the Centroc region. The costs associated with implementing this program are expected to be offset by the savings in avoided capital expenditure and in the reduction in operating costs associated with less treatment and transfer requirement.

In addition, it is recommended that a program of uniform (across-connected supplies) water restrictions be put in place. For the river towns¹, restrictions will be triggered when the storages of Wyangala or Burrendong reach a set trigger level (i.e. that level representing the lowest 10% of years). In this way, the towns will enter restriction regimes in a manner that is sympathetic with allocation reductions on other water users but is consistent with best drought management practice in urban areas.

Recommended Infrastructure

Following assessment, two region-wide strategies emerged as potential solutions to improve water supply security in the Centroc region which were very close on the TBL assessment.

Both options involved a core regional supply and distribution network to provide for the supplementary water requirements of the towns of Cowra, Forbes, Orange and Parkes sourcing water from either:

- An augmented Lake Rowlands (from current capacity of 4,500 ML to 26,500 ML) (Region-wide Strategy 2a); or
- The existing Chifley Dam (Region-wide Strategy 3a).

Both core supply and distribution network options have the potential to meet additional mining demand of up to 10 ML/d at Cadia Hill.

In addition to the core supply and distribution network, water security to other urban centres is also addressed in both strategies through:

- Pipeline connection between Bathurst and Oberon to provide supplementary water for Oberon and reduce pressure on the Fish River Water Supply, improving outcomes for Lithgow as a result;
- Pipelines from the storages of Burrendong and Chifley dams to Wellington and Bathurst respectively are recommended to save water lost in the delivery of these supplies through river channels.
- A series of local solutions, including new minor storages at Cumnock, Condobolin, Lake Cargelligo and Yeoval are recommended.

The recommended option for the supply of the core distribution network is the amplification of Lake Rowlands (Strategy 2a). Whilst more expensive than Strategy 3a, the amplification of Lake Rowlands is preferred on the following basis:

- Lake Rowlands is significantly higher in elevation than Chifley Dam (~170m), thus reducing the energy and greenhouse gas emissions associated with moving water to points of need in the region. The costs of energy are expected to rise significantly into the future and on this basis, sensitivity testing favoured Strategy 2a;
- If population growth is greater than assumed, the augmented Lake Rowlands supply is better placed to support the greater associated demands;
- Assessments of the costs of augmenting Lake Rowlands vary. The costs adopted in the TBL assessment are higher than some existing estimates. The adoption of the existing estimates in the sensitivity testing supports the adoption of Strategy 2a.
- This strategy has greater social acceptability.

The recommended region-wide strategy (2a) includes (see Figure Ex-1 for map layout of the strategy):

- Lake Rowlands Augmentation;
- Lake Rowlands-Millthorpe Pipeline (CTW Trunk Mains D and F duplication) 2;
- CTW-Orange Pipeline via Millthorpe;
- Lake Rowlands to Gooloogong Pipeline (CTW Trunk Mains P and C duplication);
- Gooloogong-Forbes Pipeline (including connection to Parkes);
- Woodstock-Cowra Pipeline (presently in planning);
- Orange-Molong Creek Dam pipeline (lower priority action resulting from the level of surety around the security of Molong. There is an existing pipeline from Molong Creek Dam into which this new pipeline would connect);
- New minor storage and water treatment facilities at Cumnock;
- New minor storage water treatment facilities at Yeoval;
- New minor storage at Condobolin (off-stream from Lachlan River);
- New pipeline replacing existing channel and minor storage at Lake Cargelligo;
- Burrendong-Wellington Pipeline;
- Chifley-Bathurst Pipeline;
- Chifley-Oberon Pipeline; and
- Belubula Creek-Cadia Hill pipeline (already available).

As the augmentation of Lake Rowlands is a key recommendation to improve security, it is a high priority action and planning for this work needs to commence as a priority. It is anticipated that the augmentation of Lake Rowlands, and the subsequent time for the storage to fill, will be the elements of the strategy which have the longest implementation timeframes. The approval and design (3-4 years) and delivery (4-5 years) of a new storage generally take between 7-10 years. Additional time would need to be allowed for the dam to fill and therefore become fully operational.

Whilst it may take up to 10 years before the augmented Lake Rowlands will be completed, other elements of the strategy can be advanced quickly.

Priority elements include the connection between Bathurst and Oberon, the provision of a Lachlan River connection to Lake Cargelligo and the connection between CTW and Cowra which is already in planning as well as the storages for Cumnock, Condobolin, Lake Cargelligo and Yeoval.

Continued Best-Practice Management

The implementation of the recommended region-wide strategy is in addition to:

- The ongoing management and maintenance of the existing water supplies of each town;
- The ongoing implementation of the best-practice demand management programs of each council; and
- The ongoing development and implementation of the existing Integrated Water Cycle Management Strategies completed by a number of the member council's including Bathurst, CTW, Orange and Parkes.

Impact of Climate Change

When examining the impact of climate change on water supply security, there needs to be consideration of the change in rainfall, temperature and evaporation regimes. These changes are forecast and then the impact on streamflows and demand sequences are inputs to supply security estimates.

The expected impacts of climate change in the Lachlan and Macquarie catchments includes increases in temperature from 0.7°C to 5.6°C and changes in rainfall from +20% to -40% by 2070.

Climate change is expected to result in decreased water availability and increased water demands. As such, the sensitivity testing illustrated that connection between the Upper Macquarie River Catchment and the Upper Lachlan Catchment may be required to ensure regional water supply security. This link would increase the supply security of both the Chifley and Lake Rowlands systems by creating the opportunity to transfer water in both directions in times of need.

Benefits to Other Sectors

Security improvement may be obtained through the partnering of towns with local irrigation operations. In return for up-front investment to assist irrigators to become more water efficient, towns would share in the resulting water saved and use this to supplement their supplies.

However, there is considerable uncertainty about the reliability of this option for security improvement. As a result, it is the recommendation of this study that improvements in irrigation efficiency be considered primarily as an offsetting mechanism for new infrastructure, particularly where that infrastructure will inherently remove additional water from river systems.

In addition, the recommended strategy reduces the dependence of river-side towns on the Lachlan and Macquarie rivers through the provision of new additional town water storage and a regional network of pipes. This will reduce the need to manage the major dams in relation to town water supplies in times of drought.

There may be mutual benefit in considering the provision of some of the region's mining related water demands in association with the recommended strategy. For the mining demands identified, the combination of the augmented Lake Rowlands and Chifley Dam are able to contribute significantly to providing these demands, although this does increase the risk of supply failure if not properly managed. However, if Chifley Dam were not available to supplement supply from Lake Rowlands, and to help avoid the supply risk failure, additional mining demands would need to be met from either increasing the planned size of the amplification of Lake Rowlands, or by supply from the major dams (Wyangala or Burrendong). This would also impact on the sizing (and therefore costs) of the raw water transfer network included in the recommended strategy.

Financial commitment would need to be sought from the mining sector prior to investment in larger assets and this assessment does not consider the need for the mining sector to acquire additional water allocations.

Central Tablelands Water has been submitting performance information about its water supply scheme to the NSW Office of Water for inclusion in its annual State-Wide Performance Reports. This allows Council to compare its system against equivalent Councils and then undertake benchmarking to identify items and methods for future improvement. A Triple Bottom Line (TBL) approach has been adopted to collate the information.

Performance Indicators

Council's TBL Water Supply Performance for 2013/2014, together with graphs of Council's performance indicators for the 9-year period from 2004 to 2013, are shown on following pages under the following groups:

- Utility Characteristics
- Social Performance Indicators
- Environmental Performance Indicators
- Financial Performance Indicators

Central Tablelands Water

TBL Water Supply Performance

2013-14

WATER SUPPLY SYSTEM - Central Tablelands Water serves a population of 13,100 (5,450 connected properties). Water is drawn from 7 bores (7 ML/d) and from Lake Rowlands to supply Blayney, Canowindra, Grenfell, Eugowra, Millthorpe, Mandurama, Lyndhurst, Carcoar, Manildra, Cargo, Cudal, Woodstock and Goolgong. Council has 2 storage dams (total capacity 4800 ML). The water supply network comprises 1 conventional treatment works (6 ML/d) and 1 DAFF works (9 ML/d), 45 service reservoirs (29 ML), 32 pumping stations, 15 ML/d delivery capacity into the distribution system, 318 km of transfer and trunk mains and 267 km of reticulation. With the exception of Quandialla, all the water supply is fully treated.

PERFORMANCE - Central Tablelands Water achieved 90% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$632 which was close to the statewide median of \$582 (Indicator 14). The economic real rate of return was similar to the statewide median (indicator 43). The operating cost (OMA) per property was \$552 which was well above the statewide median of \$400 (Indicator 49). Water quality complaints were similar to the statewide median of 3 (Indicator 25). Compliance was achieved for microbiological water quality (100% of the population, 2 of 2 zones compliant), chemical water quality and physical water quality. There were no failures of the chlorination system or the treatment system. Central Tablelands Water reported no water supply public health incidents. Current replacement cost of system assets was \$120M (\$20,900 per assessment). Cash and investments were \$6M, debt was \$3.5M and revenue was \$5.2M (excluding capital works grants).

IMPLEMENTATION OF REQUIREMENTS OF NSW BEST-PRACTICE MANAGEMENT (BPM) FRAMEWORK

(1) Complete Current Strategic Business Plan & Financial Plan	Yes	(3) Sound water conservation implemented	Yes
(2) (2a) Pricing - Full Cost Recovery, without significant cross subsidies	Yes	(4) Sound drought management implemented	Yes
(2b.2c) Pricing - Appropriate Residential Charges	12	(5) Complete performance reporting (by 15 September)	Yes
(2d) Pricing - Appropriate Non-residential Charges	Yes	(6) Integrated water cycle management strategy	YESC
(2e) Pricing - DSP with Commercial Developer Charges	Yes	IMPLEMENTATION OF ALL REQUIREMENTS	90%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

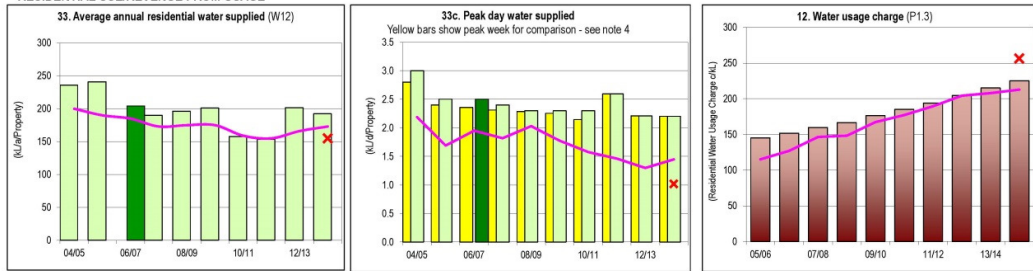
NWI No.	Description	Unit	LWU RESULT	RANKING			MEDIANS	
				3,001 to 10,000	All LWUs	Statewide	National	
			Col 1	Col 2	Col 3	Col 4	Col 5	
UTILITY CHARACTERISTICS	C1 1 Population served:	13100						
	C4 2 Number of connected properties:	5450						
		Number of assessments: 5730						
	3 Residential connected properties (% of total)	%	74			91		
	4 New residences connected to water supply (%)	%	0.7	3	3	0.9		
	A3 5 Properties served per kilometre of water main	Prop/km	10			32	35	
	6 Rainfall (% of median annual rainfall)	%	84	3	3	77		
	W11 7 Total urban water supplied at master meters (ML)	ML	1,730			6,800	10,280	
	8 Peak week to average consumption (%)	%	253	5	5	152		
	9 Renewals expenditure (% of current replacement cost of system assets)	%	0.1	5	5	0.5		
	10 Employees per 1000 properties	per 1,000 prop	3.5	5	5	1.5		
CHARGES & BILLS	P1 Residential tariff structure for 2014-15: two part, independent of land value; access charge \$200							
	P1.3 12a Residential water usage charge for 2013-14all usage (c/kL)	c/kL (2013-14)	215	2	2	208	185	
	12 Residential water usage charge for 2014-15all usage (c/kL)	c/kL (2014-15)	225	2	2	213		
	P3 14a Typical residential bill for 2013-14 (\$/assessment)	\$ (2013-14)	613	3	3	550	567	
	14 Typical residential bill for 2014-15 (\$/assessment)	\$ (2014-15)	632	3	3	582		
	15 Typical developer charge for 2014-15 (\$/equivalent tenement)	\$ (2014-15)	8,600	1	1	5,500		
	F4 16 Residential revenue from usage charges (% of residential bills)	%	68	3	3	73	68	
	F5 17 Revenue per property - water (\$/property)	\$/prop	960	2	2	795	849	
SOCIAL HEALTH	H6 18 Water Supply Coverage (% of Urban Population with reticulated WS)	% of population	96.3	3	3	99.6		
	H6 18a Risk based drinking water quality plan?	Yes						
	19 Physical compliance achieved? Note 10	Yes		1	1			
	19a Chemical compliance achieved? Note10	Yes		1	1			
	H4 19b % population with chemical compliance	%	100	1	1	100		
	20 Microbiological (E. coli) compliance achieved? Note 10	Yes		1	1			
	H3 20a % population with microbiological compliance	% of population	100	1	1	100	100	
SERVICE LEVELS	C9 25 Water quality complaints per 1000 properties	per 1,000 prop	2	3	3	3	2	
	C10 26 Water service complaints per 1000 properties	per 1,000 prop	11	2	3	6	1	
	C17 27 Incidence of unplanned interruptions per 1000 properties	per 1,000 prop	50	4	4	50	96	
	C15 28 Average duration of interruption (min)	min	180	5	4	150	113	
	A8 30 Number of water main breaks per 100 km of water main	per 100km	10	2	3	10	13	
	31 Drought water restrictions (% of time)	% of time	0	1	1	0		
	32 Total days lost (%)	%	3.2	3	4	2.9		
ENVIRONMENTAL WATER RESERVE MANAGEMENT	W12 33 Average annual residential water supplied - STATEWIDE (kL/property)	kL/prop	192	2	2	173	185	
	33a Average annual residential water supplied - COASTAL LWUs (kL/property)	kL/prop				157		
	33b Average annual residential water supplied - INLAND LWUs (kL/property)	kL/prop	192	1	1	263		
	A10 34 Real losses (leakage) (L/service connection/day)	L/connection/day	70	2	3	70	79	
	35 Energy consumption per Megalitre (kiloWatt hours)	kWh	785	5	6	620		
	36 Renewable energy consumption (% of total energy consumption)	%				0		
	E12 36a Net greenhouse gas emissions - WS & Sge (net tonnes CO2 - equivalents per 1000 properties)	t CO2	280	2	2	370	390	
FINANCE	F17 42 Current replacement cost per assessment (\$)	\$	20,900	1	1	16,500		
	43 Economic real rate of return - Water (%)	%	1.0	3	3	1.2	1.9	
	44 Return on assets - Water (%)	%	0.9	4	3	1.1		
	F22 45 Net Debt to equity - WS&Sge (%)	%	-4	2	2	1	11	
	F23 46 Interest cover - WS&Sge		9	1	1	4	2	
	47 Loan payment per property - Water (\$)	\$	106	1	1	64		
	F24 47b Net profit after tax - WS & Sge (\$'000)	\$'000	280	4	3	1180	5345	
EFFICIENCY	48 Operating cost (OMA) per 100km of main (\$'000)	\$'000	536	1	1	1,290		
	F11 49 Operating cost (OMA) per property (\$/prop) Note 8	\$/prop	552	3	4	400	439	
	50 Operating cost (OMA) per kilolitre (cents)	c/kL	160	4	4	126		
	51 Management cost (\$/prop)	\$/prop	263	5	5	140		
	52 Treatment cost (\$/prop)	\$/prop	120	2	3	58		
	53 Pumping cost (\$/prop)	\$/prop	57	3	3	43		
	54 Energy cost (\$/prop)	\$/prop	41	3	3	25		
	55 Water main cost (\$/prop)	\$/prop	66	3	2	74		
	F28 56 Capital Expenditure (\$/prop)	\$/prop	87	4	4	181	175	

NOTES:

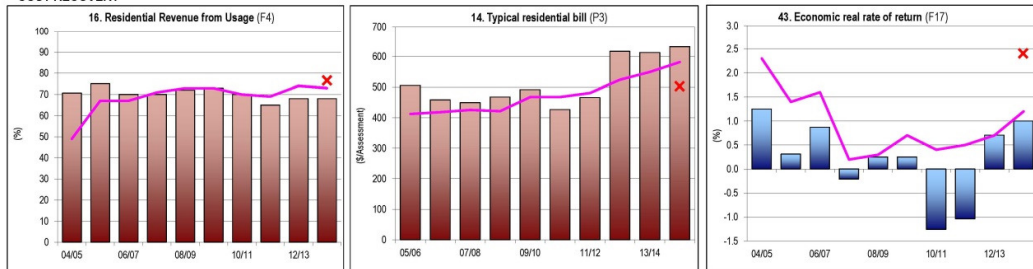
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with 3,001 to 10,000).
- Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs).
- Col 4 (Statewide Median) is on a % of connected properties basis- best reveals statewide performance (gives due weight to larger LWUs & reduces effect of smaller LWUs).
- Col 5 (National Median) is the median value for the 67 utilities reporting water supply performance in the National Performance Report 2013-14 (www.bom.gov.au).
- LWUs are required to annually review key projections & actions in the later of their IWCM Strategy and financial plan and their Strategic Business Plan and to annually 'roll forward', review and update their 30-year total asset management plan (TAMP) and 30-year financial plan.
- 2014-15 Non-residential Tariff: Access Charge based on Meter Size*(40mm:\$800), Two Part Tariff; Usage Charge 225c/kL.
- Non-residential water supplied was 49% of potable water supplied excluding non-revenue water. Non-residential revenue was 47% of annual rates and charges, indicating fair pricing of services between the residential and non-residential sectors.
- The operating cost (OMA) per property was \$552. Components were: management (\$263), operation (\$72), maintenance (\$142), energy (\$41) & chemical (\$33).
- Rehabilitations included 8.29% of service connections and 0.7% of water meters. Renewals expenditure was \$26,000/100km of main.
- 100% compliance with ADWG 2011 for drinking water quality is shown as "Yes" if compliance has been achieved (indicators 19, 19a & 20).
- Central Tablelands Water has 3 fully qualified water treatment operators who meet the requirements of the National Certification Framework.
- BPM Framework - Council needs to implement Appropriate Residential Charges (75% from usage charges) (2c).

(Results shown for 10 years together with 2013-14 Statewide Median and Top 20%)

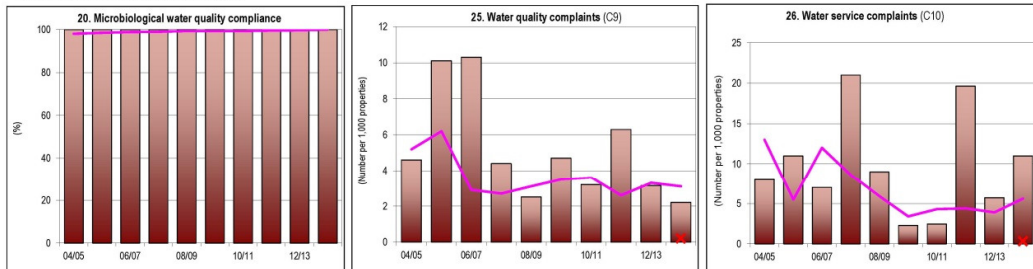
RESIDENTIAL USE/REVENUE FROM USAGE



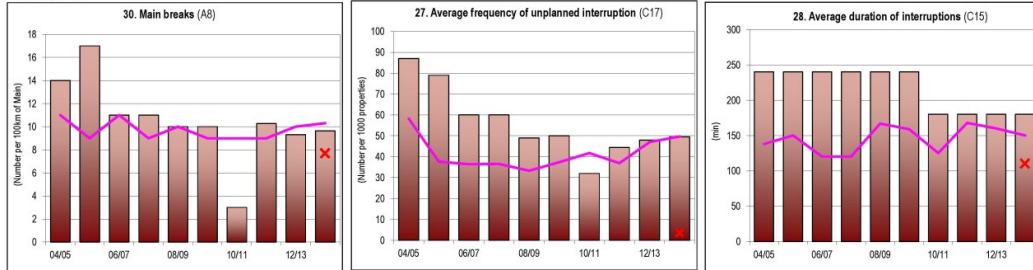
COST RECOVERY



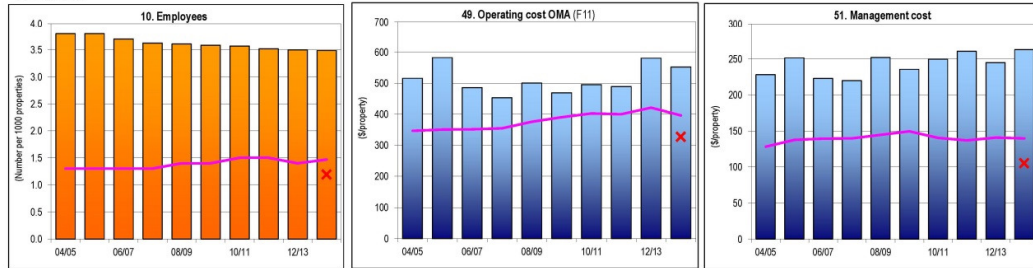
WATER QUALITY/CUSTOMER SERVICE



RELIABILITY



EFFICIENCY



NOTES:

- Costs are in Jan 2014 except for graphs 12 and 14, which are in Jan 2015.
- Microbiological water quality compliance 1999-00 to 2003-04 was on the basis of 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines for E. coli; from 2004-05 to 2010-11 compliance was on the basis of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines (ADWG) and for 2011-12 to 2013-14 compliance was on the basis of the 2011 ADWG.
- Indicators 33 and 33c - Green shading of bars shows % of time Drought Water Restrictions applied in each year.
- Indicator 33c - Yellow bars show Peak Week Water Supplied for comparison with Peak Day Water Supplied shown in green.

LEGEND

State Median for all years ———

Top 20% for 2013-14 X

0 - 30% (light green bar)

30-50% (medium green bar)

>50% of time (dark green bar)

APPENDIX G
ASSETS DETAILS

Central Tablelands Water Supply Assets

Asset	Capacity	Year of Construction	Design Life	Condition 1 - Poor 10 - Perfect	WDV 30/06/2014 \$,000	Replacement Cost 30/6/14 \$,000
Storages - Lake						
Rowlands	4,500 ML	1953	100 yrs	6	7,773	19,947
- Bogolong	295 ML	1930	100 yrs	3	225	1,459
					7,998	21,406
Reservoirs						
Blayney - Hill Street	1.14 ML	1930	100 yrs	6		537
- Filtration Plant	4.55 ML	1966	100 yrs	6		1,897
- Patricks Subdvn	0.45 ML	1974	100 yrs	6		232
- Plumb Street	0.91 ML	1958	100 yrs	6		537
Millthorpe	1.36 ML	1954	100 yrs	6		537
Trunk Main 'D' - Browns Creek	0.23 ML	1954	100 yrs	6		105
Carcoar - Village	0.68 ML	1954	100 yrs	6		316
- Filtration Plant	2.16 ML	1954	100 yrs	4		1,001
Mandurama	0.91 ML	1954	100 yrs	6		537
Lyndhurst	0.68 ML	1954	100 yrs	6		316
Garland	0.09 ML	1954	100 yrs	6		5
Bangaroo No.1	0.18 ML	1968	100 yrs	6		5
Bangaroo No.2	0.18 ML	1968	100 yrs	6		5
Bangaroo No.3	0.18 ML	1968	100 yrs	6		5
Gooloogong Bore	0.18 ML	1977	100 yrs	6		105
Grenfell -West	1.36 ML	1930	100 yrs	6		537
- South	0.09 ML	1970	100 yrs	6		5
- East No 1	0.18 ML	1965	100 yrs	7		105
- East No 2	0.45 ML	1990	100 yrs	9		232
- North	4.55 ML	1959	100 yrs	6		1,897
Eugowra -Main	1.36 ML	1955	100 yrs	6		537
- Hill Street No. 1	0.09 ML	1971	100 yrs	6		5
- Hill Street No. 2	0.40 ML	2003	100 yrs	9		232
Trajere	0.14 ML	1965	100 yrs	6		63
Pyes Gap	0.14 ML	1965	100 yrs	6		5
Canowindra	0.91 ML	1933	100 yrs	6		537
South Canowindra No. 1	0.18 ML	1986	100 yrs	6		105
South Canowindra No. 2	0.27 ML	1990	100 yrs	6		105
North Canowindra No.1	0.09 ML	1967	100 yrs	6		5
North Canowindra No.2	0.09 ML	1967	100 yrs	6		5
Morebel	1.14 ML	1955	100 yrs	6		537
Nyrang Creek No 1	0.14 ML	1969	100 yrs	6		63
Nyrang Creek No 2	0.09 ML	1969	100 yrs	6		63
Nyrang Creek No 3	0.05 ML	1969	100 yrs	6		63
McDonalds Lane	0.14 ML	1981	100 yrs	6		63
Cargo	0.68 ML	1957	100 yrs	6		316
Cudal	0.23 ML	1957	100 yrs	6		105
Manildra	0.45 ML	1957	100 yrs	6		232
Greys Hill	2.27 ML	1962	100 yrs	6		1,001
Quandialla x 7	0.18 ML	2002	100 yrs	9		38
					6,020	13,005
						(Contd..)

Asset	Capacity	Year of Construction	Design Life	Condition	WDV		Replacement Cost		
					1 -Poor 10 - Perfect	30/06/2014 \$,000	30/6/2014 \$,000	30/6/2014 \$,000	
Bores									
Bangaroo		1999	30 yrs	5				50	
Bangaroo -Standby		1987	30 yrs	5				50	
Cudal		1994	30 yrs	8				10	
Gooloogong No. 1		1993	30 yrs	6				50	
Gooloogong No. 2		1987	30 yrs	2				50	
Quandialla		2002	30 yrs	7				100	
						103	310		
Filtration Plants									
Blayney Water Filtration Plant	6 ML/day	1966	50 yrs	4		1,183		5,797	
Carcoar Water Filtration Plant	9 ML/d ML/day	2002	50 yrs	8		5,382		7,273	
						6,565	13,070		
Pumping Stations									
Blayney Shire - 8 Pumping Stations housing 18 pumps of varying sizes			50	7				1,655	
			25	7					
Cabonne Shire - 13 Pumping Stations housing 24 pumps of varying sizes			50	7				1,556	
			25	7					
Weddin Shire - 7 Pumping Stations housing 17 pumps of varying sizes			50	7				1,165	
			25	7					
						2,121	4,376		
Trunk Mains									
Trunk Main 'A' - Lake Rowlands to Carcoar WFP									
375mm x 4.68 kms		1955	70 yrs	4				1,638	
Trunk Main 'B' -Carcoar WFP to Mandurama									
250mm x 6.60 kms		1955	70 yrs	4				1,245	
Trunk Main 'C' - Mandurama to Gooloogong									
200mm x 29.40 kms		1946-1955	70 yrs	3				4,396	
225mm x 34.98 kms		1946-1955	70 yrs	3				5,247	
250mm x 8.79 kms		1946-1955	70 yrs	3				1,670	
300mm x 0.98 kms		1995	70 yrs					236	
324mm x 0.71 kms		1995	70 yrs					171	
375mm x 0.10 kms		2002-2010	70 yrs					35	
Trunk Main 'D' - Carcoar WFP to Browns Creek P/Stn									
150mm x 0.390 kms		2004-2007	70 yrs					28	
200mm x 17.83 kms		1955	70 yrs	5				2,659	
200mm x 2.050 kms		1990	70 yrs					313	
Trunk Main 'E' - Browns Creek P/Stn to Blayney									
150mm x 3.15 kms		1954	70 yrs	5				349	
Trunk Main 'F' -Browns Creek P/Stn to Millthorpe									
150mm x 8.31 kms		1954	70 yrs	5				912	
Trunk Main 'G' - Trunk Main 'C' to Lyndhurst									
100mm x 2.324 kms		1955	70 yrs	1				188	
Trunk Main 'K' -Gooloogong to Grenfell									
150mm x 0.005 kms		1986	70 yrs					5	
200mm x 37.37 kms		1946	70 yrs	1				5,606	
250mm x 2.74 kms		2002	70 yrs					511	
Trunk Main 'L' - Gooloogong to Eugowra									
150mm x 21.91 kms		1980	70 yrs	6				2,410	
Trunk Main 'P' - Trunk Main 'C' to Somers									
100mm x 1.11 kms		1990	70 yrs	2				89	
150mm x 18.84 kms		1980	70 yrs	8				2,073	
								(Contd...!)	

Asset	Capacity	Year of Construction	Design Life	Condition	WDV	
					1 -Poor 10 - Perfect	30/06/2014 \$,000
Trunk Main 'Q' - West Wyalong Road to Quandialla	100mm x 16.32 kms	2003	70 yrs	8		1,306
Trunk Main 'U' - Trunk Main 'C' to Manildra	150mm x 33.463kms	1957	70 yrs	4		3,652
	150mm x 13.39 kms	2004	70 yrs	9		1,472
	100mm x 13.72 kms	1957	70 yrs	5		1,303
Trunk Main 'V' - Trunk Main 'C' to Morebel	200mm x 3.32 kms	1990	70 yrs	7		498
Trunk Main 'X' -Lake Rowlands to Blayney	375mm x 4.525 kms	1966	70 yrs	5		1,584
	300mm x 16.505 kms	1966	70 yrs	5		3,959
					15,826	43,555
Reticulation Mains						
Blayney Shire - 100mm x 59.275 kms		1930-2011	70 yrs	4		4,416
- 125mm x 0.253 kms		2006-2011	70 yrs			19
- 150mm x 16.18 kms		1930-2011	70 yrs	4		1,294
- 200mm x 4.05 kms		1950-2007	70 yrs	4		381
- 250mm x 0.22 kms		2005	70 yrs			53
- 300mm x 1.96 kms		1974-2009	70 yrs	4		589
Cabonne Shire – 25 -80mm x 35.75 kms		1950-2010	70 yrs	6		2,358
- 100mm x 79.77 kms		1950-2012	70 yrs	6		5,980
- 125mm x 1.000 kms		2009-2012	70 yrs			75
- 150mm x 11.85 kms		1950-2009	70 yrs	6		945
- 180mm x 0.091 kms		2009-2013	70 yrs			8
- 200mm x 1.675 kms		1980	70 yrs			159
Weddin Shire – 40-80mm x 0.799 kms		1960-2002	70 yrs	9		52
- 100mm x 46.33 kms		2002-2011	70 yrs			3,475
- 150mm x 3.87 kms		2002	70 yrs	9		310
- 250mm x 0,015 kms		2003	70 yrs	9		4
					12,772	20,118
Buildings						
Blayney	Bulk Store	1972	70 yrs	5	45	70
	Chemical Shed	1972	70 yrs	5	14	22
	Workshop	1972	70 yrs	5	82	128
Canowindra	Office	1973	50 yrs	4	4	6
	Workshop/Store	1994	70 yrs	7	17	20
Grenfell	Workshop and	1997	70 yrs	8	73	82
	Office					
Cudal	Workshop and				19	37
	Depot					
Administration Office - Blayney		1930	100 yrs	5	152	690
					406	1,055

APPENDIX H
TYPICAL WATER QUALITY
ANALYSIS REPORT

Program: Drinking Water Program	Sample Types: All
Date Range: 01-07-2013 - 30-06-2014	Laboratory: ICPMR-DAL Laboratory - NATA Accredited Laboratory Number 3189
Water Utility: Central Tablelands Water	Sample Count: 1181
AHS: Greater Western PHU	

Summary Report												
Characteristic	Guideline Value	Units	Mean	Median	Standard Deviation	Min	Max	Sample Count	Exception Count	95th Percentile	5th Percentile	% meeting guideline values
Aluminium	0.2000	mg/L	0.0483	0.0400	0.0378	0.005	0.13	15	0	0.13	0.005	100.00
Antimony	0.0030	mg/L	0.0005	0.0005	0.0000	0.0005	0.0005	15	0	0.0005	0.0005	100.00
Arsenic	0.0100	mg/L	0.0010	0.0010	0.0003	0.0005	0.002	15	0	0.002	0.0005	100.00
Barium	2.0000	mg/L	0.0239	0.0200	0.0136	0.012	0.056	15	0	0.056	0.012	100.00
Boron	4.0000	mg/L	0.0567	0.0500	0.0176	0.05	0.1	15	0	0.1	0.05	100.00
Cadmium	0.0020	mg/L	0.0003	0.0003	0.0000	0.00025	0.00025	15	0	0.00025	0.00025	100.00
Calcium	10000.0000	mg/L	14.8267	12.6000	7.8936	7	35.6	15	0	35.6	7	100.00
Chloride	250.0000	mg/L	55.6667	23.0000	70.1699	15	197	15	0	197	15	100.00
Chromium	0.0500	mg/L	0.0025	0.0025	0.0000	0.0025	0.0025	15	0	0.0025	0.0025	100.00
Copper	2.0000	mg/L	0.0245	0.0170	0.0217	0.006	0.082	15	0	0.082	0.006	100.00
Fluoride	1.5000	mg/L	0.9953	1.0000	0.1895	0.65	1.22	15	0	1.22	0.65	100.00
Fluoride (WU result)	1.5000	mg/L	0.9883	0.9900	0.0366	0.95	1.05	12	0	1.05	0.95	100.00
Fluoride Ratio	0.8 - 1.2		0.9367	0.8950	0.1264	0.8	1.23	12	1	1.23	0.8	91.67
Iodide	0.5000	mg/L	0.0747	0.0200	0.1240	0.01	0.34	15	0	0.34	0.01	100.00
Iron	0.3000	mg/L	0.0280	0.0100	0.0466	0.005	0.19	15	0	0.19	0.005	100.00
Lead	0.0100	mg/L	0.0011	0.0010	0.0004	0.001	0.002	15	0	0.002	0.001	100.00
Magnesium	10000.0000	mg/L	10.3107	8.3700	7.6833	1.21	28.88	15	0	28.88	1.21	100.00
Manganese	0.5000	mg/L	0.0041	0.0025	0.0027	0.0025	0.011	15	0	0.011	0.0025	100.00
Mercury	0.0010	mg/L	0.0001	0.0001	0.0001	0.00005	0.0002	15	0	0.0002	0.00005	100.00
Molybdenum	0.0500	mg/L	0.0025	0.0025	0.0000	0.0025	0.0025	15	0	0.0025	0.0025	100.00
Nickel	0.0200	mg/L	0.0063	0.0050	0.0040	0.005	0.02	15	0	0.02	0.005	100.00
Nitrate	50.0000	mg/L	0.6200	0.5000	0.2484	0.5	1.1	15	0	1.1	0.5	100.00
Nitrite	3.0000	mg/L	0.0500	0.0500	0.0000	0.05	0.05	15	0	0.05	0.05	100.00
pH	6.5 - 8.5		7.7067	7.8000	0.2865	7.2	8.1	15	0	8.1	7.2	100.00
Selenium	0.0100	mg/L	0.0010	0.0010	0.0000	0.001	0.001	15	0	0.001	0.001	100.00
Silver	0.1000	mg/L	0.0010	0.0010	0.0000	0.001	0.001	15	0	0.001	0.001	100.00
Sodium	180.0000	mg/L	32.8000	17.0000	46.7091	6	150	15	0	150	6	100.00
Sulfate	500.0000	mg/L	13.8667	3.0000	22.5733	2	60	15	0	60	2	100.00
Total Dissolved Solids (TDS)	600.0000	mg/L	200.0000	103.0000	206.5364	67	621	15	2	621	67	86.67
Total Hardness as CaCO3	200.0000	mg/L	79.4733	62.7000	50.6059	37.3	204.5	15	1	204.5	37.3	93.33
True Colour	15.0000	Hazen Units (HU)	1.5667	1.0000	1.0668	0.5	4	15	0	4	0.5	100.00
Turbidity	5.0000	NTU	0.1633	0.1000	0.2248	0.05	0.8	15	0	0.8	0.05	100.00
Zinc	3.0000	mg/L	0.0400	0.0300	0.0436	0.01	0.19	15	0	0.19	0.01	100.00
Fluoride (daily WU)	1.5000	mg/L	1.0764	1.0900	0.0559	0.98	1.16	11	0	1.16	0.98	100.00
Fluoride (weekly WU)	1.5000	mg/L	0.9955	1.0000	0.0305	0.95	1.04	11	0	1.04	0.95	100.00
E. coli	0.8 - 1.2		0.9255	0.9400	0.0457	0.86	0.98	11	0	0.98	0.86	100.00
Free Chlorine	0.9 - 1.5	mg/L	1.0207	1.0200	0.0423	0.9	1.11	667	0	1.09	0.95	100.00
pH	0.9 - 1.5	mg/L	1.0152	1.0200	0.0463	0.9	1.15	218	0	1.09	0.94	100.00
Total Chlorine	0.0000	mpn/100 mL	0.0000	0.0000	0.0000	0	0	270	0	0	0	100.00
Total Coliforms	0.2 - 5	mg/L	0.6493	0.5700	0.3270	0.01	2.11	270	7	1.35	0.24	97.41
Turbidity	6.5 - 8.5		7.4867	7.5000	0.1417	7.1	8.1	270	0	7.7	7.3	100.00

APPENDIX I
DETAILED PROJECTED
FINANCIAL STATEMENTS

The financial statements projected by the financial model are presented in the following pages.

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING STATEMENT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Operating Revenue																														
Availability Charges	(1,207,289)	(1,209,344)	(1,217,873)	(1,226,464)	(1,235,116)	(1,243,829)	(1,252,604)	(1,261,442)	(1,270,343)	(1,279,307)	(1,288,334)	(1,297,563)	(1,306,857)	(1,316,218)	(1,325,645)	(1,335,139)	(1,344,700)	(1,354,330)	(1,364,028)	(1,373,795)	(1,383,632)	(1,393,538)	(1,403,515)	(1,413,563)	(1,423,682)	(1,433,874)	(1,444,137)	(1,454,474)	(1,464,884)	(1,475,369)
Water Sales	(3,560,318)	(3,637,100)	(3,845,688)	(4,066,238)	(4,299,436)	(4,546,009)	(4,806,723)	(5,082,388)	(5,373,863)	(5,682,054)	(6,007,920)	(6,352,423)	(6,716,681)	(7,101,826)	(7,509,057)	(7,939,639)	(8,394,912)	(8,876,292)	(9,385,275)	(9,923,445)	(10,492,475)	(11,094,135)	(11,730,296)	(12,402,937)	(13,114,149)	(13,866,144)	(14,661,261)	(15,501,973)	(16,390,894)	(17,330,788)
User Charges	(118,799)	(102,557)	(105,634)	(108,803)	(112,067)	(115,429)	(118,892)	(122,458)	(126,132)	(129,916)	(133,814)	(137,828)	(141,963)	(146,222)	(150,608)	(155,127)	(159,780)	(164,574)	(169,511)	(174,596)	(179,834)	(185,229)	(190,786)	(196,510)	(202,405)	(208,477)	(214,732)	(221,174)	(227,809)	(234,643)
Interest	(213,000)	(176,000)	(197,851)	(154,936)	(115,388)	(124,853)	(181,244)	(176,037)	(143,977)	(442,969)	(435,979)	(497,099)	(350,686)	(300,951)	(321,156)	(438,101)	(360,034)	(464,246)	(671,078)	(890,588)	(1,137,512)	(1,412,346)	(1,699,875)	(1,467,852)	(1,830,560)	(2,200,004)	(2,615,217)	(3,066,978)	(3,564,024)	(4,103,685)
Other Revenues	(328,997)	(316,907)	(326,414)	(336,008)	(345,890)	(356,267)	(366,751)	(377,550)	(377,518)	(388,561)	(399,936)	(411,934)	(424,292)	(437,021)	(450,131)	(463,635)	(477,544)	(491,871)	(506,627)	(521,825)	(537,480)	(553,605)	(570,213)	(587,319)	(604,939)	(623,087)	(641,780)	(661,033)	(680,864)	(701,290)
Grants - Aquisition of Assets	(182,135)	(145,120)	(149,474)	(153,958)	(158,577)	(163,334)	(168,234)	(173,281)	(178,479)	(183,834)	(189,349)	(195,029)	(200,880)	(206,906)	(213,114)	(219,507)	(226,092)	(232,875)	(239,861)	(247,057)	(254,469)	(262,103)	(269,966)	(278,065)	(286,407)	(294,999)	(303,849)	(312,964)	(322,353)	(332,024)
Grants - Other	(55,392)	(55,296)	(55,572)	(55,850)	(56,129)	(56,410)	(56,692)	(56,975)	(57,260)	(57,547)	(57,834)	(58,123)	(58,414)	(58,706)	(59,000)	(59,295)	(59,591)	(59,889)	(60,189)	(60,489)	(60,792)	(61,096)	(61,401)	(61,708)	(62,017)	(62,327)	(62,639)	(62,952)	(63,267)	(63,583)
Contributions	(38,653)	(16,944)	(17,452)	(17,976)	(18,515)	(19,071)	(19,643)	(20,232)	(20,839)	(21,464)	(22,108)	(22,771)	(23,454)	(24,158)	(24,883)	(25,629)	(26,398)	(27,190)	(28,006)	(28,846)	(29,711)	(30,603)	(31,521)	(32,466)	(33,440)	(34,444)	(35,477)	(36,541)	(37,638)	(38,767)
Gains on Disposal of Assets	(51,700)	(43,000)	(44,290)	(45,619)	(46,987)	(48,397)	(49,849)	(51,344)	(52,885)	(54,471)	(56,105)	(57,788)	(59,522)	(61,308)	(63,147)	(65,041)	(66,993)	(69,002)	(71,072)	(73,205)	(75,401)	(77,663)	(79,993)	(82,392)	(84,864)	(87,410)	(90,032)	(92,733)	(95,515)	(98,381)
Total Operating Revenue	(5,756,283)	(5,702,267)	(5,960,248)	(6,165,851)	(6,388,106)	(6,673,598)	(7,020,631)	(7,321,708)	(7,601,296)	(8,240,123)	(8,591,379)	(9,030,560)	(9,282,750)	(9,653,316)	(10,116,740)	(10,701,113)	(11,116,046)	(11,740,269)	(12,495,647)	(13,293,847)	(14,151,306)	(15,070,318)	(16,037,566)	(16,522,813)	(17,642,464)	(18,810,766)	(20,069,123)	(21,410,822)	(22,847,247)	(24,378,529)
Operating Expenses																														
Management Expenses	1,143,118	1,021,741	1,050,992	1,072,518	1,104,694	1,127,835	1,161,670	1,191,742	1,220,730	1,257,352	1,295,074	1,337,220	1,377,336	1,418,656	1,461,216	1,505,052	1,550,204	1,596,710	1,644,611	1,693,950	1,744,768	1,797,111	1,851,025	1,906,555	1,963,752	2,022,665	2,083,344	2,145,845	2,210,220	2,276,527
Supervision & Technical Expenses	228,195	266,036	421,817	248,306	239,766	246,959	254,368	261,999	287,854	277,955	286,295	281,443	289,887	298,583	307,541	316,767	326,270	336,058	346,140	356,524	367,220	378,236	389,583	401,271	413,309	425,708	438,479	451,634	465,183	479,138
Operational Expenses	2,280,842	2,188,167	2,346,432	2,321,999	2,365,510	2,524,791	2,580,857	2,680,325	2,767,413	2,820,172	2,904,784	2,040,392	2,151,220	2,230,790	2,229,591	2,346,333	2,365,373	2,493,853	2,586,097	2,584,707	2,720,043	2,742,116	2,891,060	2,997,995	2,996,384	3,153,276	3,178,864	3,351,530	3,475,497	3,473,631
Interest	221,652	197,948	171,560	143,932	114,437	83,170	49,352	13,612	795,791	778,273	759,325	738,832	716,666	692,692	666,761	638,715	608,380	575,569	540,081	501,697	460,181	415,278	366,710	314,179	257,362	195,908	129,440	57,548	-	-
Depreciation - System Assets	1,622,050	1,649,210	1,698,687	1,749,647	1,802,137	1,856,201	1,911,887	1,969,243	2,028,321	2,089,170	2,151,843	2,216,401	2,282,893	2,351,380	2,421,921	2,494,579	2,569,416	2,646,499	2,725,894	2,807,670	2,891,900	2,978,657	3,068,017	3,160,058	3,254,859	3,352,505	3,453,080	3,556,673	3,663,373	3,773,274
Depreciation - Plant & Equipment	212,223	183,691	189,202	194,878	200,724	206,746	212,948	219,337	225,917	232,694	239,675	246,865	254,271	261,899	269,756	277,849	286,184	294,770	303,613	312,721	322,103	331,766	341,719	351,971	362,530	373,406	384,608	396,146	408,031	420,272
Amortisation - Intangible Assets	46,873	50,345	50,345	3,472	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	5,754,954	5,557,138	5,929,034	5,734,752	5,827,268	6,045,702	6,171,082	6,336,258	7,326,026	7,455,616	7,636,995	6,861,153	7,072,272	7,254,000	7,356,786	7,579,295	7,705,828	7,943,458	8,146,435	8,257,270	8,506,215	8,643,165	8,908,114	9,132,029	9,248,197	9,523,468	9,667,816	9,959,376	10,222,303	10,422,841
Estimated Operating Result for Period																														
(Surplus)/Deficit	(1,330)	(145,129)	(31,214)	(431,099)	(560,838)	(627,896)	(849,549)	(985,450)	(275,270)	(784,506)	(954,384)	(2,169,407)	(2,210,478)	(2,399,316)	(2,759,954)	(3,121,818)	(3,410,218)	(3,796,810)	(4,349,211)	(5,036,577)	(5,645,091)	(6,427,153)	(7,129,452)	(7,390,784)	(8,394,267)	(9,287,298)	(10,401,307)	(11,451,446)	(12,624,944)	(13,955,688)
Add Expenses not Involving Flow of Funds																														
Depreciation	(1,881,146)	(1,883,246)	(1,938,233)	(1,947,997)	(2,002,861)	(2,062,947)	(2,124,835)	(2,188,580)	(2,254,237)	(2,321,865)	(2,391,518)	(2,463,266)	(2,537,164)	(2,613,279)	(2,691,677)	(2,772,428)	(2,855,601)	(2,941,269)	(3,029,507)	(3,120,392)	(3,214,004)	(3,310,424)	(3,409,736)	(3,512,029)	(3,617,389)	(3,725,911)	(3,837,688)	(3,952,819)	(4,071,404)	(4,193,546)
Add Non-operating Funds Employed																														
Carrying amount of Assets Sold	(273,300)	(288,000)	(296,640)	(305,539)	(314,705)	(324,147)	(333,871)	(343,887)	(354,204)	(364,830)	(375,775)	(387,048)	(398,659)	(410,619)	(422,938)	(435,626)	(448,695)	(462,155)	(476,020)	(490,301)	(505,010)	(520,160)	(535,765)	(551,838)	(568,393)	(585,445)	(603,008)	(621,098)	(639,731)	(658,923)
Loan Funds Utilised	-	-	-	-	-	-	-	-	(10,000,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Less Funds Deployed for Non-operating Purposes																														
Aquisition of Assets	1,387,046	1,452,230	3,552,759	3,568,892	3,070,508	1,109,808	2,909,233	3,424,724	4,128,846	3,441,200	7,133,064	5,993,693	4,349,625	2,184,096	7,484,820	3,355,146	1,143,978	1,279,942	1,213,646	1,270,056	1,628,045	15,465,580	1,365,970	1,524,784	1,449,157	1,492,632	1,537,411	1,583,533	1,631,039	111,679,970
Repayment of Loans	359,004	382,708	409,096	436,725	466,219	497,487	531,304	413,245	214,679	232,197	251,145	271,638	293,804	317,778	343,709	371,755	402,090	434,901	470,389	508,773	550,289	595,192	643,760	696,291	753,108	814,562	881,030	952,912	-	-
Less Internal Transactions																														
Transfer to Reserves	958,194	941,897	988,159	1,036,943	1,088,391	1,142,656	1,199,900	1,260,292	1,324,014	1,391,257	1,462,223	1,537,126	1,616,194	1,699,666	1,787,798	1,880,857	1,979,130	2,082,917	2,192,539	2,308,335	2,430,661	2,559,898	2,696,448	2,840,736	2,993,212	3,154,354	3,324,667	3,504,687	3,694,979	3,896,145
Transfer from Reserves	(1,168,032)	(1,121,230)	(3,474,394)	(3,217,734)	(2,708,816)	(737,264)	(2,525,513)	(3,029,492)	(3,721,758)	(3,021,899)	(6,701,184)	(5,548,857)	(3,891,443)	(1,712,169)	(6,998,735)	(2,854,479)	(628,291)	(748,784)	(666,554)	(706,550)	(1,047,635)	(14,867,757)	(750,212)	(890,553)	(795,900)	(819,777)	(844,370)	(869,701)	(895,792)	#####
Estimated Budget Result (Surplus)/Deficit	(619,564)	(660,770)	(790,466)	(859,811)	(962,101)	(1,002,303)	(1,193,331)	(1,449,148)	(10,937,930)	(1,428,446)	(1,576,429)	(2,766,121)	(2,778,122)	(2,933,843)	(3,256,978)	(3,576,592)	(3,817,606)	(4,151,258)	(4,644,717)	(5,266,657)	(5,802,744)	(6,504,823)	(7,118,988)	(7,283,394)						

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

SCHEDULES	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Management Expenses	1,143,118	1,021,741	1,050,992	1,072,518	1,104,694	1,127,835	1,161,670	1,191,742	1,220,730	1,257,352	1,295,072	1,337,220	1,377,336	1,418,656	1,461,216	1,505,052	1,550,204	1,596,710	1,644,611	1,693,950	1,744,768	1,797,111	1,851,025	1,906,555	1,963,752	2,022,665	2,083,344	2,145,845	2,210,220	2,276,527
Salaries	422,137	394,526	406,361	418,552	431,109	444,042	457,363	471,084	485,217	499,773	514,766	530,209	546,116	562,499	579,374	596,755	614,658	633,098	652,091	671,653	691,803	712,557	733,934	755,952	778,630	801,989	826,049	850,830	876,355	902,646
Employees Leave Entitlements	160,493	62,501	64,376	66,307	68,297	70,346	72,456	74,630	76,869	79,175	81,550	83,996	86,516	89,112	91,785	94,539	97,375	100,296	103,305	106,404	109,596	112,884	116,271	119,759	123,351	127,052	130,863	134,789	138,833	142,998
Employee Overhead Expenses	56,652	57,443	59,166	60,941	62,769	54,653	56,292	57,981	59,720	61,512	63,357	65,258	67,216	69,232	71,309	73,448	75,652	77,921	80,259	82,667	85,147	87,701	90,332	93,042	95,834	98,709	101,670	104,720	107,861	111,097
Management Travelling Expenses	36,750	39,550	40,737	41,959	43,217	44,514	45,849	47,225	48,642	50,101	51,604	53,152	54,746	56,389	58,081	59,823	61,618	63,466	65,370	67,331	69,351	71,432	73,575	75,782	78,055	80,397	82,809	85,293	87,852	90,488
Office Building Expenses	34,296	36,610	37,709	38,840	40,005	41,205	42,441	43,715	45,026	46,377	47,768	49,201	50,677	52,198	53,764	55,376	57,038	58,749	60,511	62,327	64,196	66,122	68,106	70,149	72,254	74,421	76,654	78,954	81,322	83,762
Office Equipment Expenses	61,887	62,535	64,411	66,343	68,334	70,384	72,495	74,670	76,910	79,217	81,594	84,042	86,563	89,160	91,835	94,590	97,427	100,350	103,361	106,462	109,656	112,945	116,334	119,824	123,418	127,121	130,934	134,862	138,908	143,076
Sundry Administration Expenses	256,785	261,377	268,918	266,686	274,687	282,927	291,415	295,381	304,243	313,370	322,771	335,749	345,822	356,197	366,882	377,889	389,226	400,902	412,929	425,317	438,077	451,219	464,756	478,698	493,059	507,851	523,087	538,779	554,943	571,591
Chairman's Allowance	14,781	15,152	15,607	16,075	16,557	17,054	17,565	18,092	18,635	19,194	19,770	20,363	20,974	21,603	22,251	22,919	23,606	24,315	25,044	25,795	26,569	27,366	28,187	29,033	29,904	30,801	31,725	32,677	33,657	34,667
Members Fees	54,013	55,372	57,033	58,744	60,506	62,322	64,191	66,117	68,101	70,144	72,248	74,415	76,648	78,947	81,316	83,755	86,268	88,856	91,521	94,267	97,095	100,008	103,008	106,098	109,281	112,560	115,937	119,415	122,997	126,687
Members Travelling & Subsistence	4,400	4,372	4,503	4,638	4,777	4,921	5,068	5,220	5,377	5,538	5,704	5,876	6,052	6,233	6,420	6,613	6,811	7,016	7,226	7,443	7,666	7,896	8,133	8,377	8,629	8,887	9,154	9,429	9,711	10,003
Members Sundry Expenses	10,128	2,628	2,707	2,788	2,872	2,958	3,047	3,136	3,136	3,230	3,327	3,427	3,530	3,636	3,745	3,857	3,973	4,092	4,215	4,341	4,472	4,606	4,744	4,886	5,033	5,184	5,339	5,500	5,665	5,835
Delegates Expenses	7,570	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	10,079	10,382	10,693	11,014	11,344	11,685	12,035	12,396	12,768	13,151	13,546	13,952	14,371	14,802	15,246	15,703	16,174	16,660	17,159	17,674
Subscriptions	23,226	21,950	21,507	22,449	23,122	23,816	24,531	25,267	19,354	19,935	20,533	21,149	21,783	22,437	23,110	23,803	24,517	25,253	26,010	26,790	27,594	28,422	29,275	30,153	31,057	31,989	32,949	33,937	34,955	36,004
Technical & Supervision Expenses	228,195	266,036	421,817	248,306	239,766	246,959	254,368	261,999	287,854	277,955	286,294	281,443	289,887	298,583	307,541	316,767	326,270	336,058	346,140	356,524	367,220	378,236	389,583	401,271	413,309	425,708	438,479	451,634	465,183	479,138
Salaries	109,119	111,967	115,326	118,786	122,349	126,020	129,800	133,694	137,705	141,836	146,091	150,474	154,988	159,638	164,427	169,360	174,441	179,674	185,064	190,616	196,334	202,224	208,291	214,540	220,976	227,605	234,434	241,467	248,711	256,172
Employees Leave Entitlements	23,108	14,870	204,316	24,755	25,497	26,262	27,050	27,862	28,697	29,558	30,445	31,359	32,299	33,268	34,266	35,294	36,353	37,444	38,567	39,724	40,916	42,143	43,408	44,710	46,051	47,433	48,856	50,321	51,831	53,386
Employee Overhead Expenses	9,244	7,682	7,913	(7,848)	(8,083)	(8,326)	(8,575)	(8,833)	(9,098)	(9,371)	(9,652)	(9,941)	(10,240)	(10,547)	(10,863)	(11,189)	(11,525)	(11,870)	(12,227)	(12,593)	(12,971)	(13,360)	(13,761)	(14,174)	(14,599)	(15,037)	(15,488)	(15,953)	(16,431)	(16,924)
Travelling Expenses	18,000	19,500	20,085	20,688	21,308	21,947	22,606	23,284	23,983	24,702	25,443	26,206	26,993	27,802	28,636	29,495	30,380	31,292	32,231	33,197	34,193	35,219	36,276	37,364	38,485	39,639	40,829	42,054	43,315	44,615
Sundry Technical Expenses	68,724	112,017	74,178	91,926	78,695	81,056	83,487	85,992	106,567	91,229	93,966	83,346	85,846	88,421	91,074	93,806	96,620	99,519	102,505	105,580	108,747	112,010	115,370	118,831	122,396	126,068	129,850	133,745	137,758	141,890
Operational Expenses	965,531	996,782	1,026,685	1,070,925	1,089,211	1,191,099	1,226,832	1,263,637	1,317,125	1,340,592	1,380,810	2,040,392	2,151,220	2,230,790	2,229,591	2,346,333	2,365,373	2,493,853	2,586,097	2,584,707	2,720,043	2,742,116	2,891,060	2,997,995	2,996,384	3,153,276	3,178,864	3,351,530	3,475,497	3,473,631
Operations Staff Leave Entitlements	4,500	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	13,439	13,842	14,258	14,685	15,126	15,580	16,047	16,528	17,024	17,535	18,061	18,603	19,161	19,736	20,328	20,938	21,566	22,213	22,879
Operations Staff Overheads	28,296	34,934	35,982	37,061	38,173	39,318	40,498	41,713	42,964	44,253	45,581	46,948	48,357	49,807	51,302	52,841	54,426	56,059	57,740	59,473	61,257	63,095	64,987	66,937	68,945	71,014	73,144	75,338	77,598	79,926
Meter Reading	223,782	237,832	244,967	252,316	259,885	267,682	275,712	283,984	292,503	301,278	310,317	319,626	329,215	339,091	349,264	359,742	370,534	381,650	393,100	404,893	417,039	429,551	442,437	455,710	469,382	483,463	497,967	512,906	528,293	544,142
Depot Expenses	74,205	83,497	86,002	88,582	91,240	93,977	96,796	99,700	102,691	105,772	108,945	112,213	115,580	119,047	122,619	126,297	130,086	133,989	138,008	142,149	146,413	150,805	155,330	159,989	164,789	169,733	174,825	180,070	185,472	191,036
Work Health & Safety (WHS)	76,909	74,683	76,924	79,231	81,608	84,057	86,578	89,176	91,851	94,606	97,445	100,368	103,379	106,480	109,675	112,965	116,354	119,844	123,440	127,143	130,957	134,886	138,933	143,101	147,394	151,815	156,370	161,061	165,893	170,870
Dams & Weirs	17,598	9,664	9,954	10,253	10,560	10,877	11,203	11,539	11,886	12,242	12,609	12,988	13,377	13,779	14,192	14,618	15,056	15,508	15,973	16,452	16,946	17,454	17,978	18,517	19,073	19,645	20,234	20,841	21,467	22,111
Mains Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reservoirs - Operation Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Maintenance Expenses	39,192	34,603	35,641	36,710	37,811	38,945	40,114	41,317	42,557	43,833	45,148	46,503	47,898	49,335	50,815	52,339	53,910	55,527	57,193	58,908	60,676	62,496	64,371	66,302	68,291	70,340	72,450	74,623	76,862	79,168
Pumping Station - Operation Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Maintenance Expenses	80,473	79,097	81,470	83,914	86,431	89,024	91,695	94,446	97,279	100,198	103,204	106,300	109,489	112,773	116,157	119,641	123,230	126,927	130,735	134,657	138,697	142,858	147,144	151,558	156,105	160,788	165,611	170,580	175,697	180,968
- Energy Costs	251,466	232,874																												

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING INCOME	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Availability Charges	1,207,289	1,209,344	1,217,873	1,226,464	1,235,116	1,243,829	1,252,604	1,261,442	1,270,343	1,279,307	1,288,334	1,297,563	1,306,857	1,316,218	1,325,645	1,335,139	1,344,700	1,354,330	1,364,028	1,373,795	1,383,632	1,393,538	1,403,515	1,413,563	1,423,682	1,433,874	1,444,137	1,454,474	1,464,884	1,475,369
Residential, Rural & Commercial	1,269,890	1,290,364	1,299,397	1,308,492	1,317,652	1,326,875	1,336,163	1,345,517	1,354,935	1,364,420	1,373,971	1,383,589	1,393,274	1,403,027	1,412,848	1,422,738	1,432,697	1,442,726	1,452,825	1,462,995	1,473,236	1,483,548	1,493,933	1,504,391	1,514,921	1,525,526	1,536,204	1,546,958	1,557,787	1,568,691
Industrial	15,312	19,517	19,517	19,517	19,517	19,517	19,517	19,517	19,517	19,517	19,517	19,654	19,791	19,930	20,069	20,210	20,351	20,494	20,637	20,782	20,927	21,074	21,221	21,370	21,519	21,670	21,821	21,974	22,128	22,283
Quandialla Service Charges	22,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Less: Pensioner Rebates	(100,713)	(100,538)	(101,040)	(101,545)	(102,053)	(102,563)	(103,076)	(103,592)	(104,110)	(104,630)	(105,153)	(105,679)	(106,207)	(106,738)	(107,272)	(107,808)	(108,348)	(108,889)	(109,434)	(109,981)	(110,531)	(111,083)	(111,639)	(112,197)	(112,758)	(113,322)	(113,888)	(114,458)	(115,030)	(115,605)
Water Sales	3,560,318	3,637,100	3,845,688	4,066,238	4,299,436	4,546,009	4,806,723	5,082,388	5,373,863	5,682,054	6,007,920	6,352,423	6,716,681	7,101,826	7,509,057	7,939,639	8,394,912	8,876,292	9,385,275	9,923,445	10,492,475	11,094,135	11,730,296	12,402,937	13,114,149	13,866,144	14,661,261	15,501,973	16,390,894	17,330,788
Price per Kilo litre	2.25	2.36	2.48	2.60	2.73	2.87	3.02	3.17	3.32	3.49	3.67	3.85	4.04	4.24	4.45	4.68	4.91	5.16	5.41	5.69	5.97	6.27	6.58	6.91	7.26	7.62	8.00	8.40	8.82	9.26
Average Annual Consumer Account	772	800	830	862	895	929	966	1,004	1,044	1,087	1,131	935	972	1,010	1,051	1,093	1,138	1,185	1,234	1,286	1,340	1,397	1,457	1,520	1,586	1,655	1,728	1,804	1,885	1,969
Water Sales - Residential etc	2,880,000	3,001,920	3,174,080	3,356,114	3,548,587	3,752,098	3,967,281	4,194,805	4,435,377	4,689,745	4,958,702	5,243,084	5,543,775	5,861,710	6,197,879	6,553,328	6,929,161	7,326,548	7,746,726	8,191,001	8,660,755	9,157,449	9,682,629	10,237,927	10,825,073	11,445,890	12,102,312	12,796,380	13,530,252	14,306,212
Water Sales - Industrial	400,163	446,691	472,309	499,396	528,036	558,319	590,338	624,194	659,992	697,842	737,863	780,180	824,923	872,233	922,255	975,146	1,031,071	1,090,203	1,152,726	1,218,835	1,288,735	1,362,644	1,440,792	1,523,421	1,610,789	1,703,168	1,800,845	1,904,123	2,013,325	2,128,789
Water Sales - Cowra	175,500	184,275	194,843	206,017	217,833	230,325	243,534	257,501	272,269	287,883	304,393	321,850	340,309	359,825	380,461	402,281	425,351	449,745	475,538	502,810	531,647	562,137	594,375	628,462	664,505	702,614	742,909	785,515	830,564	878,197
Water Sales - Other	10,155	4,214	4,456	4,711	4,981	5,267	5,569	5,889	6,226	6,583	6,961	7,309	7,674	8,058	8,461	8,884	9,328	9,795	10,284	10,799	11,339	11,905	12,501	13,126	13,782	14,471	15,195	15,954	16,752	17,590
Water Sales - Quandialla	94,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Excess Water Sales Price per kilolitre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Sales Above 450kl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
User Charges	118,799	102,557	105,634	108,803	112,067	115,429	118,892	122,458	126,132	129,916	133,814	137,828	141,963	146,222	150,608	155,127	159,780	164,574	169,511	174,596	179,834	185,229	190,786	196,510	202,405	208,477	214,732	221,174	227,809	234,643
Installations & Private Works Income	73,699	62,804	64,688	66,629	68,628	70,686	72,807	74,991	77,241	79,558	81,945	84,403	86,935	89,543	92,230	94,997	97,847	100,782	103,805	106,920	110,127	113,431	116,834	120,339	123,949	127,668	131,498	135,443	139,506	143,691
Attendance & Reconnection Charges	32,500	22,113	22,776	23,460	24,163	24,888	25,635	26,404	27,196	28,012	28,852	29,718	30,610	31,528	32,474	33,448	34,451	35,485	36,549	37,646	38,775	39,939	41,137	42,371	43,642	44,951	46,300	47,689	49,119	50,593
Meter Test & Special Reading Fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Section 603 Certificates	12,600	17,640	18,169	18,714	19,276	19,854	20,450	21,063	21,695	22,346	23,016	23,707	24,418	25,150	25,905	26,682	27,483	28,307	29,156	30,031	30,932	31,860	32,816	33,800	34,814	35,858	36,934	38,042	39,184	40,359
Interest	213,000	176,000	197,851	154,936	115,388	124,853	181,244	176,037	143,977	442,969	435,979	497,099	350,686	300,951	321,156	438,101	360,034	464,246	671,078	890,588	1,137,512	1,412,346	1,699,875	1,467,852	1,830,560	2,200,004	2,615,217	3,066,978	3,564,024	4,103,685
Investments	206,000	168,000	189,771	146,775	107,146	116,528	172,836	167,545	135,400	434,306	427,229	488,262	341,761	291,936	312,051	428,905	350,747	454,865	661,603	881,019	1,127,847	1,402,585	1,690,015	1,457,894	1,820,503	2,189,846	2,604,957	3,056,616	3,553,558	4,093,115
Overdue Accounts	7,000	8,000	8,080	8,161	8,242	8,325	8,408	8,492	8,577	8,663	8,749	8,837	8,925	9,015	9,105	9,196	9,288	9,381	9,474	9,569	9,665	9,762	9,859	9,958	10,057	10,158	10,259	10,362	10,466	10,570
Other Revenues	328,997	316,907	326,414	336,008	345,890	356,267	366,751	377,550	377,518	388,561	399,936	411,934	424,292	437,021	450,131	463,635	477,544	491,871	506,627	521,825	537,480	553,605	570,213	587,319	604,939	623,087	641,780	661,033	680,864	701,290
Catchment Area Rents	6,429	6,409	6,602	6,602	6,602	6,800	6,800	6,800	7,004	7,004	7,004	7,214	7,430	7,653	7,883	8,119	8,363	8,614	8,872	9,138	9,412	9,695	9,986	10,285	10,594	10,912	11,239	11,576	11,923	12,281
Lease Income NBN & Police Dept	11,000	11,187	11,523	11,868	12,224	12,591	12,969	13,358	2,400	2,400	2,400	2,472	2,546	2,623	2,701	2,782	2,866	2,952	3,040	3,131	3,225	3,322	3,422	3,524	3,630	3,739	3,851	3,967	4,086	4,208
Sundry Income	1,000	2,525	2,601	2,679	2,759	2,842	2,927	3,015	3,105	3,199	3,295	3,393	3,495	3,600	3,708	3,819	3,934	4,052	4,173	4,299	4,428	4,560	4,697	4,838	4,983	5,133	5,287	5,445	5,609	5,777
Plant Running Income	297,268	283,285	291,784	300,537	309,553	318,840	328,405	338,257	348,405	358,857	369,623	380,712	392,133	403,897	416,014	428,494	441,349	454,590	468,227	482,274	496,742	511,645	526,994	542,804	559,088	575,861	593,137	610,931	629,259	648,136
Insurance Experience Discount & Rebates	13,300	13,500	13,905	14,322	14,752	15,194	15,650	16,120	16,603	17,101	17,614	18,143	18,687	19,248	19,825	20,420	21,033	21,664	22,313	22,983	23,672	24,383	25,114	25,867	26,643	27,443	28,266	29,114	29,987	30,887
Grants	55,392	55,296	55,572	55,850	56,129	56,410	56,692	56,975	57,260	57,547	57,834	58,123	58,414	58,706	59,000	59,295	59,591	59,889	60,189	60,489	60,792	61,096	61,401							

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING STATEMENT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	
<u>Administration Salaries</u>	422,137	394,526	406,361	418,552	431,109	444,042	457,363	471,084	485,217	499,773	514,766	530,209	546,116	562,499	579,374	596,755	614,658	633,098	652,091	671,653	691,803	712,557	733,934	755,952	778,630	801,989	826,049	850,830	876,355	902,646	
General Manager	146,090	143,308	147,607	152,035	156,596	161,294	166,133	171,117	176,250	181,538	186,984	192,594	198,371	204,323	210,452	216,766	223,269	229,967	236,866	243,972	251,291	258,830	266,595	274,593	282,830	291,315	300,055	309,056	318,328	327,878	
Administration Staff	276,047	251,218	258,754	266,517	274,512	282,748	291,230	299,967	308,966	318,235	327,782	337,616	347,744	358,176	368,922	379,989	391,389	403,131	415,225	427,681	440,512	453,727	467,339	481,359	495,800	510,674	525,994	541,774	558,027	574,768	
<u>Administration Leave Entitlements</u>	160,493	62,501	64,376	66,307	68,297	70,346	72,456	74,630	76,869	79,175	81,550	83,996	86,516	89,112	91,785	94,539	97,375	100,296	103,305	106,404	109,596	112,884	116,271	119,759	123,351	127,052	130,863	134,789	138,833	142,998	
Annual Leave	35,178	32,877	33,863	34,879	35,926	37,003	38,114	39,257	40,435	41,648	42,897	44,184	45,510	46,875	48,281	49,730	51,221	52,758	54,341	55,971	57,650	59,380	61,161	62,996	64,886	66,832	68,837	70,903	73,030	75,220	
Long Service Leave	125,315	29,624	30,513	31,428	32,371	33,342	34,342	35,373	36,434	37,527	38,653	39,812	41,007	42,237	43,504	44,809	46,153	47,538	48,964	50,433	51,946	53,504	55,109	56,763	58,466	60,219	62,026	63,887	65,803	67,778	
<u>Administration - Overhead</u>	56,652	57,443	59,166	60,941	62,769	64,653	66,592	68,581	70,620	72,710	74,851	77,043	79,286	81,580	83,925	86,321	88,768	91,266	93,815	96,415	99,066	101,768	104,521	107,325	110,190	113,106	116,074	119,094	122,166	125,291	128,468
Payroll Tax	14,131	13,858	14,274	14,702	15,143	15,598	16,066	16,548	17,044	17,555	18,082	18,625	19,183	19,759	20,352	20,962	21,591	22,239	22,906	23,593	24,301	25,030	25,781	26,554	27,351	28,171	29,017	29,887	30,784	31,707	
Fringe Benefits Tax	8,000	14,251	14,679	15,119	15,572	16,040	16,521	17,016	17,527	18,053	18,594	19,152	19,727	20,319	20,928	21,556	22,203	22,869	23,555	24,261	24,989	25,739	26,511	27,306	28,126	28,969	29,838	30,734	31,656	32,605	
Training Expenses	15,985	20,272	20,880	21,507	22,152	12,816	13,201	13,597	14,005	14,425	14,858	15,303	15,762	16,235	16,722	17,224	17,741	18,273	18,821	19,386	19,967	20,566	21,183	21,819	22,473	23,148	23,842	24,557	25,294	26,053	
Workers Compensation Insurance	12,670	9,536	9,822	10,116	10,420	10,732	11,054	11,386	11,728	12,079	12,442	12,815	13,199	13,595	14,003	14,423	14,856	15,302	15,761	16,234	16,721	17,222	17,739	18,271	18,819	19,384	19,965	20,564	21,181	21,817	
Superannuation	49,400	46,023	47,403	48,825	50,290	51,799	53,353	54,953	56,602	58,300	60,049	61,851	63,706	65,617	67,586	69,613	71,702	73,853	76,068	78,350	80,701	83,122	85,616	88,184	90,830	93,554	96,361	99,252	102,229	105,296	
Sick Leave Insurance	1,146	1,909	1,966	2,025	2,086	2,149	2,213	2,279	2,348	2,418	2,491	2,566	2,643	2,722	2,803	2,888	2,974	3,063	3,155	3,250	3,347	3,448	3,551	3,658	3,768	3,881	3,997	4,117	4,240	4,368	
<u>less Contributions to Admin.Overheads</u>	(44,680)	(48,406)	(49,858)	(51,354)	(52,894)	(54,481)	(56,115)	(57,799)	(59,533)	(61,319)	(63,158)	(65,053)	(67,005)	(69,015)	(71,085)	(73,218)	(75,415)	(77,677)	(80,007)	(82,407)	(84,880)	(87,426)	(90,049)	(92,750)	(95,533)	(98,399)	#####	#####	#####	(110,749)	
<u>Administration Travelling</u>	36,750	39,550	40,737	41,959	43,217	44,514	45,849	47,225	48,642	50,101	51,604	53,152	54,746	56,389	58,081	59,823	61,618	63,466	65,370	67,331	69,351	71,432	73,575	75,782	78,055	80,397	82,809	85,293	87,852	90,488	
General Manager	17,550	24,800	25,544	26,310	27,100	27,913	28,750	29,612	30,501	31,416	32,358	33,329	34,329	35,359	36,420	37,512	38,638	39,797	40,991	42,220	43,487	44,792	46,135	47,519	48,945	50,413	51,926	53,483	55,088	56,741	
Administration Staff	19,200	14,750	15,193	15,648	16,118	16,601	17,099	17,612	18,141	18,685	19,245	19,823	20,417	21,030	21,661	22,311	22,980	23,669	24,380	25,111	25,864	26,640	27,439	28,263	29,110	29,984	30,883	31,810	32,764	33,747	

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING STATEMENT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Administration Building	34,296	36,610	37,709	38,840	40,005	41,205	42,441	43,715	45,026	46,377	47,768	49,201	50,677	52,198	53,764	55,376	57,038	58,749	60,511	62,327	64,196	66,122	68,106	70,149	72,254	74,421	76,654	78,954	81,322	83,762
Building M & R	4,683	6,778	6,982	7,191	7,407	7,629	7,858	8,094	8,337	8,587	8,844	9,110	9,383	9,664	9,954	10,253	10,560	10,877	11,204	11,540	11,886	12,242	12,610	12,988	13,378	13,779	14,192	14,618	15,057	15,508
Office Cleaning	16,057	16,546	17,042	17,554	18,080	18,623	19,181	19,757	20,349	20,960	21,589	22,236	22,904	23,591	24,298	25,027	25,778	26,551	27,348	28,168	29,014	29,884	30,780	31,704	32,655	33,635	34,644	35,683	36,753	37,856
Electricity & Gas	11,192	10,305	10,614	10,933	11,261	11,598	11,946	12,305	12,674	13,054	13,446	13,849	14,265	14,692	15,133	15,587	16,055	16,537	17,033	17,544	18,070	18,612	19,170	19,745	20,338	20,948	21,576	22,224	22,890	23,577
Council Rates	1,884	2,286	2,355	2,425	2,498	2,573	2,650	2,730	2,811	2,896	2,983	3,072	3,164	3,259	3,357	3,458	3,562	3,668	3,778	3,892	4,009	4,129	4,253	4,380	4,512	4,647	4,786	4,930	5,078	5,230
Sundry Building Expenses	480	695	716	737	759	782	806	830	855	880	907	934	962	991	1,021	1,051	1,083	1,115	1,149	1,183	1,219	1,255	1,293	1,332	1,372	1,413	1,455	1,499	1,544	1,590
Office Equipment	61,887	62,535	64,411	66,343	68,334	70,384	72,495	74,670	76,910	79,217	81,594	84,042	86,563	89,160	91,835	94,590	97,427	100,350	103,361	106,462	109,656	112,945	116,334	119,824	123,418	127,121	130,934	134,862	138,908	143,076
Equipment M & R	13,302	13,302	13,701	14,112	14,535	14,972	15,421	15,883	16,360	16,851	17,356	17,877	18,413	18,965	19,534	20,120	20,724	21,346	21,986	22,646	23,325	24,025	24,746	25,488	26,253	27,040	27,851	28,687	29,548	30,434
Computer Hardware & Software Support	43,435	43,583	44,890	46,237	47,624	49,053	50,525	52,040	53,602	55,210	56,866	58,572	60,329	62,139	64,003	65,923	67,901	69,938	72,036	74,197	76,423	78,716	81,077	83,510	86,015	88,595	91,253	93,991	96,810	99,715
Computer & Copier Lease Payments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Computer Sundry Expenses	5,150	5,650	5,820	5,994	6,174	6,359	6,550	6,746	6,949	7,157	7,372	7,593	7,821	8,056	8,297	8,546	8,803	9,067	9,339	9,619	9,907	10,205	10,511	10,826	11,151	11,485	11,830	12,185	12,550	12,927
Other Administration Expenses	256,785	261,377	268,918	266,686	274,687	282,927	291,415	295,381	304,243	313,370	322,771	335,749	345,822	356,197	366,882	377,889	389,226	400,902	412,929	425,317	438,077	451,219	464,756	478,698	493,059	507,851	523,087	538,779	554,943	571,591
Advertising	6,000	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601	7,829	8,063	8,305	8,555	8,811	9,076	9,348	9,628	9,917	10,215	10,521	10,837	11,162	11,497	11,842	12,197	12,563	12,940	13,328	13,728
Printing & Stationery	23,414	16,595	17,093	17,606	18,134	18,678	19,238	19,815	20,410	21,022	21,653	22,302	22,971	23,661	24,370	25,101	25,854	26,630	27,429	28,252	29,099	29,972	30,872	31,798	32,752	33,734	34,746	35,789	36,862	37,968
Postage & Courier Charges	15,400	14,414	14,846	15,292	15,751	16,223	16,710	17,211	17,727	18,259	18,807	19,371	19,952	20,551	21,167	21,802	22,457	23,130	23,824	24,539	25,275	26,033	26,814	27,619	28,447	29,301	30,180	31,085	32,018	32,978
Telephone & Fax Charges - Office	7,192	11,272	11,610	11,958	12,317	12,687	13,067	13,459	13,863	14,279	14,707	15,149	15,603	16,071	16,553	17,050	17,561	18,088	18,631	19,190	19,766	20,358	20,969	21,598	22,246	22,914	23,601	24,309	25,038	25,790
Bank & Merchant Charges	25,725	25,709	26,480	27,275	28,093	28,936	29,804	30,698	31,619	32,567	33,544	34,551	35,587	36,655	37,755	38,887	40,054	41,255	42,493	43,768	45,081	46,433	47,826	49,261	50,739	52,261	53,829	55,444	57,107	58,820
Consultancy Fees	6,000	10,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Audit Fees	16,986	17,459	17,983	18,522	19,078	19,650	20,240	20,847	21,472	22,117	22,780	23,463	24,167	24,892	25,639	26,408	27,201	28,017	28,857	29,723	30,614	31,533	32,479	33,453	34,457	35,491	36,555	37,652	38,781	39,945
Internal Audit	15,000	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	20,159	20,764	21,386	22,028	22,689	23,370	24,071	24,793	25,536	26,303	27,092	27,904	28,742	29,604	30,492	31,407	32,349	33,319	34,319
Legal Expenses	4,000	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438	10,751	11,074	11,406	11,748	12,101	12,464	12,838	13,223	13,619	14,028	14,449	14,882	15,329	15,789	16,262	16,750	17,253	17,770	18,303
Integrated Planning & Reporting (IP&R)	2,500	1,200	1,236	1,273	1,311	1,351	1,391	1,433	1,476	1,520	1,566	1,613	1,661	1,711	1,762	1,815	1,870	1,926	1,983	2,043	2,104	2,167	2,232	2,299	2,368	2,439	2,513	2,588	2,666	2,746
Insurance - Public Liability/Prof. Indemnity	24,387	24,948	25,696	26,467	27,261	28,079	28,922	29,789	30,683	31,603	32,551	33,528	34,534	35,570	36,637	37,736	38,868	40,034	41,235	42,472	43,746	45,059	46,411	47,803	49,237	50,714	52,236	53,803	55,417	57,079
- Industrial Special Risk (Property)	61,658	61,577	63,424	65,327	67,287	69,305	71,385	73,526	75,732	78,004	80,344	82,754	85,237	87,794	90,428	93,141	95,935	98,813	101,777	104,831	107,976	111,215	114,551	117,988	121,528	125,173	128,929	132,796	136,780	140,884
- Fidelity Guarantee	1,030	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	1,344	1,384	1,426	1,469	1,513	1,558	1,605	1,653	1,702	1,754	1,806	1,860	1,916	1,974	2,033	2,094	2,157	2,221	2,288	2,357
Sundry Administration Expenses:																														
- Sundry Expenses	7,700	13,548	13,954	14,373	14,804	15,248	15,705	16,176	16,662	17,162	17,676	18,207	18,753	19,315	19,895	20,492	21,107	21,740	22,392	23,064	23,756	24,468	25,202	25,958	26,737	27,539	28,365	29,216	30,093	30,996
- Rounding of Cents	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Collection Agency Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blayney Shire - Shared HR Support	4,000	4,000	4,120	4,244	4,371	4,502	4,637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WBC Alliance	22,883	17,926	18,463	19,017	19,588	20,175	20,781	21,404	22,046	22,708	23,389	24,091	24,813	25,558	26,324	27,114	27,928	28,765	29,628	30,517	31,433	32,376	33,347	34,347	35,378	36,439	37,532	38,658	39,818	41,012
WBC Alliance Projects	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contributions & Donations	12,910	12,700	13,081	13,473	13,878	14,294	14,723	15,164	15,619	16,088	16,571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chairman's Allowance	14,781	15,152	15,607	16,075	16,557	17,054	17,565	18,092	18,635	19,194	19,770	20,363	20,974	21,603	22,251	22,919	23,606	24,315	25,044	25,795	26,569	27,366	28,187	29,033	29,904	30,801	31,725	32,677	33,657	34,667
Chairman's Allowance	14,781	15,152	15,607	16,075	16,557	17,054	17,565	18,092	18,635	19,194	19,770	20,363	20,974	21,603	22,251	22,919	23,606	24,315	25,044	25,795	26,569	27,366	28,187	29,033	29,904	30,801	31,725	32,677	33,657	34,667
Members' Fees - Section 248	54,013	55,372	57,033	58,744																										

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING STATEMENT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
<u>Members' Travelling & Subsistence</u>	4,400	4,372	4,503	4,638	4,777	4,921	5,068	5,220	5,377	5,538	5,704	5,876	6,052	6,233	6,420	6,613	6,811	7,016	7,226	7,443	7,666	7,896	8,133	8,377	8,629	8,887	9,154	9,429	9,711	10,003
Travelling & Subsistence	4,400	4,372	4,503	4,638	4,777	4,921	5,068	5,220	5,377	5,538	5,704	5,876	6,052	6,233	6,420	6,613	6,811	7,016	7,226	7,443	7,666	7,896	8,133	8,377	8,629	8,887	9,154	9,429	9,711	10,003
<u>Members' Sundry Expenses</u>	10,128	2,628	2,707	2,788	2,872	2,958	3,047	3,136	3,136	3,230	3,327	3,427	3,530	3,636	3,745	3,857	3,973	4,092	4,215	4,341	4,472	4,606	4,744	4,886	5,033	5,184	5,339	5,500	5,665	5,835
Insurance	10,128	2,628	2,707	2,788	2,872	2,958	3,047	3,136	3,136	3,230	3,327	3,427	3,530	3,636	3,745	3,857	3,973	4,092	4,215	4,341	4,472	4,606	4,744	4,886	5,033	5,184	5,339	5,500	5,665	5,835
<u>Delegates Expenses</u>	7,570	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	10,079	10,382	10,693	11,014	11,344	11,685	12,035	12,396	12,768	13,151	13,546	13,952	14,371	14,802	15,246	15,703	16,174	16,660	17,159	17,674
LG One Association & LGMA Conferences	4,920	5,154	5,309	5,468	5,632	5,801	5,975	6,154	6,339	6,529	6,725	6,927	7,134	7,348	7,569	7,796	8,030	8,271	8,519	8,774	9,038	9,309	9,588	9,876	10,172	10,477	10,791	11,115	11,449	11,792
Water Resources Conference	2,650	2,571	2,648	2,728	2,809	2,894	2,980	3,070	3,162	3,257	3,355	3,455	3,559	3,666	3,776	3,889	4,006	4,126	4,249	4,377	4,508	4,644	4,783	4,926	5,074	5,226	5,383	5,545	5,711	5,882
<u>Subscriptions</u>	23,226	21,950	21,507	22,449	23,122	23,816	24,531	25,267	19,354	19,935	20,533	21,149	21,783	22,437	23,110	23,803	24,517	25,253	26,010	26,790	27,594	28,422	29,275	30,153	31,057	31,989	32,949	33,937	34,955	36,004
LGNSW Subscription	2,475	2,562	2,639	2,718	2,800	2,884	2,970	3,059	3,151	3,245	3,343	3,443	3,546	3,653	3,762	3,875	3,992	4,111	4,235	4,362	4,492	4,627	4,766	4,909	5,056	5,208	5,364	5,525	5,691	5,862
Water Directorate	3,455	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434	4,567	4,704	4,845	4,990	5,140	5,294	5,453	5,616	5,785	5,959	6,137	6,321	6,511	6,706	6,908	7,115	7,328	7,548	7,775	8,008	8,248
Australian Water Association	655	701	722	744	766	789	813	837	862	888	915	942	970	999	1,029	1,060	1,092	1,125	1,159	1,193	1,229	1,266	1,304	1,343	1,383	1,425	1,468	1,512	1,557	1,604
CENTROC	5,645	5,775	5,948	6,127	6,310	6,500	6,695	6,896	432	445	458	472	486	501	516	531	547	564	581	598	616	634	653	673	693	714	735	758	780	804
CENTROC Water Utilities Alliance	8,740	9,307	8,485	9,036	9,307	9,586	9,874	10,170	10,475	10,789	11,113	11,447	11,790	12,144	12,508	12,883	13,270	13,668	14,078	14,500	14,935	15,383	15,845	16,320	16,810	17,314	17,833	18,368	18,919	19,487
CENTROC Savewater Alliance Membership	2,256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Technical/Supervision Salaries</u>	109,119	111,967	115,326	118,786	122,349	126,020	129,800	133,694	137,705	141,836	146,091	150,474	154,988	159,638	164,427	169,360	174,441	179,674	185,064	190,616	196,334	202,224	208,291	214,540	220,976	227,605	234,434	241,467	248,711	256,172
Operations Manager	109,119	111,967	115,326	118,786	122,349	126,020	129,800	133,694	137,705	141,836	146,091	150,474	154,988	159,638	164,427	169,360	174,441	179,674	185,064	190,616	196,334	202,224	208,291	214,540	220,976	227,605	234,434	241,467	248,711	256,172
Technical Assistance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Technical/Super. Staff Leave Entitlements</u>	23,108	14,870	204,316	24,755	25,497	26,262	27,050	27,862	28,697	29,558	30,445	31,359	32,299	33,268	34,266	35,294	36,353	37,444	38,567	39,724	40,916	42,143	43,408	44,710	46,051	47,433	48,856	50,321	51,831	53,386
Annual Leave	9,093	9,331	9,610	9,899	10,196	10,502	10,817	11,141	11,475	11,820	12,174	12,539	12,916	13,303	13,702	14,113	14,537	14,973	15,422	15,885	16,361	16,852	17,358	17,878	18,415	18,967	19,536	20,122	20,726	21,348
Long Service Leave	14,015	5,539	194,705	14,856	15,302	15,761	16,233	16,720	17,222	17,739	18,271	18,819	19,384	19,965	20,564	21,181	21,816	22,471	23,145	23,839	24,555	25,291	26,050	26,831	27,636	28,465	29,319	30,199	31,105	32,038
<u>Technical/Supervision Staff Overheads</u>	9,244	7,682	7,913	7,848	8,083	8,326	8,575	8,833	9,098	9,371	9,652	9,941	10,240	10,547	10,863	11,189	11,525	11,870	12,227	12,593	12,971	13,360	13,761	14,174	14,599	15,037	15,488	15,953	16,431	16,924
Payroll Tax	3,742	3,936	4,054	4,175	4,300	4,429	4,562	4,699	4,840	4,985	5,135	5,289	5,448	5,611	5,779	5,953	6,131	6,315	6,505	6,700	6,901	7,108	7,321	7,541	7,767	8,000	8,240	8,487	8,742	9,004
Fringe Benefits Tax	4,000	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219	5,376	5,537	5,703	5,874	6,050	6,232	6,419	6,611	6,810	7,014	7,224	7,441	7,664	7,894	8,131	8,375	8,626	8,885	9,152
Training Expenses	1,200	1,780	1,833	1,888	1,945	2,003	2,064	2,125	2,189	2,255	2,322	2,392	2,464	2,538	2,614	2,692	2,773	2,856	2,942	3,030	3,121	3,215	3,311	3,411	3,513	3,618	3,727	3,839	3,954	4,073
Workers Compensation Insurance	3,675	3,055	3,146	3,241	3,338	3,438	3,541	3,648	3,757	3,870	3,986	4,105	4,229	4,355	4,486	4,621	4,759	4,902	5,049	5,201	5,357	5,517	5,683	5,853	6,029	6,210	6,396	6,588	6,786	6,989
Superannuation	23,370	24,034	24,755	9,500	9,785	10,079	10,381	10,692	11,013	11,343	11,684	12,034	12,395	12,767	13,150	13,545	13,951	14,370	14,801	15,245	15,702	16,173	16,658	17,158	17,673	18,203	18,749	19,312	19,891	20,488
Sick Leave Insurance	3,044	3,148	3,243	3,340	3,440	3,543	3,650	3,759	3,872	3,988	4,108	4,231	4,358	4,489	4,623	4,762	4,905	5,052	5,203	5,360	5,520	5,686	5,856	6,032	6,213	6,400	6,592	6,789	6,993	7,203
<u>less Supervision O/heads charged to jobs</u>	(29,787)	(32,270)	(33,239)	(34,236)	(35,263)	(36,321)	(37,410)	(38,533)	(39,689)	(40,879)	(42,106)	(43,369)	(44,670)	(46,010)	(47,390)	(48,812)	(50,276)	(51,785)	(53,338)	(54,938)	(56,586)	(58,284)	(60,033)	(61,834)	(63,689)	(65,599)	(67,567)	(69,594)	(71,682)	(73,832)
<u>Technical/Supervision Travelling</u>	18,000	19,500	20,085	20,688	21,308	21,947	22,606	23,284	23,983	24,702	25,443	26,206	26,993	27,802	28,636	29,495	30,380	31,292	32,231	33,197	34,193	35,219	36,276	37,364	38,485	39,639	40,829	42,054	43,315	44,615
Operations Manager	18,000	19,500	20,085	20,688	21,308	21,947	22,606	23,284	23,983	24,702	25,443	26,206	26,993	27,802	28,636	29,495	30,380	31,292	32,231	33,197	34,193	35,219	36,276	37,364	38,485	39,639	40,829	42,054	43,315	44,615

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING STATEMENT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Sundry Engineering Expenses	68,724	112,017	74,178	91,926	78,695	81,056	83,487	85,992	106,567	91,229	93,966	83,346	85,846	88,421	91,074	93,806	96,620	99,519	102,505	105,580	108,747	112,010	115,370	118,831	122,396	126,068	129,850	133,745	137,758	141,890
Engineers Office/Mapping Expenses	3,030	3,551	3,658	3,767	3,880	3,997	4,117	4,240	4,367	4,498	4,633	4,772	4,915	5,063	5,215	5,371	5,532	5,698	5,869	6,045	6,227	6,414	6,606	6,804	7,008	7,218	7,435	7,658	7,888	8,124
Telemetry Expenses	44,194	44,466	45,800	47,174	48,589	50,047	51,548	53,095	54,688	56,328	58,018	59,759	61,551	63,398	65,300	67,259	69,277	71,355	73,496	75,700	77,971	80,311	82,720	85,201	87,757	90,390	93,102	95,895	98,772	101,735
Asset/Mapping Management System	17,000	14,000	14,420	14,853	15,298	15,757	16,230	16,717	17,218	17,735	18,267	18,815	19,379	19,961	20,559	21,176	21,812	22,466	23,140	23,834	24,549	25,286	26,044	26,825	27,630	28,459	29,313	30,192	31,098	32,031
Asset Revaluation	-	-	-	15,523	-	-	-	-	17,995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Manmanagement Plan	-	40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterwise/Demand Management	4,500	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	13,439	13,842	14,258	14,685	15,126	15,580	16,047	16,528	17,024	17,535	18,061	18,603	19,161	19,736	20,328	20,938	21,566	22,213	22,879
Operations Staff Leave Entitlements	131,906	109,647	186,501	116,308	119,797	123,391	127,093	130,906	134,833	138,878	143,044	147,336	151,756	156,308	160,998	165,828	170,802	175,927	181,204	186,640	192,240	198,007	203,947	210,065	216,367	222,858	229,544	236,431	243,523	250,829
Annual Leave	58,323	57,071	58,783	60,546	62,363	64,233	66,160	68,145	70,190	72,295	74,464	76,698	78,999	81,369	83,810	86,324	88,914	91,582	94,329	97,159	100,074	103,076	106,168	109,353	112,634	116,013	119,493	123,078	126,770	130,573
Sick Leave	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Long Service Leave	45,287	17,642	91,736	18,701	19,262	19,839	20,435	21,048	21,679	22,329	22,999	23,689	24,400	25,132	25,886	26,662	27,462	28,286	29,135	30,009	30,909	31,836	32,791	33,775	34,788	35,832	36,907	38,014	39,155	40,329
Public Holidays	28,296	34,934	35,982	37,061	38,173	39,318	40,498	41,713	42,964	44,253	45,581	46,948	48,357	49,807	51,302	52,841	54,426	56,059	57,740	59,473	61,257	63,095	64,987	66,937	68,945	71,014	73,144	75,338	77,598	79,926
Operations Staff Overheads	80,529	87,670	90,300	117,808	121,342	124,983	128,732	132,594	136,572	140,669	144,889	149,236	153,713	158,324	163,074	167,966	173,005	178,196	183,541	189,048	194,719	200,561	206,577	212,775	219,158	225,733	232,505	239,480	246,664	254,064
Payroll Tax	23,347	25,368	26,129	26,913	27,720	28,552	29,408	30,290	31,199	32,135	33,099	34,092	35,115	36,168	37,253	38,371	39,522	40,708	41,929	43,187	44,483	45,817	47,192	48,607	50,066	51,568	53,115	54,708	56,349	58,040
Fringe Benefits Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Expenses	19,499	22,862	23,548	24,254	24,982	25,731	26,503	27,298	28,117	28,961	29,830	30,724	31,646	32,596	33,573	34,581	35,618	36,687	37,787	38,921	40,088	41,291	42,530	43,806	45,120	46,473	47,868	49,304	50,783	52,306
Workers Compensation Insurance	20,874	17,545	18,072	18,614	19,172	19,748	20,340	20,950	21,579	22,226	22,893	23,580	24,287	25,016	25,766	26,539	27,335	28,155	29,000	29,870	30,766	31,689	32,640	33,619	34,627	35,666	36,736	37,838	38,974	40,143
Superannuation	75,143	79,483	81,867	59,524	61,310	63,149	65,043	66,995	69,005	71,075	73,207	75,403	77,665	79,995	82,395	84,867	87,413	90,035	92,736	95,519	98,384	101,336	104,376	107,507	110,732	114,054	117,476	121,000	124,630	128,369
Sick Leave Insurance	4,390	4,904	5,051	5,203	5,359	5,519	5,685	5,856	6,031	6,212	6,399	6,591	6,788	6,992	7,202	7,418	7,640	7,869	8,106	8,349	8,599	8,857	9,123	9,397	9,678	9,969	10,268	10,576	10,893	11,220
<u>less: Charged to New Installations</u>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>less: Quandialla Overheads & Supervision</u>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>less: Contributions to Overheads</u>	223,782	237,832	244,967	252,316	259,885	267,682	275,712	283,984	292,503	301,278	310,317	319,626	329,215	339,091	349,264	359,742	370,534	381,650	393,100	404,893	417,039	429,551	442,437	455,710	469,382	483,463	497,967	512,906	528,293	544,142
Meter Reading	74,205	83,497	86,002	88,582	91,240	93,977	96,796	99,700	102,691	105,772	108,945	112,213	115,580	119,047	122,619	126,297	130,086	133,989	138,008	142,149	146,413	150,805	155,330	159,989	164,789	169,733	174,825	180,070	185,472	191,036
Meter Reading	74,205	83,497	86,002	88,582	91,240	93,977	96,796	99,700	102,691	105,772	108,945	112,213	115,580	119,047	122,619	126,297	130,086	133,989	138,008	142,149	146,413	150,805	155,330	159,989	164,789	169,733	174,825	180,070	185,472	191,036
Depot Expenses	76,909	74,683	76,924	79,231	81,608	84,057	86,578	89,176	91,851	94,606	97,445	100,368	103,379	106,480	109,675	112,965	116,354	119,844	123,440	127,143	130,957	134,886	138,933	143,101	147,394	151,815	156,370	161,061	165,893	170,870
Depot Expenses	76,909	74,683	76,924	79,231	81,608	84,057	86,578	89,176	91,851	94,606	97,445	100,368	103,379	106,480	109,675	112,965	116,354	119,844	123,440	127,143	130,957	134,886	138,933	143,101	147,394	151,815	156,370	161,061	165,893	170,870
Work Health & Safety (WHS)	17,598	9,664	9,954	10,253	10,560	10,877	11,203	11,539	11,886	12,242	12,609	12,988	13,377	13,779	14,192	14,618	15,056	15,508	15,973	16,452	16,946	17,454	17,978	18,517	19,073	19,645	20,234	20,841	21,467	22,111
Work Health & Safety (WHS)	17,598	9,664	9,954	10,253	10,560	10,877	11,203	11,539	11,886	12,242	12,609	12,988	13,377	13,779	14,192	14,618	15,056	15,508	15,973	16,452	16,946	17,454	17,978	18,517	19,073	19,645	20,234	20,841	21,467	22,111
Dams & Weirs	119,976	116,794	120,298	123,907	127,624	131,453	135,397	139,458	143,642	147,951	152,390	156,962	161,671	166,521	171,516	176,662	181,962	187,421	193,043	198,834	204,799	210,943	217,272	223,790	230,504	237,419	244,541	251,878	259,434	267,217
Lake Rowlands - Foreshore Management	12,510	12,407	12,780	13,163	13,558	13,965	14,384	14,815	15,260	15,717	16,189	16,675	17,175	17,690	18,221	18,767	19,330	19,910	20,508	21,123	21,757	22,409	23,082	23,774	24,487	25,222	25,978	26,758	27,561	28,387
- Algal Control	3,589	6,919	7,127	7,340	7,561	7,787	8,021	8,262	8,510	8,765	9,028	9,299	9,578	9,865	10,161	10,466	10,780	11,103	11,436	11,779	12,133	12,497	12,872	13,258	13,655	14,065	14,487	14,922	15,369	15,830
- Council Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Maintenance	53,343	54,553	56,189	57,875	59,611	61,400	63,242	65,139	67,093	69,106	71,179	73,314	75,514	77,779	80,113	82,516	84,991	87,541	90,167	92,872	95,659	98,528	101,484	104,529	107,665	110,894	114,221	117,648	121,177	124,813
- Check Levels & Destratifi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Other	39,779	42,915	44,202	45,529	46,894	48,301	49,750	51,243	52,780	54,363	55,994	57,674	59,404	61,187	63,022	64,913	66,860	68,866	70,932	73,060	75,252	77,509	79,835	82,230	84,696	87				

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

OPERATING STATEMENT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Reservoirs - Operations Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blayney Area	Reservoir Operations to be split up from Reservoir Maintenance																													
Canowindra Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grenfell Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Section Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reservoirs - Maintenance	39,192	34,603	35,641	36,710	37,811	38,945	40,114	41,317	42,557	43,833	45,148	46,503	47,898	49,335	50,815	52,339	53,910	55,527	57,193	58,908	60,676	62,496	64,371	66,302	68,291	70,340	72,450	74,623	76,862	79,168
Blayney Area	10,663	11,359	11,700	12,051	12,413	12,785	13,169	13,564	13,971	14,390	14,821	15,266	15,724	16,196	16,682	17,182	17,698	18,228	18,775	19,339	19,919	20,516	21,132	21,766	22,419	23,091	23,784	24,498	25,232	25,989
Canowindra Area	14,664	14,394	14,826	15,270	15,728	16,200	16,686	17,187	17,702	18,234	18,781	19,344	19,924	20,522	21,138	21,772	22,425	23,098	23,791	24,504	25,240	25,997	26,777	27,580	28,407	29,260	30,137	31,041	31,973	32,932
Grenfell Area	3,185	3,258	3,356	3,457	3,560	3,667	3,777	3,891	4,007	4,127	4,251	4,379	4,510	4,645	4,785	4,928	5,076	5,229	5,385	5,547	5,713	5,885	6,061	6,243	6,430	6,623	6,822	7,027	7,237	7,455
Other - Mowing	7,827	2,829	2,914	3,001	3,091	3,184	3,280	3,378	3,479	3,584	3,691	3,802	3,916	4,034	4,155	4,279	4,408	4,540	4,676	4,816	4,961	5,110	5,263	5,421	5,583	5,751	5,923	6,101	6,284	6,473
D-Section Area	2,853	2,762	2,845	2,930	3,018	3,109	3,202	3,298	3,397	3,499	3,604	3,712	3,823	3,938	4,056	4,178	4,303	4,432	4,565	4,702	4,843	4,989	5,138	5,292	5,451	5,615	5,783	5,957	6,135	6,319
Pumping Station - Operation Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blayney Area	Pumping Stati																													
Canowindra Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grenfell Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Section Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumping Station - Maintenance & Repair	80,473	79,097	81,470	83,914	86,431	89,024	91,695	94,446	97,279	100,198	103,204	106,300	109,489	112,773	116,157	119,641	123,230	126,927	130,735	134,657	138,697	142,858	147,144	151,558	156,105	160,788	165,611	170,580	175,697	180,968
Blayney Area	25,740	23,565	24,272	25,000	25,750	26,522	27,318	28,138	28,982	29,851	30,747	31,669	32,619	33,598	34,606	35,644	36,713	37,815	38,949	40,117	41,321	42,561	43,837	45,153	46,507	47,902	49,339	50,820	52,344	53,914
Canowindra Area	28,530	28,706	29,568	30,455	31,368	32,309	33,279	34,277	35,305	36,364	37,455	38,579	39,736	40,928	42,156	43,421	44,724	46,065	47,447	48,871	50,337	51,847	53,402	55,004	56,654	58,354	60,105	61,908	63,765	65,678
Grenfell Area	15,170	15,658	16,128	16,612	17,110	17,623	18,152	18,697	19,257	19,835	20,430	21,043	21,674	22,325	22,994	23,684	24,395	25,127	25,880	26,657	27,457	28,280	29,129	30,002	30,903	31,830	32,784	33,768	34,781	35,825
D-Section Area	11,033	11,168	11,503	11,848	12,203	12,569	12,946	13,335	13,735	14,147	14,571	15,009	15,459	15,923	16,400	16,892	17,399	17,921	18,459	19,012	19,583	20,170	20,775	21,399	22,041	22,702	23,383	24,084	24,807	25,551
Pumping Station - Energy Costs	251,466	232,874	239,860	247,056	254,468	262,102	269,965	278,064	286,406	294,998	303,848	312,963	322,352	332,023	341,983	352,243	362,810	373,695	384,905	396,453	408,346	420,597	433,214	446,211	459,597	473,385	487,587	502,214	517,281	532,799
Blayney Area	91,322	96,460	99,354	102,335	105,405	108,567	111,824	115,178	118,634	122,193	125,859	129,634	133,523	137,529	141,655	145,905	150,282	154,790	159,434	164,217	169,143	174,218	179,444	184,828	190,372	196,084	201,966	208,025	214,266	220,694
Canowindra Area	87,423	28,558	29,415	30,297	31,206	32,143	33,107	34,100	35,123	36,177	37,262	38,380	39,531	40,717	41,939	43,197	44,493	45,828	47,202	48,618	50,077	51,579	53,127	54,721	56,362	58,053	59,795	61,588	63,436	65,339
Grenfell Area	63,830	61,669	63,519	65,425	67,388	69,409	71,492	73,636	75,845	78,121	80,464	82,878	85,365	87,926	90,563	93,280	96,079	98,961	101,930	104,988	108,137	111,382	114,723	118,165	121,710	125,361	129,122	132,995	136,985	141,095
D-Section Area	8,891	46,186	47,572	48,999	50,469	51,983	53,543	55,149	56,803	58,508	60,263	62,071	63,933	65,851	67,826	69,861	71,957	74,116	76,339	78,629	80,988	83,418	85,920	88,498	91,153	93,887	96,704	99,605	102,593	105,671

CENTRAL TABLELANDS *Water* - 30 Year Financial Plan

NON OPERATING EXPENSES	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Acquisition of Assets	1,387,046	1,452,230	3,552,759	3,568,892	3,070,508	1,109,808	2,909,233	3,424,724	4,128,846	3,441,200	7,133,064	5,993,693	4,349,625	2,184,096	7,484,820	3,355,146	1,143,978	1,279,942	1,213,646	1,270,056	1,628,045	15,465,580	1,365,970	1,524,784	1,449,157	1,492,632	1,537,411	1,583,533	1,631,039	111,679,970
Funding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vehicle Replacements	407,000	370,000	381,100	392,533	404,309	416,438	428,931	441,799	455,053	468,705	482,766	497,249	512,167	527,532	543,357	559,658	576,448	593,741	611,554	629,900	648,797	668,261	688,309	708,958	730,227	752,134	774,698	797,939	821,877	846,533
Office Furniture & Equipment	-	-	-	-	-	-	1,350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meter Replacement Programme	102,189	105,746	108,918	112,186	115,551	119,018	122,589	126,266	130,054	133,956	137,974	142,114	146,377	150,768	155,291	159,950	164,749	169,691	174,782	180,025	185,426	190,989	196,719	202,620	208,699	214,960	221,408	228,051	234,892	241,939
Provision for Pump Replacements	45,880	46,350	47,741	49,173	50,648	52,167	53,732	55,344	57,005	58,715	60,476	62,291	64,159	66,084	68,067	70,109	72,212	74,378	76,609	78,908	81,275	83,713	86,225	88,811	91,476	94,220	97,047	99,958	102,957	106,045
Telemetry	-	-	-	-	-	268,830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reticulation Mains Renewals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- As determined	-	-	-	-	-	253,354	260,955	-	-	268,783	276,847	285,152	293,707	302,518	311,593	320,941	330,570	340,487	350,701	361,222	372,059	383,221	394,717	406,559	418,756	431,318	444,258	457,586	471,313	485,452
- Millthorpe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- South Canowindra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Cudal AC Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Carcoar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reticulation Mains Extensions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CWFP & BWFP - Mech & Elec refurb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CWFP - Mech & Elec refurb	-	-	-	-	-	-	-	-	1,384,234	1,384,234	-	-	-	-	-	-	-	-	-	-	-	2,356,566	-	-	-	-	-	-	-	-
CWFP - Low Level Storage	-	445,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CWFP - Repair Plenum Floor	200,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blayney WFP - Upgrade	400,000	300,000	-	-	-	-	-	-	-	-	-	-	-	876,753	6,321,389	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blayney Water Filtration Plant	-	-	-	-	-	-	-	75,630	-	-	-	-	87,680	-	-	-	-	101,645	-	-	-	-	-	-	117,835	-	-	-	-	-
Trunk Main Renewals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'K' Renewal	-	150,134	3,015,000	3,015,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'U' - 'C' to Cudal	-	-	-	-	-	-	130,810	1,946,700	1,946,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'C' - Mand to 'U'	-	-	-	-	-	-	-	-	-	280,000	4,780,000	4,780,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'B' - CWFP to Mand.	-	-	-	-	-	-	-	-	-	71,300	1,395,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'C' - 'U' to G'gong	-	-	-	-	-	-	-	-	-	-	-	226,888	320,941	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'D' - CWFP to B/Ck	-	-	-	-	2,500,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'A' - L/R to CWFP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85,122	2,244,488	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'F' B/Ck to M'Thorp	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'P' - 'C' to Somers	-	-	-	-	-	-	-	-	-	-	-	-	36,122	260,441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk Main 'X' - L/R to Blayney	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170,244	7,069,698	-	-	-	-	-	-	-	-
Flood Restoration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gooloogong Bridge Trunk Main relocation	204,977	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lake Rowlands Remediation	-	-	-	-	-	-	1,910,866	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lake Rowlands Replacement Project	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110,000,000
Service Reservoirs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170,244	4,713,132	-	-	-	-	-	-	-
Administration Building	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Admin Building Refurbishment (Indoor)	22,000	15,000	-	-	-	-	-	-	-	15,000	-	-	-	-	-	-	-	-	-	-	20,000	-	-	-	-	-	-	-	-	-
Admin Building Refurbishment (Outdoor)	5,000	20,000	-	-	-	-	-	-	-	604,707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Admin Building Replacement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT Link Upgrade (BSC & CTW)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gooloogong Bore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Bore Gooloogong	-	-	-	-	-	-	-	-	155,800	155,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refurbish Gooloogong Bore	-	-	-	-	-	-	-	778,984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caragabal Investigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of Loans	359,004	382,708	409,096	436,725	466,219	497,487	531,304	413,245	214,679	232,197	251,145	271,638	293,804	317,778	343,709	371,755	402,090	434,901	470,389	508,773	550,289	595,192	643,760	696,291	753,108	814,562	881,030	952,912	-	-
Principal on Loans - Quandialla	25,703	27,400	29,289	31,267	33,379	35,618	38,039	29,586	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Capital Works	333,301	355,308	379,807	405,457	432,840	461,869	493,265	383,659	214,679	232,197	251,145	271,638	293,804	317,778	343,709	371,755	402,090	434,901	470,389	508,773	550,289	595,192	643,760	696,291	753,108	814,562	881,030	952,912	-	-
Transfers to Reserves	958,194	941,897	988,159	1,036,943	1,088,391	1,142,656	1,199,900	1,260,292	1,324,014	1,391,257	1,462,223	1,537,126	1,616,194	1,699,666	1,787,798	1,880,857	1,979,130	2,082,917	2,192,539	2,308,335	2,430,661</									

