



Mid-Western
REGIONAL COUNCIL

Strategic Business Plan for Water Supply Services

June 2008



Acknowledgement

This Strategic Business Plan was prepared by Mid-Western Regional Council with the assistance of the Strategic Water Management Unit of Sustainable Water Solutions, NSW Department of Commerce.

The Plan is based on a workshop held on 15 - 16 February 2007 in which senior Council staff were represented.

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Mid-Western Regional Council Strategic Business Plan for Water Supply June 2008

Summary

Introduction

This Strategic Business Plan covers the development and operation of Mid-Western Regional Council's Water Supply Schemes. It provides supporting information for Council's Management Plan which is developed during February-November each year and updated annually.

Corporate Vision

Council's corporate vision is:

A progressive and prosperous community that we proudly call home.

Corporate Mission

The corporate mission of the Council is:

To pursue a high standard of living for our citizens, preserving the diversity and character of the Council's region and natural environment

Corporate Objective for Water Supply

Council has adopted the following objective for its water supply services:

To supply water in an efficient manner to the agreed and currently recognised health, environmental and other community standards with minimal restrictions and with the flexibility to promote and meet development demands within the Region

Council's corporate policies and objectives also 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 Mid-Western Regional Council operates 3 separate water supply schemes - at Mudgee, Gulgong and Rylstone. The Rylstone scheme also services the town of Kandos and the villages of Charbon and Clandulla. There are no plans to service to any other villages that are currently not serviced.

The Mudgee Water Supply scheme services a population of approximately 9800 people and the last major augmentation of Mudgee's water supply system occurred with the construction of a new water treatment plant in 2006.

Gulgong's town water supply system is supplied from the Cudgegong River with a new water treatment plant completed and commissioned in 2006.

Water is sourced from the Rylstone Dam located in the upper reaches of the Cudgegong River and is pumped to a water treatment plant at Rylstone. Treated water is pumped from the water treatment plant through the Rylstone distribution system to reservoirs located near the Rylstone hospital. A pumping station drawing from the Rylstone reservoirs delivers water to Kandos. Further pumping delivers water from Kandos to Charbon and from Charbon to Clandulla.

A more detailed description and service area maps of Mudgee, Gulgong and Rylstone water supply schemes are presented in Part A of this Business Plan.

Operating Environment Review

Review of the operating environment 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 that water supply services are available to support future development of the Region
- Meeting DWE Best Practice Management Guidelines including Integrated Water Cycle Management (IWCM)
- Security of water supply, particularly to Rylstone, Kandos, Charbon and Clandulla
- Equitable service pricing including developer charges across the Region
- Managing and funding long-term capital works program

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 on the following page.

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 of this Plan.

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 10 years include:

- Investigating alternative water supplies for Rylstone/Kandos and villages.
- Refurbishing Redbank Creek dam
- Constructing a powdered activated carbon plant at the Mudgee WTP
- Constructing an off-river raw water storage at Gulgong
- Constructing an additional clear water reservoir for Gulgong
- Alternate water supply scheme for parks and gardens
- Augmentation of Rylstone filtration plant
- Constructing an additional clear water reservoir for Mudgee
- Metering of Council's Parks/Reserves
- Mains replacement
- Water meters replacement


Summary of Levels of Service Improvements





DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target (2012)
AVAILABILITY OF SERVICE			
Normal Quantity Available:			
Domestic Peak day	L/tenement/day	3000	3000
Domestic Annual	kL/tenement/yr	370	350
Total Annual Average Consumption	ML/yr	Mudgee 1800 Gulgong 500 Rylstone 500	Mudgee 2000 Gulgong 600 Rylstone 600
Total Peak Daily Consumption	ML/day	Mudgee 11 Gulgong 4 Rylstone 3	Mudgee 14 Gulgong 5 Rylstone 4
Peak/Average daily consumption	%	300	250
Pressure:			
Min. pressure when delivering 0.15 L/sec	Metres head	10	20
Max. static pressure	Metres head	90	70
Consumption Restrictions in Droughts:			
Level of restriction applied through a repeat of the worst drought on record	% normal usage	M/G - 100 Ryl - 60	M/G - 100 Ryl - 80
- Average frequency of restrictions	No./ 10 yr period	10	1
Supply Interruptions to Consumers			
Unplanned:			
- Maximum duration	Hours	4	<4
- Frequency	No./year	Major – 30 Minor - 200	25 <150
Customer Enquiries/ Complaints:			
Personal/ Oral	Working Days	2	1
Written	Working Days	10	10
Service Provision:			
Time to provide a domestic individual connection to water supply in serviced area (95% of times)	Working days	20	10

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target (2012)
WATER QUALITY			
(Should meet Drinking Water Quality Guidelines of Australia, NHMRC&AWRCM 1996)			
Percentage Compliance with 2001 NHMRC / AWRCM Australian Drinking Water Quality Guidelines:			
Physical parameters	%	80	100
Chemical parameters	%	90	100
Total coliforms	%	95	100
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
<p>Customer Service</p> 	<p>Provide services that meet the agreed LOS, that are economically feasible and financially affordable, and that meet health and environmental requirements</p>	<p>Compliance with levels of service and action planning and meet performance targets</p>
	<p>To provide services to existing areas at current levels and extend to new residential and industrial areas on a user pays basis</p>	<p>Provide service in advance of demand where economically viable Review and update Development Servicing Plans (DSP) by June 2008</p>
	<p>Effective demand management strategy that minimises water demand and wastage</p>	<p>Prepare Demand Management Plan by December 2009</p>
	<p>Ensure town water supplies have sufficient storage so as not to fail in times of drought</p>	<p>Review and update Drought Management Plan by December 2008</p>
	<p>An equitable pricing policy that supports current and future service provision and encourages efficient water use based on full cost recovery and user pays basis and maximise revenue from grants and other sources</p>	<p>Implementation of developer charges from July 2008 Implementation of best practice pricing from July 2008</p>
	<p>Provide a high level of customer satisfaction with reduced level of substantiated complaints and keep the customers informed of significant issues</p>	<p>Implement new customer request system by September 2008 Conduct annual customer satisfaction survey</p>
	<p>Seek community feedback with regard to service targets and prior to any major decisions regarding significant changes in service levels</p>	<p>Consultation for water supply augmentation strategies</p>

Key Result Area	Objective	Performance Target
Environment 	<p>An ecologically sustainable scheme whose environmental impacts, especially in sensitive areas, are acceptable to the community</p>	<p>Prepare IWCM plan by December 2008</p> <p>All environmental impacts, which occur are acceptable to Government regulatory authorities and the majority of the local community</p>
Asset Management 	<p>Develop operations plan and procedures to achieve levels of service with due diligence and effective use of technology so as to ensure a reliable and safe service at minimum operating costs</p>	<p>Undertake operations analysis by December 2008</p> <p>No failures to deliver agreed Levels of Service due to operations related problems</p>
	<p>Increase the reliability of systems, reduce life cycle and ongoing costs, allow for appropriate financial planning and ensure levels of service are maintained</p>	<p>Review maintenance strategy by June 2009</p>
	<p>Capital works program provides agreed levels of service at optimal life-cycle costs to meet social, economic and environmental considerations</p>	<p>No failures to deliver agreed Levels of Service due to lack of infrastructure and sufficient infrastructure is in place to cater for the projected developments</p>
Human Resources 	<p>Maintain an appropriate staff structure and staff numbers with the necessary training and skills to effectively manage the water supply schemes and provide agreed and required Levels of Service</p>	<p>Review and update HR Plan by June 2008</p>
Finance 	<p>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</p>	<p>Quarterly review and annual updating of financial plan</p>

Summary of Projected Financial Position

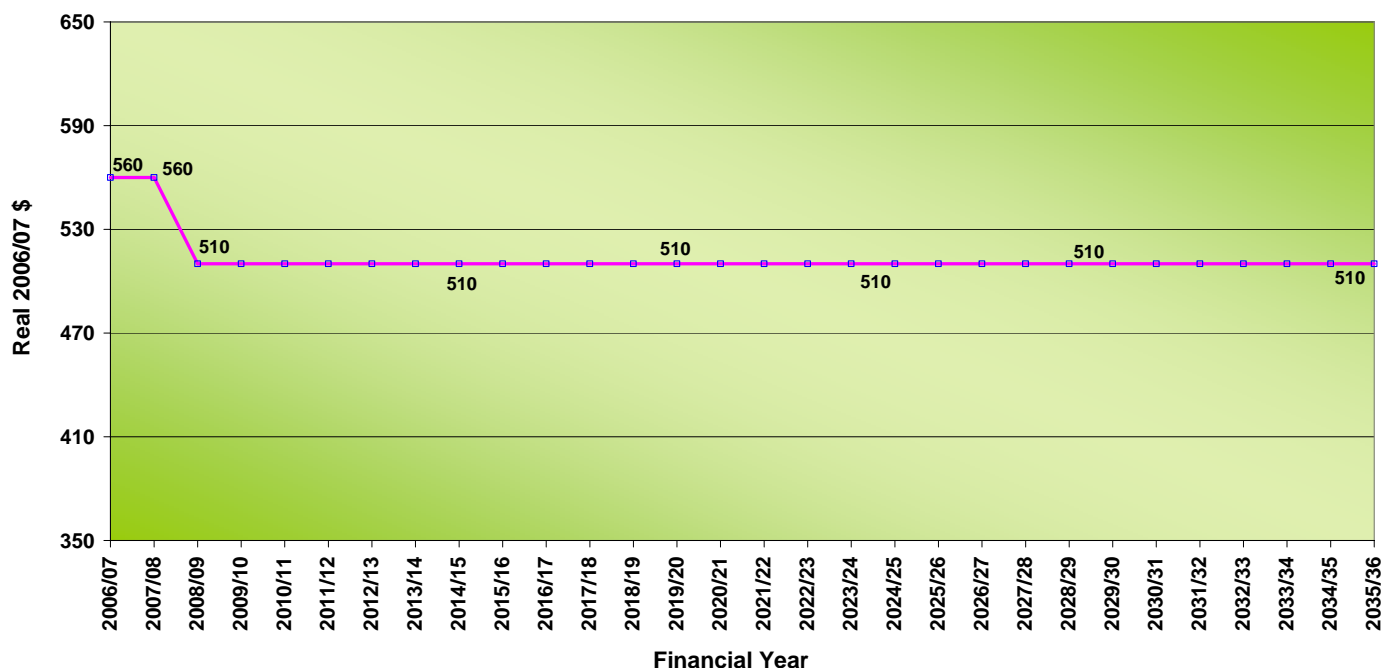
Following Table presents the summary of projected financial position of Mid-Western Regional Council's water fund over the next 30 years at five-year intervals. The typical annual residential bill forecast for the same period is shown graphically below this Table. The values are all in 2006/07 dollars.

Summary of Projected Financial Position

2006/07 \$ (000)	2006/07	2010/11	2015/16	2020/21	2025/26	2030/31	2035/36
Estimated Total Revenue	4,633	5,281	5,907	6,427	6,903	7,673	8,480
Estimated Total Expenditure	4,337	4,863	5,153	5,440	5,843	6,260	6,689
Operating Surplus / (Deficit)	296	418	754	987	1,060	1,412	1,791
Acquisition of Assets	867	3,642	1,967	577	5,427	477	527
Principal Loan Payments	231	370	440	372	196	0	0
Borrowings Outstanding	5,876	8,121	5,061	2,350	512	0	0
Cash and Investments	4,622	2,003	3,253	5,692	3,707	10,285	21,355
Total Assets	53,180	57,193	57,910	59,314	62,198	67,129	73,123
Total Liabilities	6,339	8,631	5,647	3,009	1,240	799	873

Financial modelling has demonstrated that owing to the high projected growth rate, typical residential bills, measured in 2006 dollars, can be decreased to \$510 p.a. from the present (2007/08) level of \$560 p.a. from year 2008/09 onwards throughout the plan period. The projected level of residential charges is sufficient to maintain liquidity with a minimum of \$1,000,000 of cash in hand over the period. The typical residential bill projections are graphically presented in the following Figure.

Typical Residential Water Bill



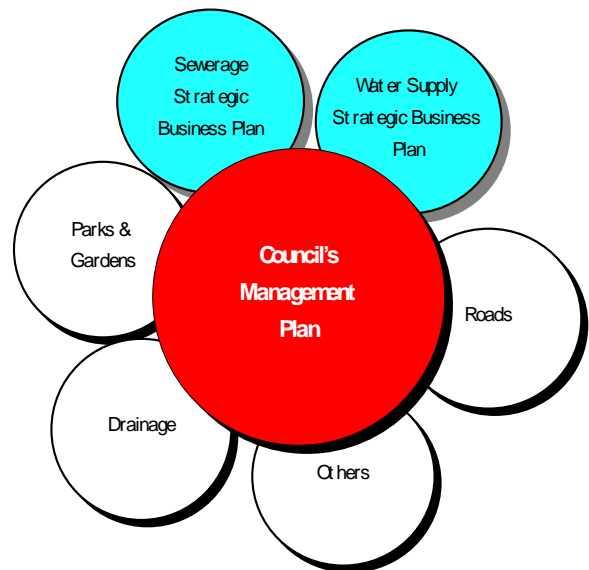
The large capital works to be taken up in the near future will be funded through borrowings. The borrowing outstanding is expected to reach a peak of \$ 8,121 K in 2010/11, but all the loans will be retired towards by the end of the 2028/29.

See Part C for more financial projection details.

Why This Plan Has Been Developed

The Local Government Act 1993 requires Council to prepare **Management Plans** and **Annual Reports**. The **Management Plan** must cover each of Council's principal 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 activities, in this case the **water supply** services. The relationship between Council's Management Plan and the Strategic Business Plans for the various areas is shown above.

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 Management Plan focuses on 3 to 5 years.

Strategic Planning Benefits

The strategic business plan aims to:

- Provide information for Council's Management Plan;
- Detail information for ratepayers and customers, elected representatives, management, staff, Government and relevant external bodies;
- Focus attention on the key issues affecting day to day operations;
- Explore how to share the limited resources available in an equitable manner;
- Demonstrate to stakeholders that the schemes are well managed;

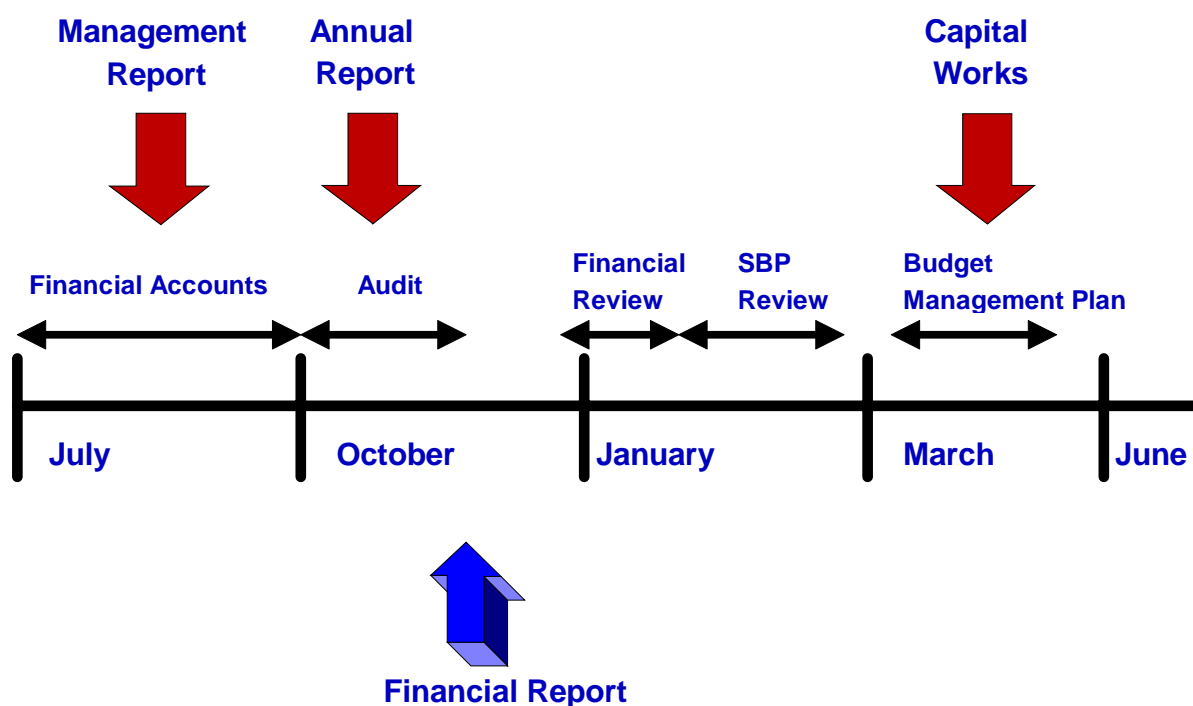
- Identify financial and other resources required to operate these services on a commercial basis;
- Provide a long term price path for each service;
- Assist in development of an affordable capital works program;
- Enable Council to model 'what-if' scenarios and see their rating impact; and
- Allow future financial performance indicators to be calculated, such as return on capital invested.

Strategic Business Plans are considered desirable for all councils but specifically DWE 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:

- Department of Local Government (DLG) – Competitive neutrality;
- Council of Australian Governments (COAG) – National water Reform, National competition policy;
- Local Government and Shires Associations (LGSA) – Benchmarking; and
- Independent Pricing and Regulatory Tribunal (IPART) – Pricing Principles.

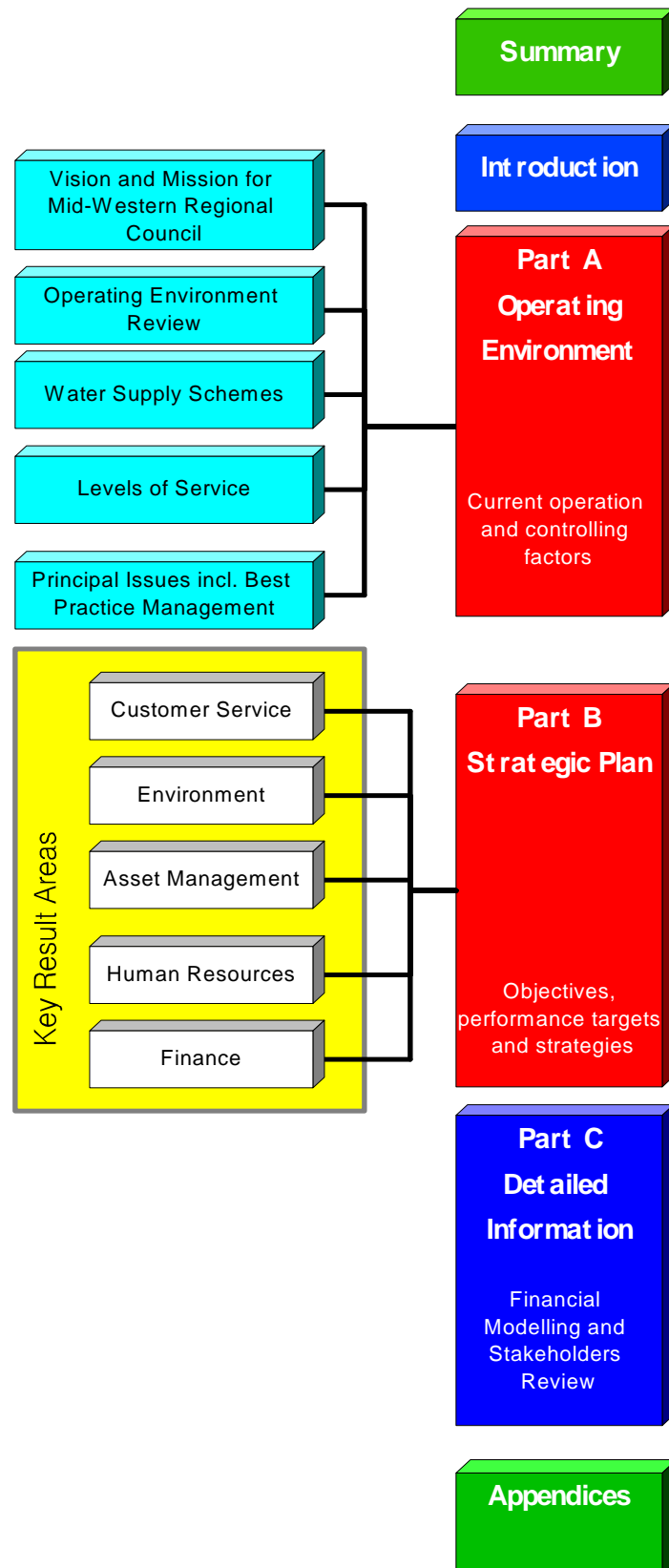
The Plan also communicates scheme information to stakeholders and demonstrates that the scheme is being well managed.

Planning Cycle



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: OPERATING ENVIRONMENT

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 Mid-Western Regional Council looking to a 30-year planning horizon
- Operating Environment
- Review of Existing Water Supply Scheme
- 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:

A progressive and prosperous community that we proudly call home.

Corporate Mission

The corporate mission of the Council is:

To pursue a high standard of living for our citizens, preserving the diversity and character of the Council's region and our natural environment

Corporate Objective for Water Supply

Council has adopted the following objective for its water supply services:

To supply water in an efficient manner to the agreed and currently recognised health, environmental and other community standards with minimal restrictions to supply and with flexibility to promote and meet development demands within the Region

The implications of Council's vision and mission statements for the provision of the water supply services are:

- To strive for 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

In order to continue effective service provision Council needs the support of the community. For this to occur, however, the general public needs to become more aware and knowledgeable about water supply planning issues.

Operating Environment

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

- Age profile – the trend of aging population with higher middle-aged (40-64 years) and senior population (65-79 years) will continue
- Falling occupancy rate – expected to reach the natural minimum in line with the national trend away from large families, leading to more households with less people per ET.
- Strong commercial development is expected to continue resulting in more people migrating to the region generating greater demand for accommodation and water services
- Number of wineries and fruit/vegetable processing industries, cattle/sheep farms is increasing
- A new mine (Moolarben) and the expansion of an existing mine (Ulan) are expected to be operational within next 1-3 years

Public Health

- The Region provides good medical services with hospitals in the townships of Mudgee, Gulgong and Rylstone.
- Council has commissioned the NSW Rural Doctors Network to study the viability of increased access to general health practitioners and allied health professionals in the Region.

Environment

- Dry land salinity is a persistent problem in many locations in the Region
- The Shire has good air quality and there is no need for extensive monitoring or air pollution control programs
- All creeks and rivers in the Council LGA are classified as environmentally sensitive river systems. There is a continuing need for a well-planned ongoing water quality monitoring program in the region encompassing the upper Cudgegong River

Transport

- Reconstruction of Castlereagh Highway between Lithgow – Mudgee has provided faster access to and from the Region to Sydney and major centres around the region
- Mudgee has reliable twice daily air link with Sydney

Tourism

- As part of their Economic Development Strategy, Council has recently completed a 10-year Tourism Study, which indicated that the Region continues to show strong growth in tourism, and the trend is expected to continue. The study has identified programs and funding requirements to provide a major boost to the growth of tourism in the Region

Technology and Information

- Sophisticated information management would provide better financial and operational analysis and lead to continual service improvement.
- Power supply in the Region is unreliable due to frequent outages. Council has provided sufficient water storage in Mudgee to cater for supply interruptions. Council will be investigating/upgrading reservoir capacities at Gulgong/Rylstone water supplies in the near future.
- Mobile coverage is improving. ADSL/ Broadband Internet is expanding covering all townships and 5 Km radius around them. Improvements will enhance opportunities for growth and development of the Region and improve quality of other services

Government Legislation/ Policy

- More regulation, stringent enforcement and fewer subsidies from Government is imposing heavy burden on Council responsibilities
- Water allocation changes to the Water Management Legislation in NSW means that Council will be constrained while seeking increase in water allocation from State Water
- Council has entered into a strategic alliance with Lithgow and Oberon Councils in many areas including asset management, information technology and tourism

Water Supply Scheme

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

Existing Schemes

The Mid-Western Regional Council operates 3 separate water supply schemes - at Mudgee, Gulgong and Rylstone. The Rylstone scheme also services the town of Kandos and the villages of Charbon and Clandulla. There are no plans to service to any other villages that are currently not serviced.

Council undertakes regular monthly sampling of the potable water supply systems in Mudgee, Gulgong and Rylstone. Samples are tested by the Department of Health laboratories or private registered laboratories. Mudgee, Gulgong and Rylstone water meets the health requirements of the Australian Drinking Water Guidelines.

Mudgee Scheme

The Mudgee Water Supply scheme serves a population of approximately 9800 people and is sourced from Windamere Dam on the Cudgegong River. There is also a separate reticulated bore water supply for irrigation of major parks, which is available for supplementing the potable system if required.

The last major augmentation of Mudgee's water supply system occurred with the construction of a new water treatment plant including lime-softening process in 2006. Fluoridation unit of the water treatment plant was commissioned in 2007.

Council plans to provide raw water supply to parks and gardens in the near future using ground water from the Glen Willow bore field that was previously a source for town water supply. Council is also considering using reclaimed water for parks irrigation.

Gulgong Scheme

Gulgong's town water supply also is sourced from Windamere Dam on the Cudgegong River. The new water treatment plant for Gulgong including lime-softening and powdered activated carbon adsorption process was commissioned in 2006. Fluoridation unit of the water treatment plant was commissioned in 2007.

Rylstone Scheme

Water is sourced from the Rylstone Dam located in the upper reaches of the Cudgegong River. Water is pumped to a conventional water treatment plant at Rylstone which comprises chemical coagulation, flocculation/clarification, filtration, disinfection, fluoridation, and allowance for activated carbon dosing. The water treatment plant was commissioned in 1962.

Treated water is pumped from the water treatment plant through the Rylstone distribution/reticulation system to reservoirs located near the Rylstone hospital. A pumping station drawing from the Rylstone reservoirs delivers water to Kandos. Further pumping delivers water from Kandos to Charbon and from Charbon to Clandulla.

Assets Summary

Mid-Western Regional Council has prepared an Asset Register and the locations of all major assets have been recorded. Council is currently installing asset management software to assist in managing the infrastructure.

No detailed condition audit of underground assets has been carried out yet so Council does not really know the cost or timing of the real replacement needs. At this stage it must be assumed that there is a growing liability that will have to be met at some point in time and the level of cost is indicated by the accumulated depreciation less cumulative replacement expenditure.

The estimated condition of Council's major water assets is presented in the following Table.

Asset	No./ Length/ Capacity	Year of Construction	Design Life (years)	Condition 1 – Poor 10 – Perfect
Storages	2			
– Redbank creek dam*		1894	100	1
– Rylstone dam		1954	100	6
Reservoirs	14	1950 - 2002	M&E – 40 Civil - 100	4 - 10
Bore/well fields	6	Various	-	6
Treatment Plant	3		M&E – 25	
– Mudgee		2005	Civil - 50	10
– Gulgong		2005		10
– Rylstone		1962		7
Pumping Stations	13	1950 - 2004	M&E – 25 Civil - 50	5 - 10
Trunk Mains		1930 - 2008	50 - 80	
– Mudgee	18.96 Km			8
– Gulgong	7.80 Km			7
– Rylstone	15.02 Km			5
Reticulation		1930 - 2008	50 - 80	
– Mudgee	140.31 Km			7
– Gulgong	41.24 Km			7
– Rylstone	38.66 Km			7
Telemetry	-	1998 - 2007	10	9

* - Redbank Creek Dam is no longer used to supply water to Mudgee. However, it requires extensive maintenance and upgrade works and these are programmed for 2008/09.

Figure 1 - Map of Mid-Western Regional Council

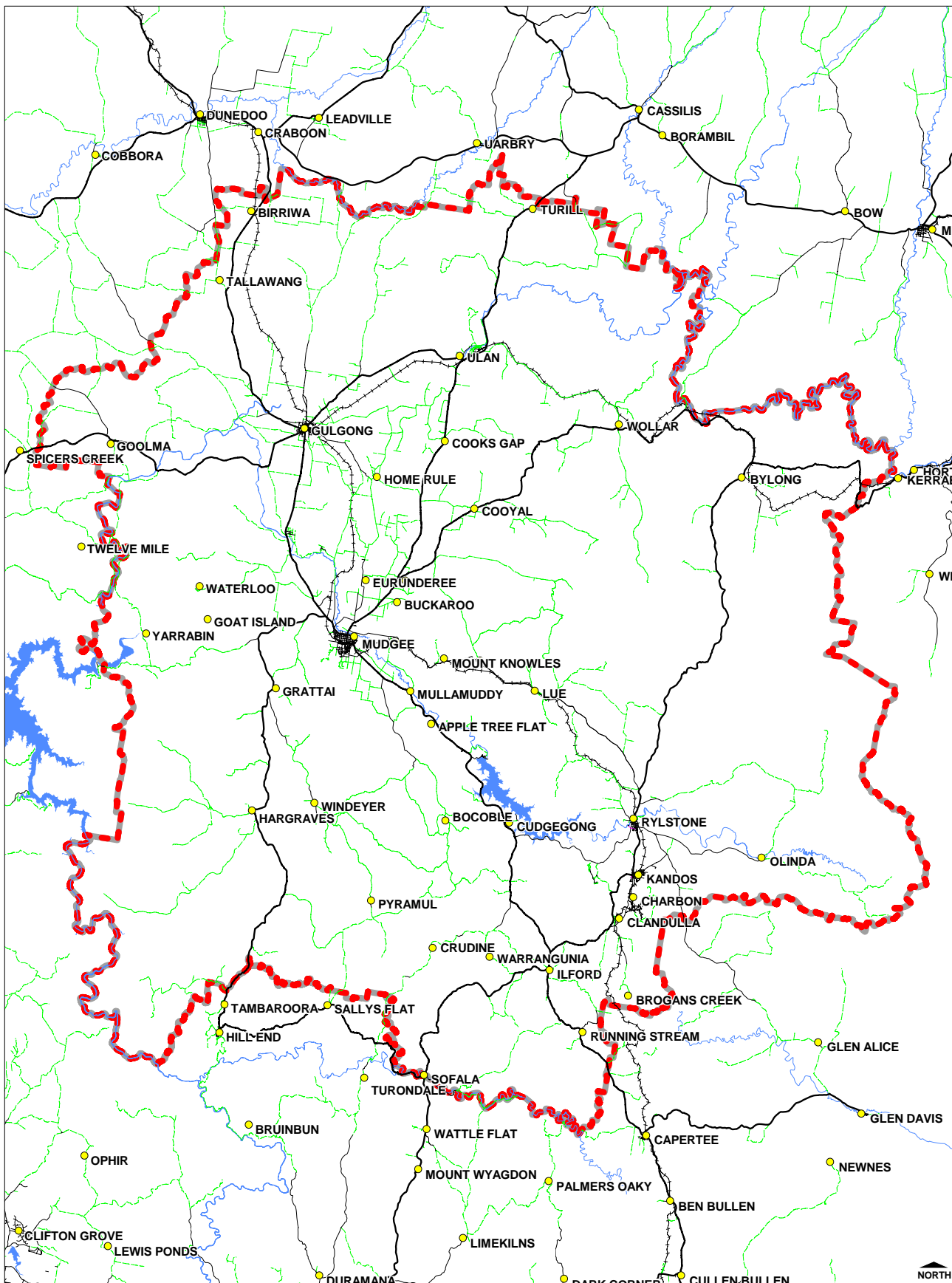


Figure 2 – Map of Mudgee Town Water Supply Service Area

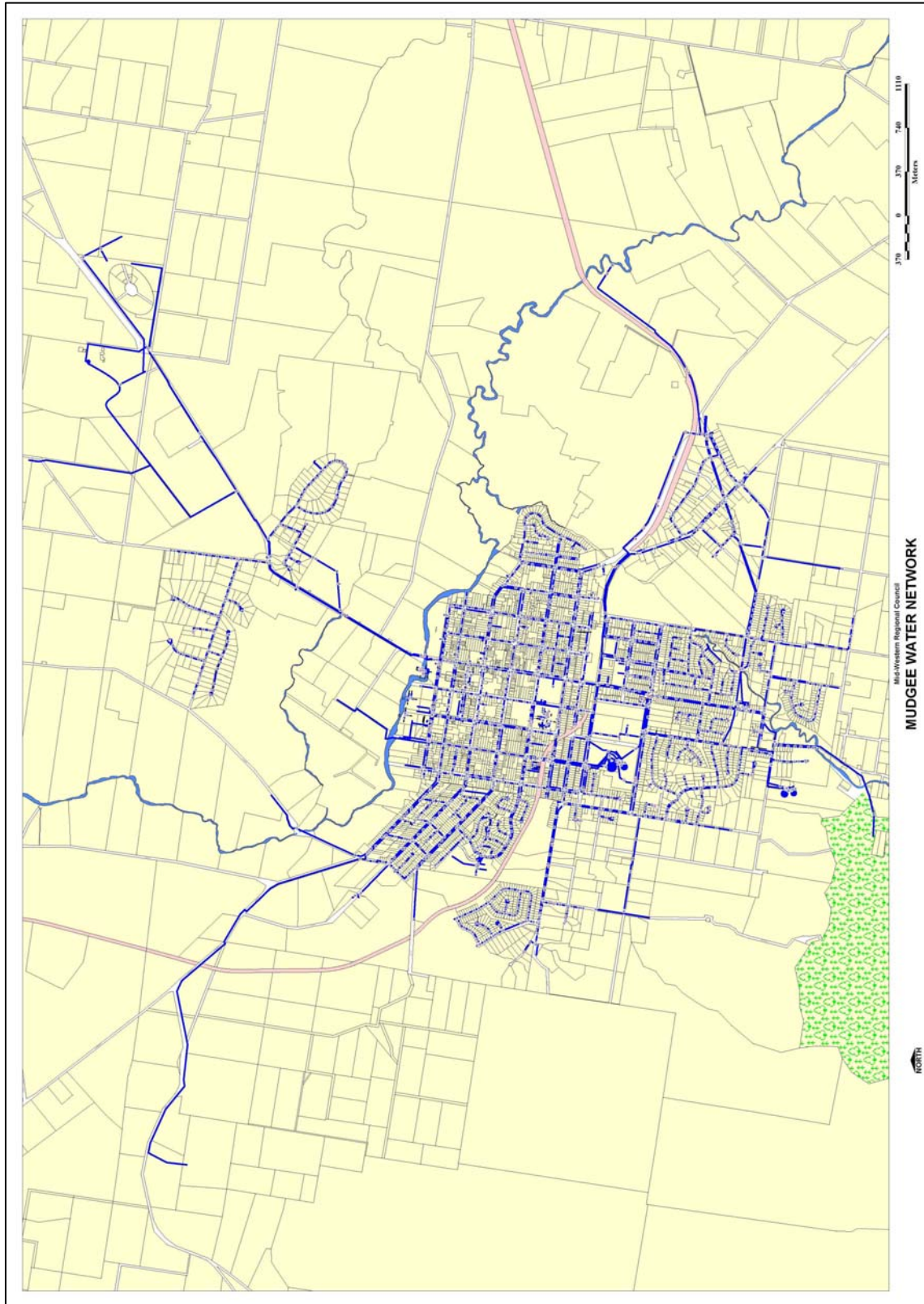


Figure 3 – Map of Gulgong Water Supply Service Area

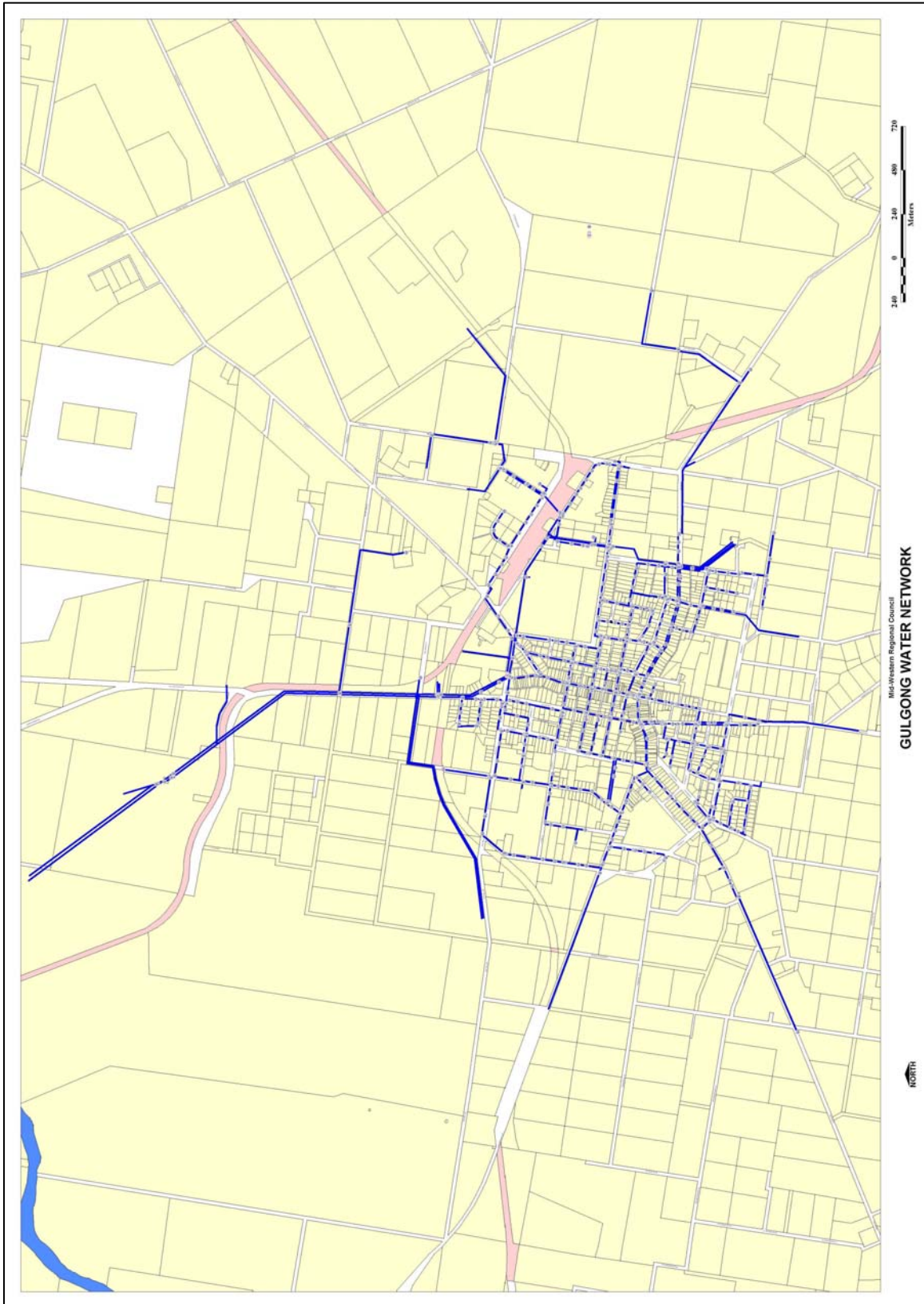


Figure 5 – Map of Kandos Water Supply Service Area

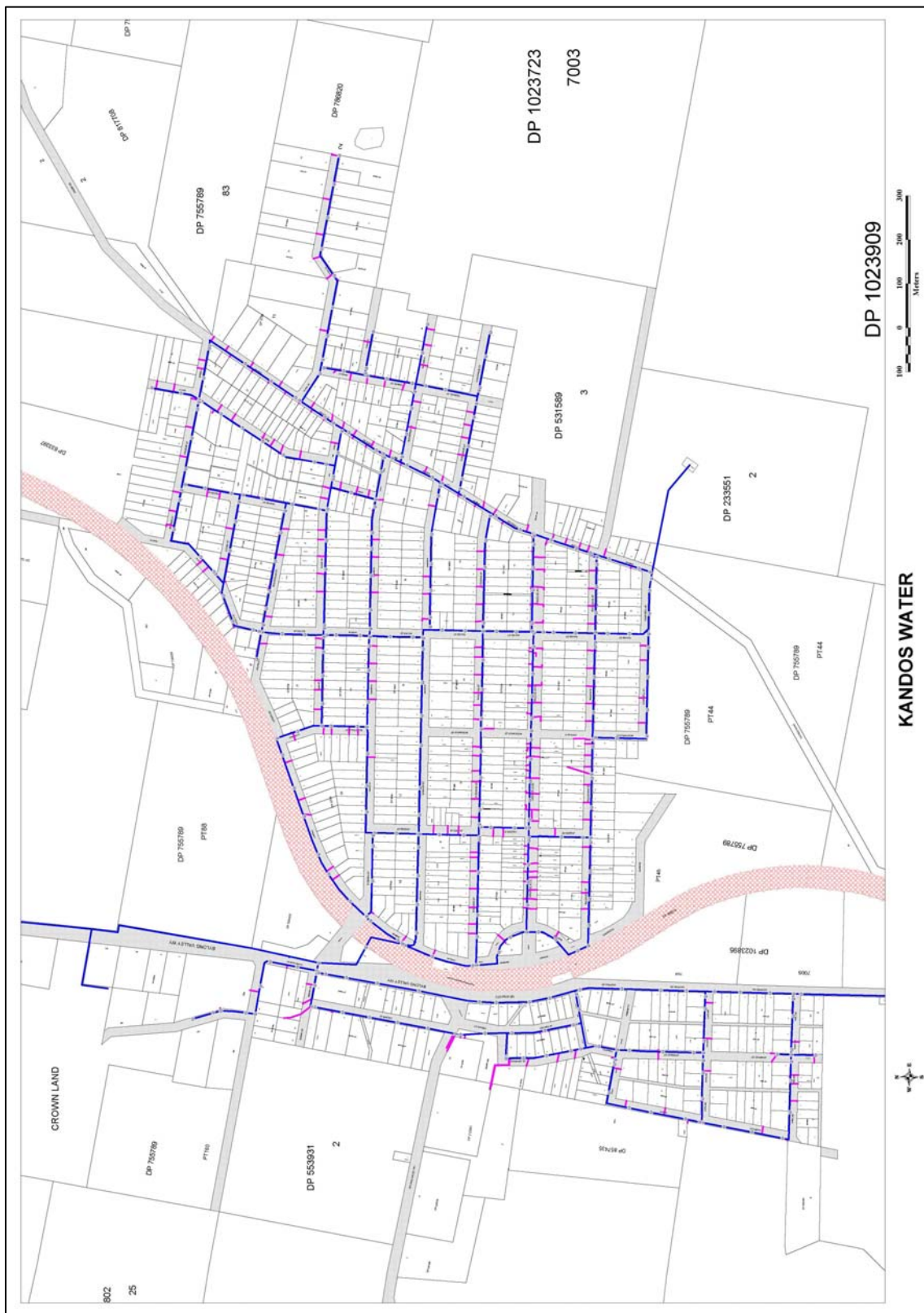
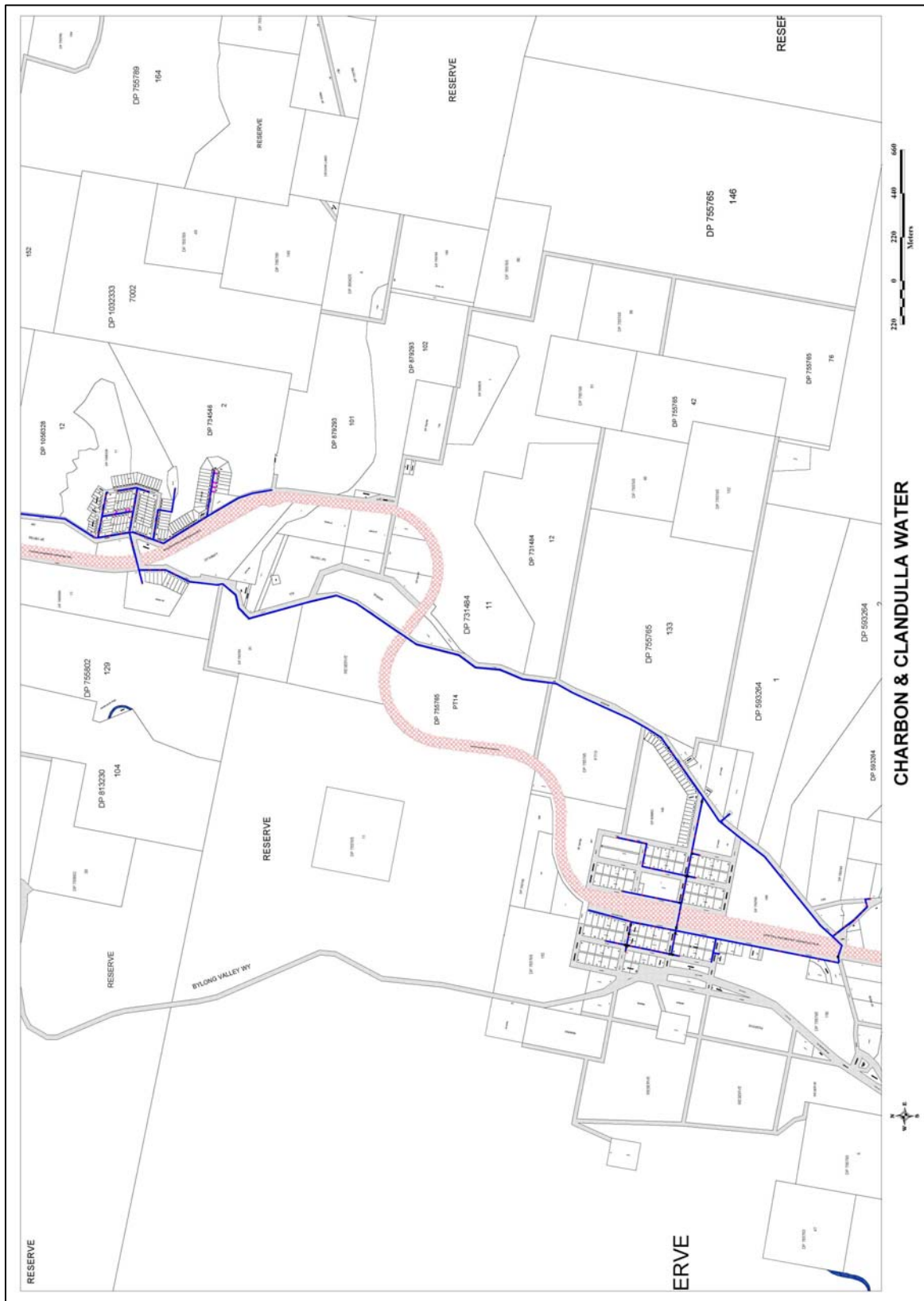


Figure 6 – Map of Charbon and Clandulla Water Supply Service Area



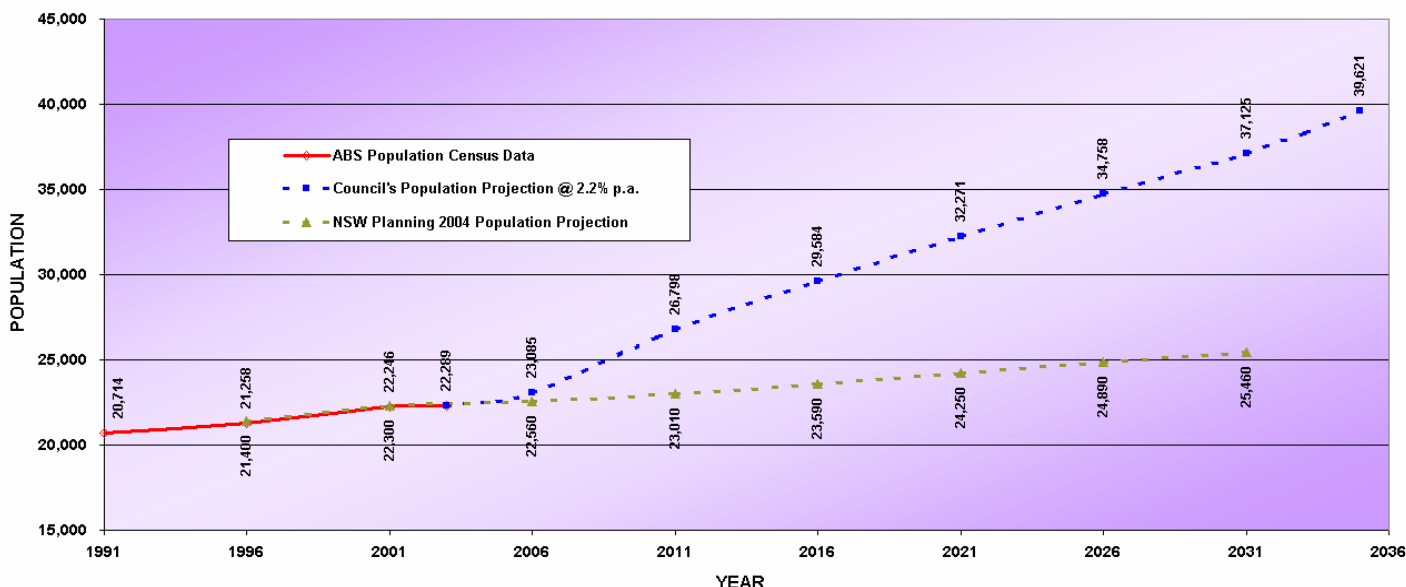
Future Development

Growth Projections

Mid-Western Regional Council area has had a robust growth in population for a major part of the 7-year period between 1996 and 2003 at a compounding growth rate of 0.6% p.a. (Source: ABS, *Estimated Residential Population Local Government Areas – NSW 1991 – 2001*, ref 3218.0).

The ABS Census data and the NSW Planning forecasts are shown graphically in the Figure below. Both these forecasts indicate increasing population growth for the Shire. Council has undertaken a review of population projections (2005-2031) in 2005 and has adopted a long-term average growth rate of 2.2% p.a. for future planning. Council is optimistic with its predictions believing that the economic development strategies it has in place should result in expected growth in population over the next thirty years. This growth rate has been adopted in this Strategic Business Plan and for financial modelling for the financial projections during the 30-year forecast period.

Figure 7 – Mid-Western Regional Council Population Growth



The projected number of water supply assessments for financial modelling purposes is based on the 6,595 (Residential: 6022; Non-residential: 573) assessments in June 2006 (Reference: *Mid-Western Regional Council Special Schedule 3 for the year 2005/06*) and factored up on a pro-rata basis in line with the above forecasts.

Capital Works Program

The following is a summary of the major water supply capital works planned for MWRC over the next 10 years. The justification for why they have been planned is also shown below

Proposed Capital Work	Year	Justification
Rylstone Water Supply Augmentation	2008/09	Security of Supply
Refurbishment of Redbank Creek dam	2008/09	Asset Renewal
Gulgong Turkey's Nest Dam	2008/09	Security of Supply
Gulgong additional clear water reservoir	2010/11	Growth related
Alternate water supply scheme for parks and gardens	2008 - 11	Managing demand to cater growth
Augmentation of Rylstone Filtration Plant	2009 - 11	Growth related
Mudgee additional clear water reservoir	20014/15	Growth related
Mains replacement	2008/09 onwards	Asset renewal/ replacement
Water meter replacement	2008/09 onwards	Asset renewal/ replacement

Stakeholders

Stakeholders are parties within Mid-Western Region 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. Internal stakeholders include:

- Residents/Families
- Property Owners/Ratepayers
- Councillors
- Pensioners
- Commercial and Industrial Consumers
- Council Employees
- Technical Management Staff
- Tourists
- Government Agencies
- Special Interest Groups

A review of stakeholder satisfaction to identify any perceived service gaps is presented in Appendix C.

Levels of Service

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 scheme's 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 WTP 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 – Water Supply

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target (2012)
AVAILABILITY OF SERVICE			
Normal Quantity Available:			
Domestic Peak day	L/tenement/day	3000	3000
Domestic Annual	kL/tenement/yr	370	350
Total Annual Average Consumption	ML/yr	Mudgee-1800 Gulgong-500 Rylstone- 500	Mudgee-2000 Gulgong-600 Rylstone- 600
Total Peak Daily Consumption	ML/day	Mudgee-11 Gulgong-4 Rylstone- 3	Mudgee-14 Gulgong-5 Rylstone- 4
Peak/Average daily consumption	%	300	250
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 residential areas serviced	100	100
Pressure:			
Min. pressure when delivering 0.15 L/sec	Metres head	10	20
Max. static pressure	Metres head	90	70
Consumption Restrictions in Droughts:			
Level of restriction applied through a repeat of the worst drought on record	% normal usage	M/G – 0 Ryl -60	M/G – 0 Ryl - 80
- Average frequency of restrictions	No./ 10 yr period	10	1
Supply Interruptions to Consumers			
Temporary supply arrangements during interruptions		Where possible	Where possible
Planned (95% of time):			
- Notice given to domestic customers	Working Days	4	4
- Notice given to commercial customers	Working Days	4	4

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target (2012)
- Notice given to major industrial customers	Working Days	4	4
Unplanned:			
- Maximum duration	Hours	4	< 4
- Frequency	No./year	Major – 30 Minor - 200	25 < 150
RESPONSE TIMES			
(Defined as time to have staff on-site to commence rectification after notification of problem by public or own staff)			
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	Hours	0.5	0.5
- Out of working hours	Hours	1	1
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	Hours	1	1
- Out of working hours	Hours	1	1
Priority 3 (Defined as failure to maintain continuity or quality of supply to a single customers)			
	Hours	2	2
Priority 4 (Defined as a minor problem or complaint, which can be dealt with at a time convenient to the customer and the Council)			
	Working Day	1	1
Customer Enquiries/ Complaints:			
Personal/ Oral	Working Days	2	1
Written	Working Days	10	10
Note: Times apply for 95% of occasions			
Service Provision:			
Time to provide a domestic individual connection to water supply in serviced area (95% of times)	Working days	20	10

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target (2012)
WATER QUALITY			
(Should meet Drinking Water Quality Guidelines of Australia, NHMRC&AWRCM 1996)			
Microbiological Parameters:			
Total coliforms	CFU/100ml	100	100
Thermo tolerant coliforms	CFU/100ml	100	100
Sampling frequency	Samples/month	4	4
Physico-chemical Parameters:			
pH	Unit	7.5	ADWG* 7.5 – 8.5
Turbidity	NTU	<1	5
True Colour	HU	1	15
Hardness (as CaCO3)	mg/L		
Iron	mg/L	-	0.3
Manganese	mg/L	0.6	0.1
Arsenic	mg/L		0.007
Fluoride	mg/L		0.5 – 1.5
Free available chlorine (WTP)	mg/L		0.2 – 0.6
Free available chlorine (Reticulation)	mg/L		0.2 – 0.6
Sampling frequency	Samples/WTP/ year	365	365
Percentage Compliance with 2001 NHMRC / AWRCM ADW Guidelines:			
Physical parameters	%	80	100
Chemical parameters	%	90	100
Total coliforms	%	98	100
Thermo tolerant coliforms	%	100	100

* - Australian Drinking Water Guidelines

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

Principal Issues

Looks at the key concerns facing Council in the future.

A number of issues have been identified as important to the future operation of the water supply schemes. Below is a list of major issues and where they have been addressed in this Strategic Business Plan.

Issue	Section where this is addressed
Ensuring that water supply services are available to support future development of the Region	Objective 1 – Levels of Service Review (Performance Management) Objective 2 – Area Served Objective 3 – Demand Management Objective 11 – Capital Works
Meeting DWE Best Practice Management Guidelines including Integrated Water Cycle Management (IWCM)	Objective 1 – Levels of Service Review Objective 3 – Demand Management Objective 7 – Environment
Security of water supply, particularly to Rylstone, Kandos, Charbon and Clandulla	Objective 1 – Levels of Service Review Objective 11 – Capital Works
Equitable service pricing including developer charges across the Region	Objective 4 – Service Pricing Objective 13 – Finance
Managing and funding long-term capital works program	Objective 11 – Capital Works Objective 13 – Finance

Best Practice Management

Department of Water and Energy Best Practice Guidelines

The Department of Water and Energy (DWE) has prepared *Guidelines for Best-Practice of Water Supply and Sewerage* pursuant to section 409(6) of the Local Government Act 1993. A summary of Mid-Western Regional Council's compliance status of the criteria is as follows:

Issue	Status
Strategic Business Plan (including Financial Plan)	This document represents the Strategic Business Plan and Financial Plan.
Water supply service pricing	Council has adopted two-part tariff structure for filtered water supplies since 2003/04. Tariff structure fully complying with all outcome indicators of Best Practice Guidelines (with appropriate cost recovery, without significant cross subsidies, usage/access charges ratio) including appropriate water supply tariffs will be addressed by June 2008
Developer Charges	<i>Development Servicing Plan</i> with commercial developer charges will be reviewed and adopted in July 2008.
Demand Management	Sound demand management including demand monitoring, leakage reduction and community education, together with all of the issues in the DUES <i>Demand Management Check List</i> will be addressed by December 2009.
Drought Management	Sound drought management planning will be fully implemented, including data on the existing system, and all of the issues in the DUES <i>Drought Management Checklist</i> addressed by December 2008.
Annual Performance Reporting	<i>Performance Reporting Forms</i> are completed annually and issues in the DWE <i>Performance Reporting Check List</i> have been addressed.
Asset Management*	A 30-year <i>Capital Works Plan</i> , listing the proposed projects for each of backlog, growth and renewals will be in place by June 2009; the <i>Operations Plan</i> and <i>Maintenance Plan</i> will be reviewed and updated by June 2009.
Environmental Management*	The <i>Protection of the Environment Operation Act, 1997</i> has been complied with and all issues in the Environmental Management Checklist addressed by December 2006.
Integrated Water Cycle Management	Substantial commencement of sound IWCM by March 2008. Integrated Water Cycle Management will be fully implemented and all of the issues in the IWCM Check List addressed by December 2008.

* - Currently no specific requirements in the DWE Best Practice Guidelines

PART B: STRATEGIC PLAN

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.

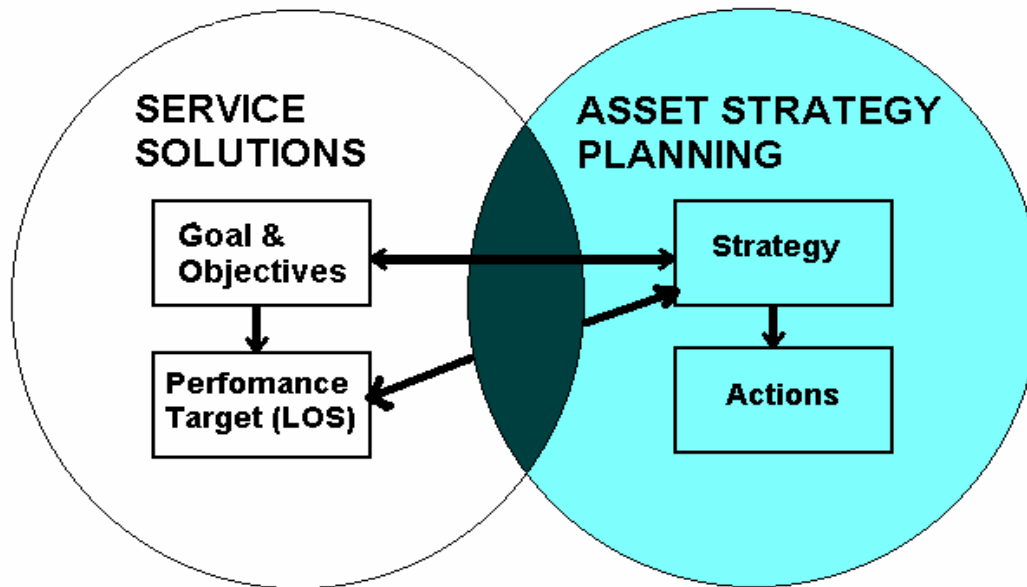
Council has developed five key result areas in Service Provision Strategies covering:

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

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

Planning Strategy

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 (Implement) – One off cost
	Ongoing – Cost incurred annually over a number of years or at regular intervals

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.

This 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
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.

BMS	Business Manager Services
GM	General Manager
GMA	Group Manager Assets
GMO	Group Manager Operations
GMP	Group Manager Planning and Development
HRUM	Human Resources Unit Manager
MF	Manager Finance
HB	Team Leader Health and Building
MTS	Manager Technical Support
MWCW	Manager Water Cycle and Waste
NAE	No Additional Expense

Customer Service



This section details Mid-Western Regional Council'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;
- Current and future water supply service areas;
- Management of demand for water;
- Drought management;
- 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 DWE 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 shires. Performance data is forwarded to DWE each year and a TBL report is received back the following year that should be communicated to Council by 31st 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:

- Quality of water supplied is generally good
- Compliance with microbiological water quality is maintained at 100%.

It is perceived that improvements could be made regarding the number of main breaks leading to service interruptions due to aging reticulation mains

Objective 1: Levels of Service Review

Provide services that meet the agreed LOS, that are economically feasible and financially affordable and meet health and environmental requirements

Performance Targets

Compliance with levels of service and action planning and meet performance targets

Strategy

Review current operations and documented levels of service and update the Strategic Business Plan (SBP)

Objective 1: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review current operations for annual report	Nov Annually		MWCW		NAE
Review and update Strategic Business Plan	2010	5 yearly	GMA	20	15 every 5 years
Public display of SBP and adoption by Council	As required		MWCW		NAE
Implement and monitor SBP Action Plans	Ongoing		MWCW	As detailed in this report	
Best Practice Management Compliance Audit	Jan 2008	Jun 2009	MWCW	3	
Monitor and review LOS targets and report performance to DWE	Sep Annually		MWCW		NAE
Report key performance indicators and TBL reports to Council	August Annually		GMA		NAE
Input and review of special schedules for Dept. of Local Govt. in the financial statements	August Annually		MF		NAE
SoE reporting	Nov Annually		GMP		NAE

Areas Serviced

This section of the Customer Service Plan addresses Council's intentions in the provision of services for the next thirty years.

The extension of water supply services, however, 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
- Cost to customers associated with extending services

When extending services, Council will have to:

- Treat all residents as equal for the provision of services
- Consider residents expectation of service.
- Consult community when considering new development areas or backlog programs

The table on the next page summarises the details of current and future (30-years) water supply service areas within the Region. As indicated by the table, other than extending services to new subdivisions within the existing service areas, Council currently has no plans to extend the service to any of the villages at this stage.

With an expected average annual growth rate of 2.0% in residential assessments in the service areas covered by existing water supply schemes over the next 30 years, and considering capacities of the existing system, it is believed that augmentation of all schemes will be required.

Towns	No. of Assessments		Service Type	
	Current (2007)	Future (2036)	Current	Future
Birriwa	17	25	Rainwater tanks	Rainwater tanks
Bylong	10	15	Rainwater tanks	Rainwater tanks
Charbon	152	240	Reticulated water supply	Reticulated water supply
Clandulla	139	220	Reticulated water supply	Reticulated water supply
Goolma	20	30	Rainwater tanks	Rainwater tanks
Gulgong	870	1100	Reticulated water supply	Reticulated water supply
Hargraves	62	90	Rainwater tanks	Rainwater tanks
Ilford	53	80	Rainwater tanks	Rainwater tanks
Kandos	680	700	Reticulated water supply	Reticulated water supply
Lue	45	70	Rainwater tanks	Rainwater tanks
Mudgee	3890	6220	Reticulated water supply	Reticulated water supply
Pyramul	35	50	Rainwater tanks	Rainwater tanks
Running Stream	3	3	Rainwater tanks	Rainwater tanks
Rylstone	330	440	Reticulated water supply	Reticulated water supply
Turill	10	15	Rainwater tanks	Rainwater tanks
Ulan	66	100	Rainwater tanks	Rainwater tanks
Windeyer	45	70	Rainwater tanks	Rainwater tanks
Wollar	103	160	Rainwater tanks	Rainwater tanks

Note: The number of assessments is the estimated number of available yield within the village/town only and not the total number of assessments within the locality, based upon best available information.

Objective 2: Areas Serviced

To provide services to existing areas at current levels and extend to new residential and industrial areas on a user pays basis

Performance Targets

Provide service in advance of demand where economically viable

Review and update Development Servicing Plans (DSP) by June 2008

Strategies

Review need and identify works required to provide/extend services in accordance with LEP identified growth areas

Objective 2: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Development of comprehensive LEP to identify future growth areas	Jan 2007	June 2008	GMP	NAE	
Hydraulic Analysis	March 2008	Dec 2008	MWCW	Refer to Objective 10: Operations	
Prepare Development Servicing Plan	July 2007	June 2008	MWCW		
Review Section 64 charges for identified future growth areas	Dec 2007	June 2008	MWCW	5	

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 water consumption, through elimination of waste and improved efficiency. It is not Council's intention that customers ration their water use. 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.

Council has a dual objective of meeting demand, and future growth in demand through planning, and influencing customer usage through education and information. A number of demand management measures have been implemented in Mudgee, Gulgong and Rylstone since 1993. These measures have resulted in an estimated 15% reduction in water consumption. The demand management measures include:

- Pricing policy – two-part “pay for use” water pricing system implemented since 1994 in Mudgee and Gulgong and in Rylstone from 2006/07 onwards.
- Community awareness and education programs - Waterwise literature, National Water Week information, advice to larger users such as schools, hospitals and motels, weekly water consumption and water saving tips in Council's community newspaper.
- Leakage detection & repair - Council's systems, advice to householders.
- Water saving practices - such as more efficient watering practices in Council's parks.
- Water restrictions during drought periods when required.

Objective 3: Demand Management

Effective demand management strategy that minimises wastage

Performance Targets

Prepare Demand Management Plan by December 2009

Strategies

Develop and implement a Demand Management Plan

Encourage alternative water usages for major industries

Use of groundwater for public parks and gardens where economically feasible

Objective 3: Action	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Develop demand management plan including benefit/cost analysis and investment schedule	July 2009	Dec 2009	MWCW	20	
Implement and promote identified recommendations – Customer education – Rebates for rainwater tanks	As required		MWCW		NAE 10
Participate in leakage reduction program of Water Directorate/ LGSA		Ongoing	MWCW		NAE
Strategy 2					
Investigate feasibility of dual system for Caerlon to provide non-potable water supply system	July 2008	Dec 2008	MWCW	NAE	
Encourage non-potable water usage by industries and other high water users		Ongoing	HB		NAE
Encourage stormwater reuse at industrial sites where feasible		Ongoing	HB		NAE

Contd../

Objective 3: Action	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 3					
Metering for parks and garden irrigation by Council (Mudgee, Gulgong, Rylstone and Kandos)	July 2008	June 2011	MWCW	140	
Feasibility study for alternative water supply for parks and gardens	July 2008	Jun 2009	MWCW	NAE	
Implementation of alternative water supply for parks and gardens	July 2009	June 2011	MWCW	200/ year for 2 years	

Drought Management

Drought management aims to ensure that town water supplies with significant storage do not fail in times of drought.

Drought management planning includes:

- Documenting basic data on:
 - communities served/ not served by reticulated water supply
 - water demands,
 - records of average rainfall
 - evaporation rates
 - records of past droughts,
 - the existing water supply system and its water sources,
 - reviewing historical performance of rivers, dams, weirs and bores in previous droughts.
- Strategies to achieve the objective of having sufficient water to satisfy the basic needs of the community.
- Consultation with stakeholders including government agencies
- Agreed procedure for progressive implementation of water restrictions
- Human resource requirements

In regard to security of supply, Council has not had to impose restrictions on supply in Mudgee and Gulgong for many years. Rylstone and Kandos were under continuous water restrictions from 2003 to June 2007.

Drought security for the Mudgee and Gulgong water supply systems are provided by Windamere Dam, which is operated by State Water. Council has high security allocations of 2000 ML and 600 ML per annum for Mudgee and Gulgong respectively. Rylstone and Kandos are supplied from Rylstone dam on the Cudgegong River, which has a storage capacity of 3200 ML.

Council provides public watering points on the outskirts of Mudgee, Gulgong and Rylstone for rural domestic uses.

A drought management plan for Rylstone and Kandos was adopted by the former Rylstone Council in 2003. Council plans to review and update this plan to include Mudgee and Gulgong in accordance with DWE Best Practice Guidelines by December 2008.

Objective 4 Drought Management

Ensure town water supplies have sufficient storage so as not to fail in times of drought

Performance Targets

Review and update Drought Management Plan by December 2008

Strategies

Adopt long-term water security measures and drought-proof Mid-Western Region

Objective 4: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review and update a Drought Management Plan for the whole Region	July 2008	Dec 2008	MWCW	40	
Develop means and methods for enforcing restrictions	July 2008	Dec 2008	MWCW	NAE	
Develop and implement a registration scheme for water carters drawing from town water supplies	July 2008	Dec 2008	MWCW	NAE	

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 - adoption of user pays principles in accordance with the August 2007 DWE Guidelines. Residential and non-residential revenue to be collected via a two-part tariff which reflects the level of water used and hence the load on the water supply system. (It is considered equitable that people pay for the cost of the services they use).

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 - should be fully disclosed in Council's reporting.

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

Erstwhile Mudgee Shire Council adopted a two-part water tariff structure in July 1994 that comprises a standing access charge and usage charges for actual water consumption by customers. However, the access charges are not proportional to the square of the connection size as recommended in the DWE Best Practice Guidelines.

Council adopted uniform access and usage charges for all the towns with reticulated water supply for year 2006/07. The details of existing pricing structure (2007/08) are presented in the Tables next page.

Council plans to undertake a comprehensive review of water pricing to ensure compliance with National Competition Policy and the DWE Guidelines and adopt a tariff structure with features such as:

- Full cost recovery of water services (current pricing system achieves this objective);
- Access charges in proportion to the size of water connections
- Achieving 75% of residential revenue through usage charges

Accordingly, Council plans to develop and adopt an inclining block usage tariff for residential and non-residential customers in accordance with DEUS guidelines from year 2008/09.

Category	Access charge (\$)	
	2007-08	2008-09
<u>Residential</u>	302	135
<u>Business</u>	505	135

Usage	Usage Charge (cents)	
	2007-08	2008-09
<450KL PA	108	160
>450KL PA	108	240

Developer Charges

Developer Charges are up-front charges levied under Section 64 of the Local Government Act to recover part of the infrastructure costs incurred in servicing new developments or additions/changes to existing developments. Developer charges serve two related functions:

- They provide a source of funding for infrastructure required for new urban development.
- They impact on the costs of urban development and thus encourage less costly forms and areas of development.

Council levies following rates of Section 64 developer charges:

Town	Section 64 Charges / ET (2007/08)
Mudgee	\$ 2,785.00
Gulgong	\$ 2,785.00
Rylstone	\$ 1,502.00

Developer contributions are currently under review and Council will adopt commercial developer charges in accordance with DEUS Best Practice Guidelines from July 2008 onwards.

Objective 5: Service Pricing

An equitable pricing policy that supports current and future service provision and encourages efficient water use based on full cost recovery and user pays basis and maximise revenue from grants and other sources

Performance Target

Implementation of developer charges by July 2008

Implementation of best practice pricing by July 2008

Strategies

Water charges reviewed every 3-5 years to meet financial planning revenue goals.

Review of developer contributions every 5 years

Objective 5: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review levels of revenue from charges	Annually		MF		NAE
Adjust and adopt tariffs to suit financial model projections and cross-subsidy policy	Annually	Ongoing	MF/GMA		NAE
Strategy 2					
Review and update developers contribution and DSP	Started	June 2008 (5 yearly)	MWCW	15	8 / 5years
Public display of DSP update		Every 5 years	GMA/GMP		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 relationship. Methods employed include:

- Council's Community Newspaper;
- Being responsive to customer needs;
- Town and village forums held throughout the Region;
- Public forums at Council meetings;
- Council website;
- Published levels of service; and
- Annually report on achievements, performance etc.

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. Performance monitoring and reporting is very important for updating and review of the Strategic Business Plan.

The main problem that was identified in a Stakeholder Analysis was that customers in Rylstone and Kandos are less satisfied with the services mainly due to water restrictions being in place for a prolonged period of time (for more information on the Stakeholder Analysis see Appendix C). Council has planned capital work programs to improve security of supply in these and other towns and expects to achieve overall satisfaction of all customers in the near future.

In order to carry out Council's mission to focus on the community expectations, a level of communication is required so that the community is satisfied that the Council's decisions are responsive to their needs. A complaints record system does exist and Council intends to implement a customer focussed, socially responsive communications system for service provision issues. 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.

Council has identified the following issues vis a vis customer relations:

- Concern over water quality
- Inadequate pressure and flows in parts of the reticulation during periods of peak demand

Objective 6: Customer Relations

Provide a high level of customer satisfaction with reduced level of substantiated complaints and keep the customers informed of significant issues

Performance Targets

Implement new customer request system by September 2008

Conduct annual customer satisfaction survey

Strategies

Continuous improvement of customer service mechanism

Ensure levels of service are met

Objective 6: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Implement new customer request system	July 2007	Sep 2008	MTS	NAE	
Document procedures for receiving customer requests during working hours and after hours	July 2008	Sep 2008	MTS	NAE	
Customer education		Ongoing	MWCW		1
Monitor complaint reports		Ongoing	MWCW		NAE
Staff training		Ongoing	BMS	Refer to Objective 11: Human Resources	
Strategy 2					
Publish statistical information in Annual Report	Annually (Nov)		MWCW		NAE
Conduct customer satisfaction survey	Annually (August)		MWCW		2

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.

Development of the Local Environmental Plan, fluoridation of water supplies, new water supplies and reservoirs and new sewage treatment works, IWCM strategies all benefit from direct involvement of the community. Periods of public display, public comment and notices to ratepayers and business groups to advertise the opportunity to comment are typical consultation processes. Methods used by Council to consult the community in the past include:

- Public meetings (as required)
- Customer Surveys;
- Public forum at Council meetings;
- Councilors feedback;
- Progress Associations

Following issues 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.

While community consultation on projects is necessary and 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. Proposed water supply works that would benefit from community consultation include:

- Security of supply to Rylstone and Kandos
- Water supply pressure in Clandulla
- Implementation of best practice water pricing, developer charges and IWCM strategies

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 7: Community Involvement

Seek community feedback with regard to service targets and prior to any major decisions regarding significant changes in service levels

Performance Targets

Consultation for water supply augmentation strategies

Strategy

Identify future projects/ major decisions requiring consultation

Undertake consultation as required

Objective 7: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Identify projects that require community consultation	Annually (June)		MWCW		NAE
Plan and prepare a program for future projects and communicate with stakeholders	Annually (July)		MWCW		NAE
Strategy 2					
Implement consultation program		Ongoing	MWCW		3
Report to Council for project approval		Ongoing	GM / MWCW		NAE

Environment



This section details Mid-Western Regional Council'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; and
- Local knowledge and enthusiasm for sustainability should be harnessed

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

Description	Condition or "state" of the environment	Pressures the human activities have on the environment	Response of the Council/ Government, community etc
Land	Waste disposal sites	Disposal of sludge from WTP's	<ul style="list-style-type: none"> - Sale for soil remediation - Best practice management
River	Sustainability	Interrupted environmental flows	<ul style="list-style-type: none"> - Dam Management Plan
Water supply (reservoirs)	Cudgegong River catchment (Rylstone Dam)	Native plants and animals	<ul style="list-style-type: none"> - Catchment management - Weed control - Restrict public access

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

- Installation of variable speed drives on most large, energy-hungry equipment
- Optimisation of backwash recycle process in WTP's has ensured no wastage of water on the site
- Ensuring water services are included in the State of the Environment Report

Integrated Water Cycle Management (IWCM)

Integrated Water Cycle Management is a framework to help identify water management problems and to determine appropriate management responses so that social, environmental and economic objectives are met.

IWCM involves the integration of the Council's three main water services – water supply, sewerage and stormwater **within a whole catchment strategic framework** so that water is used optimally.

It also involves the integration with other services for example roads and drainage, trade waste collection and with external requirements in particular the NSW Water Reforms.

The first stage of development of IWCM is a concept study. This defines the catchment, water resource and urban water issues faced by Council. Once the issues are broadly defined, studies are undertaken to better define issues and look at ways of managing them.

The second stage is to develop the strategy through undertaking detailed studies to better define the issues and look at cost-effective ways of managing them.

Council plans to develop and adopt IWCM Strategies in accordance with the DEUS guideline document Integrated Water Cycle Management for NSW Water Utilities by December 2008.

Objective 8: Environment

An ecologically sustainable scheme whose environmental impacts, especially in sensitive areas, are acceptable to the community

Performance Targets

Prepare IWCM plan by December 2008

All environmental impacts, which occur are acceptable to Government regulatory authorities and the majority of the local community

Strategies

Assess the environmental impacts of existing schemes and any new capital works where significant environmental impact is likely

Objective 8: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Develop IWCM Plan	March 2008	Dec 2008	MWCW	60	
Identify opportunities and encourage use of alternative water supplies			MWCW	Refer to Objective 4: Demand Management	
Marketing plan for sale of WTP sludge	July 2008	Dec 2008	MWCW	NAE	
Review and update SOE report	Nov Annually		GMP		NAE

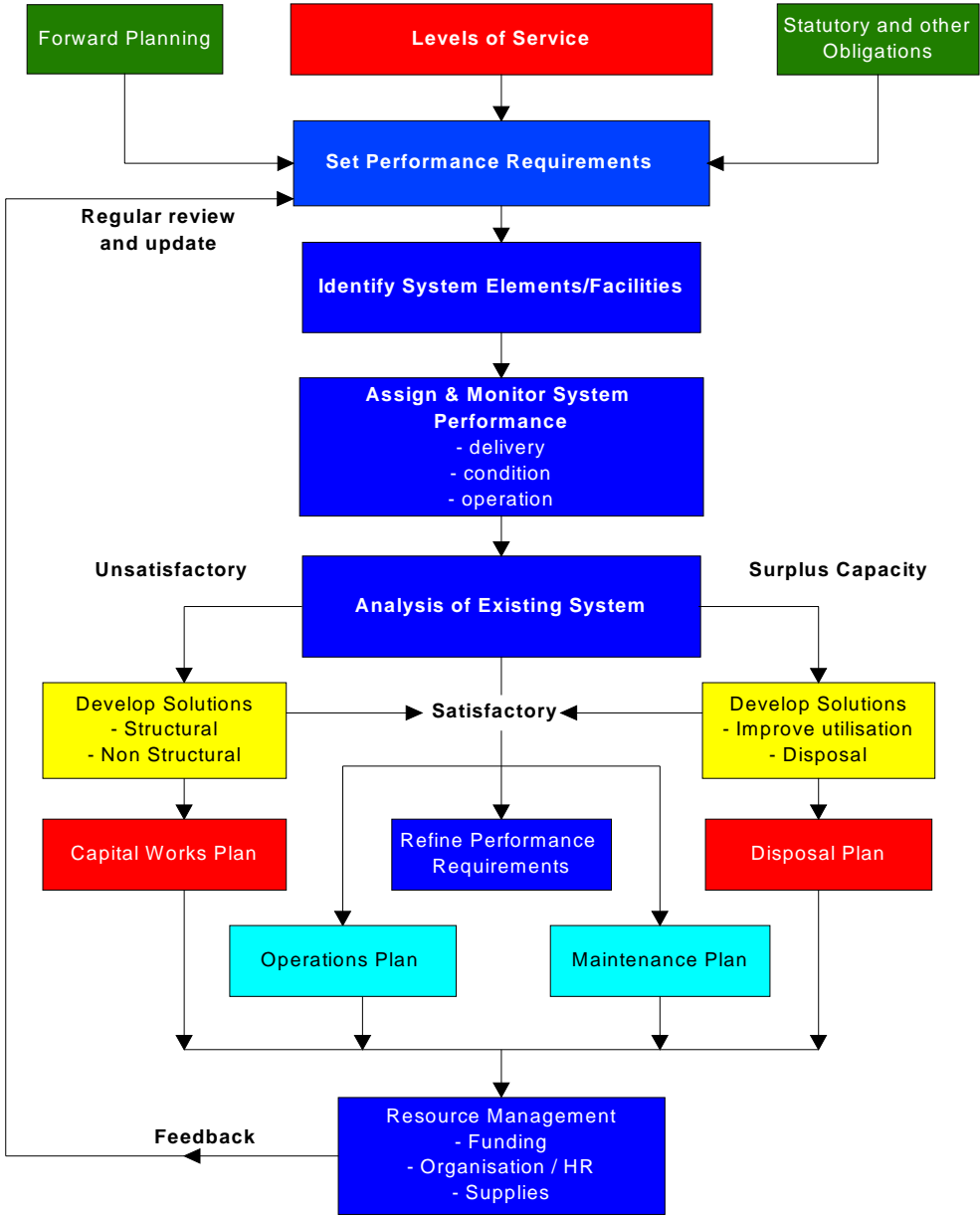
Asset Management



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

This section 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 8 - Best Practice Asset Management Approach



This section of the 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.

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. This model is not intended to reflect the structure of the Asset Management Plan but rather provides a guide for continuous improvement.

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 type of asset portfolio warrants significant investment of resources for its management. 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 life cycle rather than a focusing on asset creation alone.

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. Both current and projected capital works to satisfy future demands in terms of growth, improved Levels of Service and replacement of existing assets are identified. Appropriate operation and maintenance activities also are identified, to suit the desired level of service delivery. This includes documentation of the rules and procedures at system and facility level. All these details are used in the financial plan to ensure that required funds are available when needed.

Asset Values

The following Table shows a break-up of values of water supply assets of the Mid-Western Regional Council.

Asset	No./ Length/ Capacity	Year of Construction	Current Written down Value (\$000) June 2006	Current Replacement Cost (\$000) June 2006
Dam Storages	2			
- Redbank creek dam		1894	361	2,000
- Rylstone dam		1954	1,987	15,000
Reservoirs	14	1950 - 2002	4,808	12,500
Bore Wells	5	Various	-	-
Treatment Plant	3			
- Mudgee		2005	15,871	9,000
- Gulgong		2005	4,796	5,000
- Rylstone		1962/1987	384	6,000
Pumping Stations	15	1950 - 2004	2,590	6,361
Trunk Mains		1930 - 2008		
- Mudgee	18.96 Km		610	4,600
- Gulgong	7.80 Km		916	1,403
- Rylstone	15.02 Km		728	3,292
Reticulation		1930 - 2008		
- Mudgee	140.31 Km		5630	14,615
- Gulgong	41.24 Km		915	3,357
- Rylstone	38.66 Km		1547	5,656
Subtotal	-	-	44,914	85,013
Telemetry	-	1998	150	200
Total	-	-	45,064	85,213

Council completed fair value assessment of assets in July 2007.

Operations Plan

Figure 9 - 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.

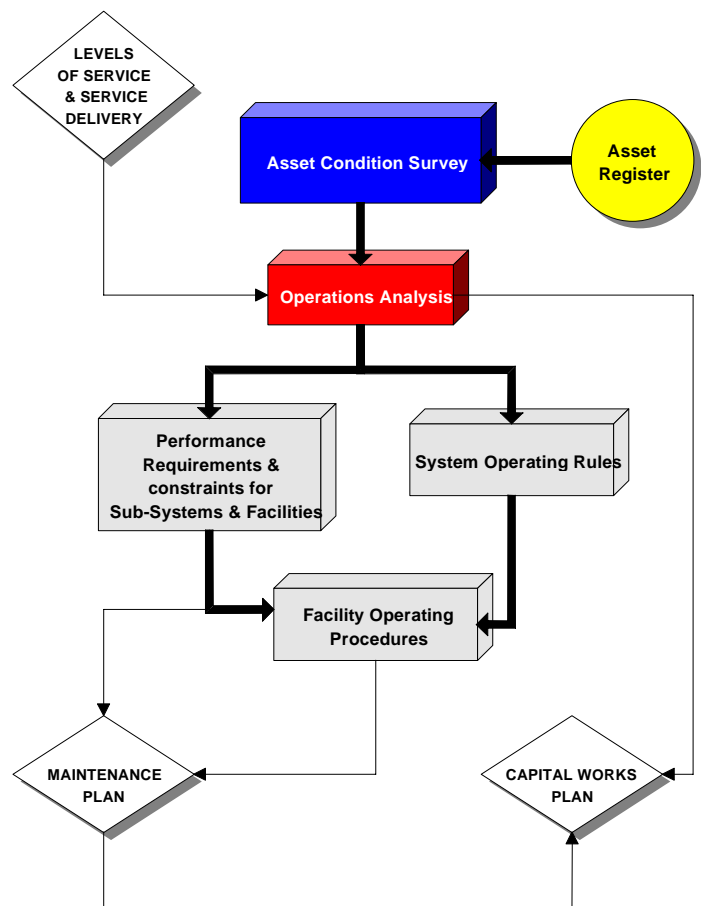
Provision of the agreed Levels of Service to customers is dependent on the efficient and effective running of water supply operations. An operations analysis will interface the operations and capital works plans by identifying what level of service the existing assets can provide and what additional 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 need 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:

- Completion of documenting system operating rules and performance requirements for all subsystems and facilities;
- Developing an effective Assets Management System that will enable identification of conditions of assets from assets register and maintenance reports;
- Addressing the increasing pumping costs; and
- Compliance with OHS requirements

Main operational issues include the following:

- Optimising operations to reduce costs
- Monitoring of operational performance
- Review and document operating procedures

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

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

Council has developed an OH&S Policy outlining the roles and responsibilities of all employees within the Council. As part of Council's ongoing commitment to Occupational Health and Safety requirements, all relevant staff are familiar with the amendments to the OH&S Act, Local Government Act 1993 and the Protection of the Environment (Operations) Act 1997.

On an annual basis the water supply scheme including the treatment plant, pumps, reticulation lines and other associated areas are reviewed to ensure all risks are assessed and minimised. For more information refer to the Council's Occupational Health & Safety Policy.

Objective 9: Operations

Develop operations plan and procedures to achieve levels of service with due diligence and effective use of technology so as to ensure a reliable and safe service at minimum operating costs

Performance Targets

Undertake operations analysis by December 2008

No failures to deliver agreed Levels of Service due to operations related problems

Strategies

Develop an Operations Plan

Operate the scheme in accordance with documented operating procedures

Objective 9: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Develop electronic asset management system	Started	Sep 2008	MTS	50	5
Asset data transfer to electronic asset register		Ongoing	MTS		NAE
Identify and assess condition of assets – Civil – Mech.& Elec.	July 2007	Ongoing	MWCW		50
Strategy 2					
Update Operations Plan – Operations analysis including hydraulic analysis – Completion of documentation of procedures and practices	July 2008	Dec 2008	BMS/ MWCW	70	
	July 2008	Jun 2009			
Annual review and implementation of recommended operational changes		Annually	BMS/ MWCW		NAE

Maintenance Plan

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:

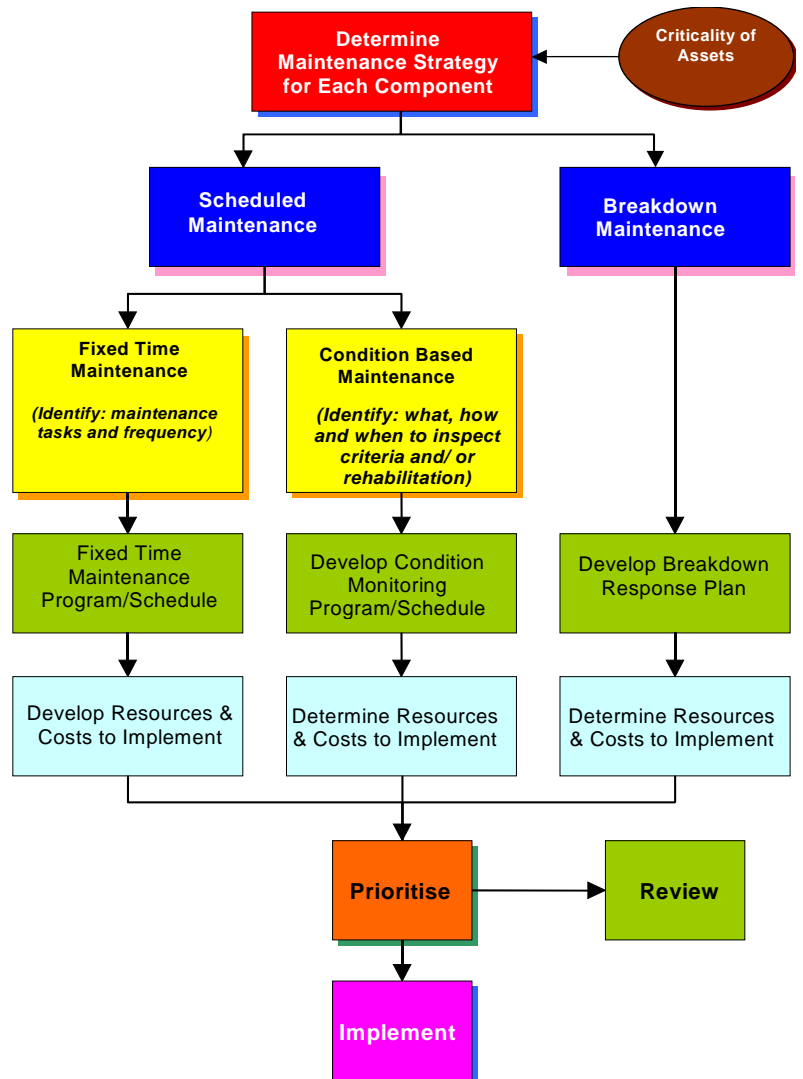
Scheduled maintenance - fixed time or condition based;

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.

Figure 10 - Maintenance Flowchart



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

- Need to update Operation and Maintenance (O&M) manuals and an O&M plan;
- Criticality analysis of systems to identify components of high risk
- Need for spare parts inventory
- Need for refresher training of key staff dealing with customers and mission critical functions.

Objective 10: Maintenance

Increase the reliability of systems, reduce life cycle and ongoing costs, allow for appropriate financial planning and ensure levels of service are maintained

Performance Targets

Review maintenance strategy by December 2009

Strategies

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

Objective 10: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Develop detailed Maintenance Plan <ul style="list-style-type: none"> - Asset criticality assessment - Predictive maintenance for critical assets - Scheduled maintenance for less critical assets - Breakdown maintenance strategy 	Jan 2009	June 2009	MWCW	15	
Implement work order management system	Sept 2008	Ongoing	MTS		NAE
Undertake maintenance cost analysis for renewals	July 2009	Dec 2009	MWCW	NAE	
Review and document Contingency Plans <ul style="list-style-type: none"> - Water treatment plants and Pump stations 	July 2009	Dec 2009	MWCW	NAE	

Capital Works

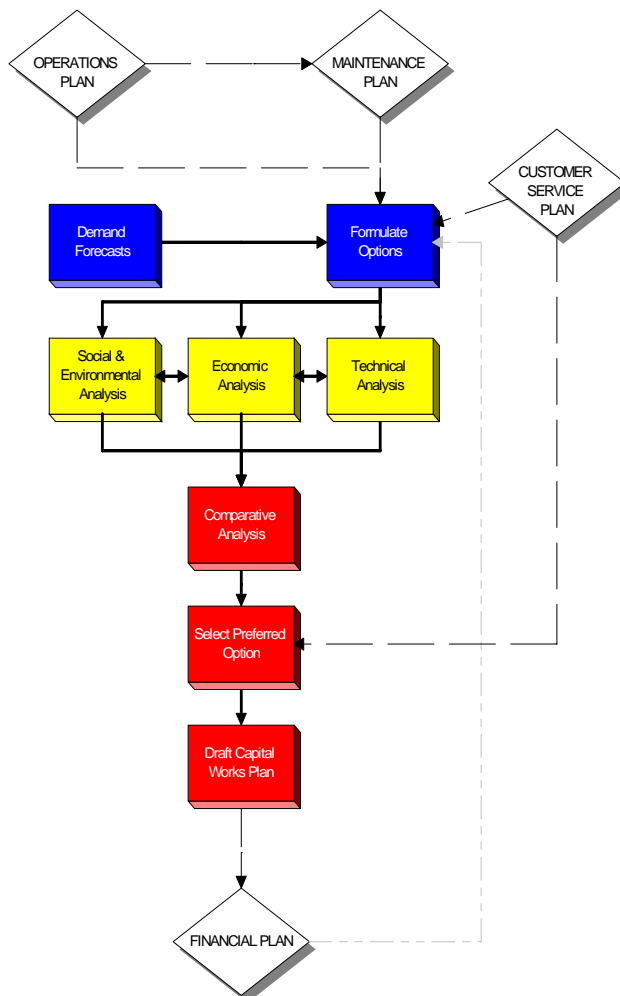
The capital works plan should make an assessment of scheduled work for growth, non-growth, and rehabilitation works over a 30-year period.

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.

Figure 11 - Capital Works Flowchart



A summary of the 30-year capital expenditure program is shown in Part C of this Plan.

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

- Investigating alternative water supplies for Rylstone/Kandos and villages.
- Refurbishing Redbank Creek dam
- Constructing a powdered activated carbon plant at the Mudgee WTP
- Constructing an off-river raw water storage at Gulgong
- Constructing an additional clear water reservoir for Gulgong
- Alternate water supply scheme for parks and gardens
- Augmentation of Rylstone filtration plant
- Constructing an additional clear water reservoir for Mudgee
- Metering of Council's Parks/Reserves
- Mains replacement

Objective 11: Capital Works

Capital works program provides agreed levels of service at optimal life-cycle costs to meet social, economic and environmental considerations

Performance Targets

No failures to deliver agreed Levels of Service due to lack of infrastructure and sufficient infrastructure is in place to cater for the projected developments

Strategy

Plan and construct capital works within financial constraints

Objective 11: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Prepare a long-term (30-years) capital works plan – For backlog areas – For growth – For renewal/ replacement	Feb 2009 (Biennially)	June 2009	GMA	Refer to Capital Works Plan in Part C – Detailed Information	
Review capital works plan as part of Management Plan	Annually (Nov)	Annually (Feb)	MWCW		NAE
Review economic analysis to determine preferred capital work options	As required		MF/MWCW	Included in project costs	
Engage consultants for design and preparation of tender documents	As required		MWCW	As per Capital Works Plan	

Human Resources



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.

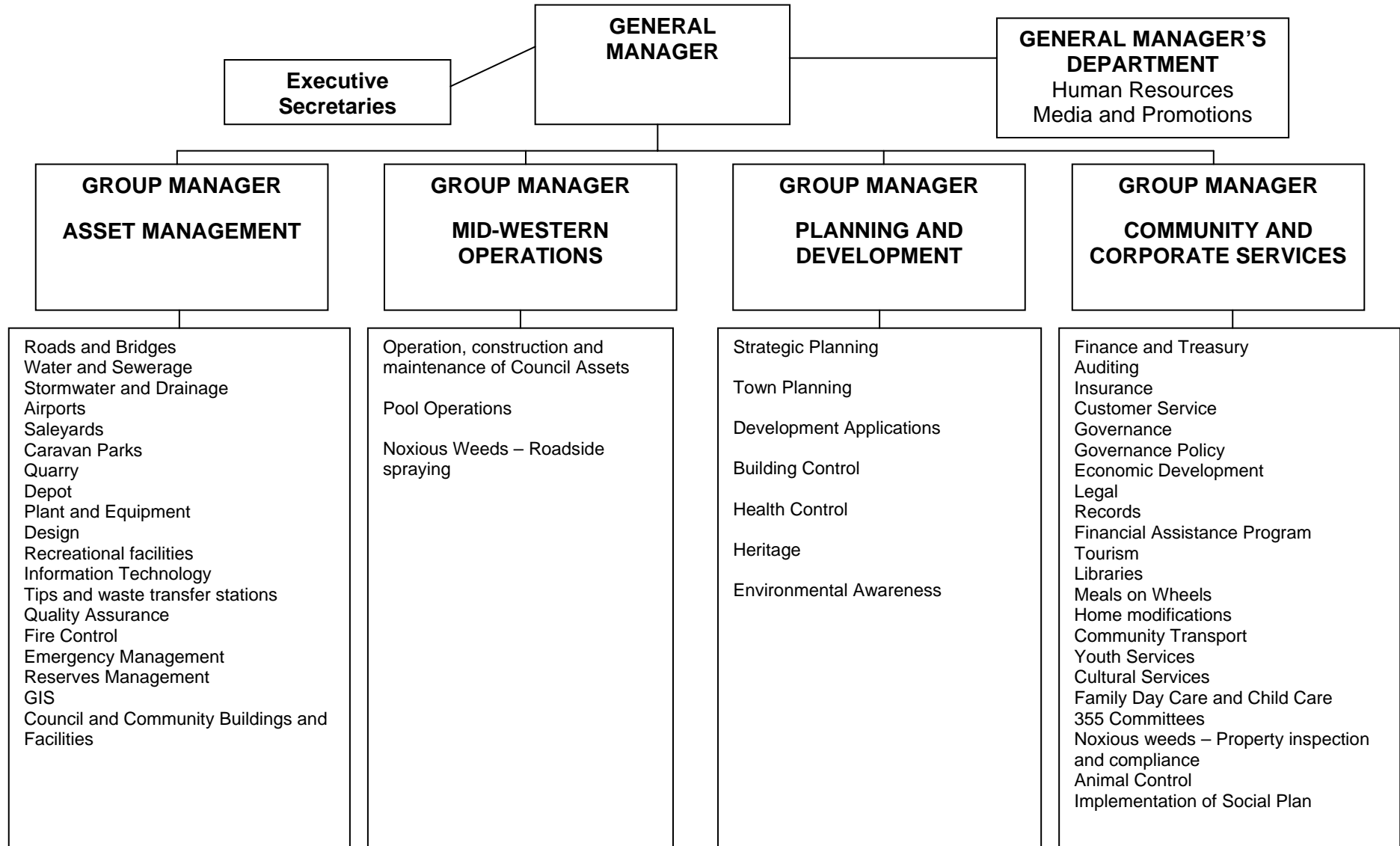
The General Manager delegates authority to the Group Manager – Assets who in turn delegates responsibility to the Manager Water Cycle and Waste to manage all the water supply assets.

The operation, maintenance and construction of assets are contracted to Mid-Western Operations, an internal service provider. Mid-Western Operations has 23 staff that operates and maintains the water supply and sewerage schemes. The organisational structure is shown next page.

Important human resources issues being considered by the Council are as follows:

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

Figure 12 – Mid-Western Council Organisational Structure



Objective 12: Human Resources

Maintain an appropriate staff structure and staff numbers with the necessary training and skills to effectively manage the water supply schemes and provide agreed and required Levels of Service

Performance Targets

Review and update HR Plan by June 2008

Strategy

Employ/ replace staff to meet needs and establish an ongoing staff training program

Objective 12: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Document HR Plan	March 2007	June 2008	BMS	NAE	
– Position analysis					
– Needs (resources/skills) analysis					
Document and implement training and retraining plans	Annually (Oct)		BMS		NAE
Annual performance review	Annually (Oct)	Ongoing	BMS		NAE



This section details Mid-Western Regional Council's objectives relating to the business operation and financial management of the water supply fund

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 cash flow.

Legislation requires separate accounting for water supply services and elimination of cross subsidisation with 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 modelled using the NSW Financial Model issued by the Department of Water and Energy 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
- Borrowings.

There is pressure to provide a suitable financial plan because DWE 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 DWE Financial Planning Guidelines, Council will develop its long-term financial models and establish a steady price path. This will be used to set the pricing structure in accordance with the DWE May 2007 Best Practice Management Guidelines.

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

Objective 13: 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 13: Actions	Start	End	Responsible	Cost \$000	
				Implement	Ongoing
Strategy 1					
Review cost projections for long term Financial Plan, with the aim of reduction in the costs of operations and maintenance	Annually		MF/MWCW		NAE
Update Financial Plan	Annually		MF/ MWCW		NAE
Agree on price path for setting the tariff in accordance with the DEUS guidelines	Annually		MF/MWCW	Refer to objective 5: Service Pricing	

PART C: DETAILED INFORMATION

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

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

Financial Management

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. The new *NSW Financial Planning Model (FINMOD Version 4.0)*, issued by the Department of Water and Energy (previously DEUS) in November 2003, has been used for this modelling. A 30-year planning horizon has been adopted as recommended in the Department of Energy, Utilities and Sustainability 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 government grants will not be available to Council for any of the capital work planned for the next 30-years. Where funding from revenue would require an unrealistic level of charging in the short term then borrowing will be undertaken.

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.

AAS27 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 a fair value basis which is depreciated current replacement cost or market value depending on the type of asset.

All capital works estimates in the text are quoted in current (2006) dollars unless specified otherwise. The output data is quoted in real and inflated 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.

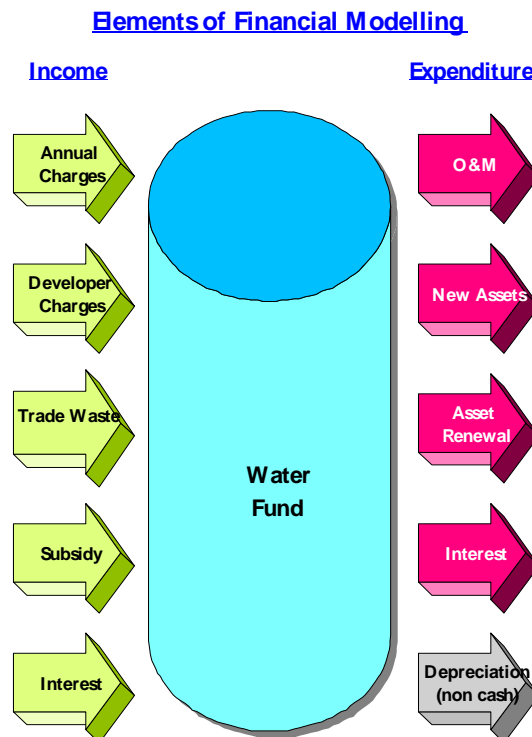
A summary of the results is included on the following pages and detailed input and output data are available in the Appendices.

Model Description

The financial model forecasts income streams to match projected expenditure. The diagram on the right 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.



Modelling Methodology

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

- AAS27 special schedules for past financial performance of the water and sewerage funds
- Estimates for uncontrollable variables eg 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:

Opening balances

Council's special accounting schedules are used to establish opening balances and baseline costs for the model. Financial statements for the last two years are compared to try to eliminate 'one off' occurrences from being incorporated as part of a normal trend.

Developer Charges

New assessments have to pay a developer charge for the benefits being received by connecting to the system. Currently Council is reviewing the developer charges calculation to introduce developer charges in accordance with DWE best practice management guidelines and has adopted \$6,012/ET (2006 \$) as developer charges for implementation from year 2008/09 onwards. Residential assessments are estimated as equivalent to 0.92 ET and the non-residential assessments 1.43 ET. The adopted developer charges have been considered in the financial model.

Growth Projections

A long-term average residential connection growth rate of 2.2% p.a. has been used for water supply services. This rate of growth is based on Council's report on recent review of 25-year population growth projections for the Region.

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 (eg increased income from bulk water sales) then the split can be adjusted to match. Residential charges currently account for 82% of water supply revenues. With the adoption of DWE best practice tariff structure, revenue split of 85:15 for residential to non-residential revenue is expected from year 2008/09 onwards.

Performance Measures

Council's minimum service criteria will have an impact on the level of charges required, eg. minimum cash levels, which is generally assumed to be 10 - 20% of annual revenues (excluding restricted revenues). For the current financial model \$ 1,000 K (2006\$) has been considered as minimum cash level.

Expected lives 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 Supply and Sewerage 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 model in this case has been modelled on the assumption that Council will not receive any grant or subsidy for any of the planned ILOS capital works.

Ongoing recurrent costs: Management, Operations and Maintenance

By default, the model 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 rate 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 planning model 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.

Typical 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 model 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.

The Modelling Process

Phase 1 – Initial runs

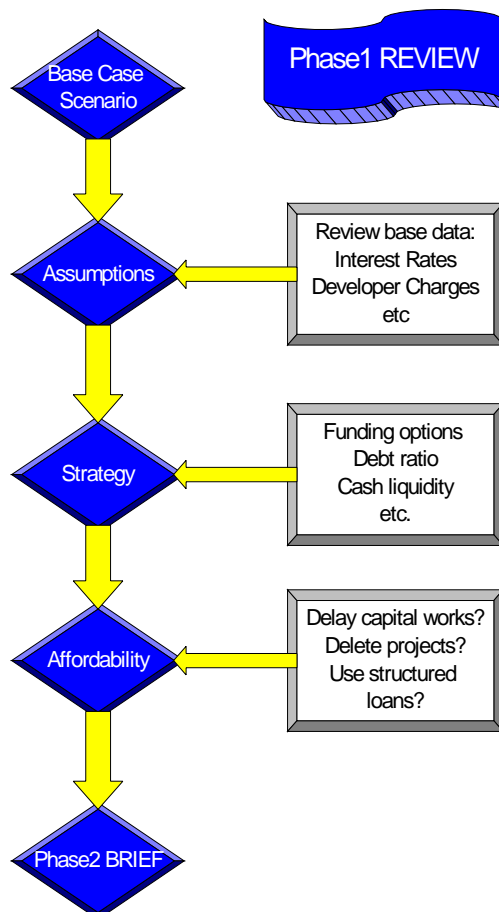
The objective of Phase 1 development is to present a first cut model of options for future service provision. Comparison of outcomes enables Council to make decisions as to the preferred model and the most beneficial and practical funding solution for the proposed asset management programs.

Funding

In considering funding for future options there are three basic options:

- Fund all capital works from revenues.
- Borrow to fund all capital works.
- Fund capital works from a mix of borrowing and revenue

Most Councils would prefer to avoid borrowing to fund their capital works programs if possible. This strategy obviously avoids incurring interest



charges. Where capital works costs are low and cash levels are high this may be possible but it may also suggest that current levels of charging are too high.

On the other hand deferring expenditure is consistent with the goal of intergenerational equity when considering long-term asset management. Longer period loans spread the cost of works over a longer period, eliminating early peaks in annual charges. Often councils will have no choice except to borrow for major projects because collecting sufficient cash in advance is impracticable and would require an unacceptably high level of charges.

In general most councils use a mix of revenue and borrowings to meet Council's financial performance policy criteria. Given that this is achieved, the latest DWE Guidelines recommend adoption of the lowest possible steady rate of long-term charges in real terms that is achievable. In the Phase 1 runs of the model the default loan period used was twenty years.

Phase 2 – Preferred model and sensitivity

After consideration of Phase1 issues a preferred option will be finally reviewed and updated to suit any last minute planning refinements and detailed cost estimating carried out.

While the preferred model reflects the expected performance of the systems, it does not give any indication of the sensitivity of the proposed solution should the basic assumptions used prove significantly different in practice.

It is recommended that a sensitivity analysis be carried out if it is perceived that a variable may change significantly in the future. The value of a sensitivity analysis is that it shows:

- the sensitivity of the results to assumptions (uncontrollable variables)
- the impact of changing controllable variables.

The guidelines suggest that a number of sensitivities be carried out to test the robustness of the plan. In regard to controllable variables such as type of loan structure, level of developer charges etc. the model enables Council to make decisions to establish the right management policies.

It is important to demonstrate the impact of the 'no subsidy' scenario, which shows the potential benefits of government assistance. Council's expectations for receiving subsidy are included in the final preferred model as being the most realistic future scenario.

With uncontrollable variables, Council is at the mercy of change. The downside risk of an increase in interest rates, or low growth rates, or rise in energy costs, may be considerable. Increasingly the impact of water demand management may be felt in the future and expected water savings although resulting in loss of revenues, should be more than compensated for by deferment of capital works and lower operational costs.

On-going Review

Over time, changes in model variables can have a significant impact on the model's accuracy and this has implications for Council's forward planning. It is recommended that the models 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. Any cross subsidies with General Fund should be eliminated or explicitly disclosed in the Annual Accounts.

- 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 spreadsheets and shown graphically. Projections are in real (2006) dollars.

Figure 15 –Capital Works Plan for Water Supply

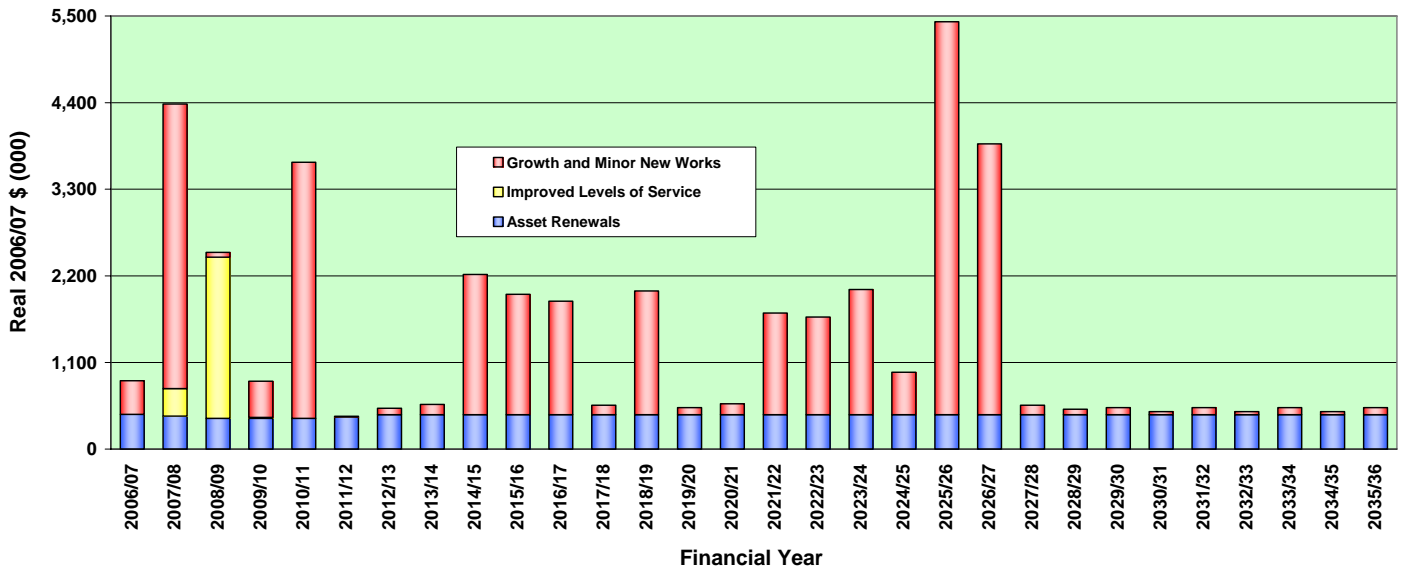


Figure 16 - Recurrent Cost Plan for Water Supply

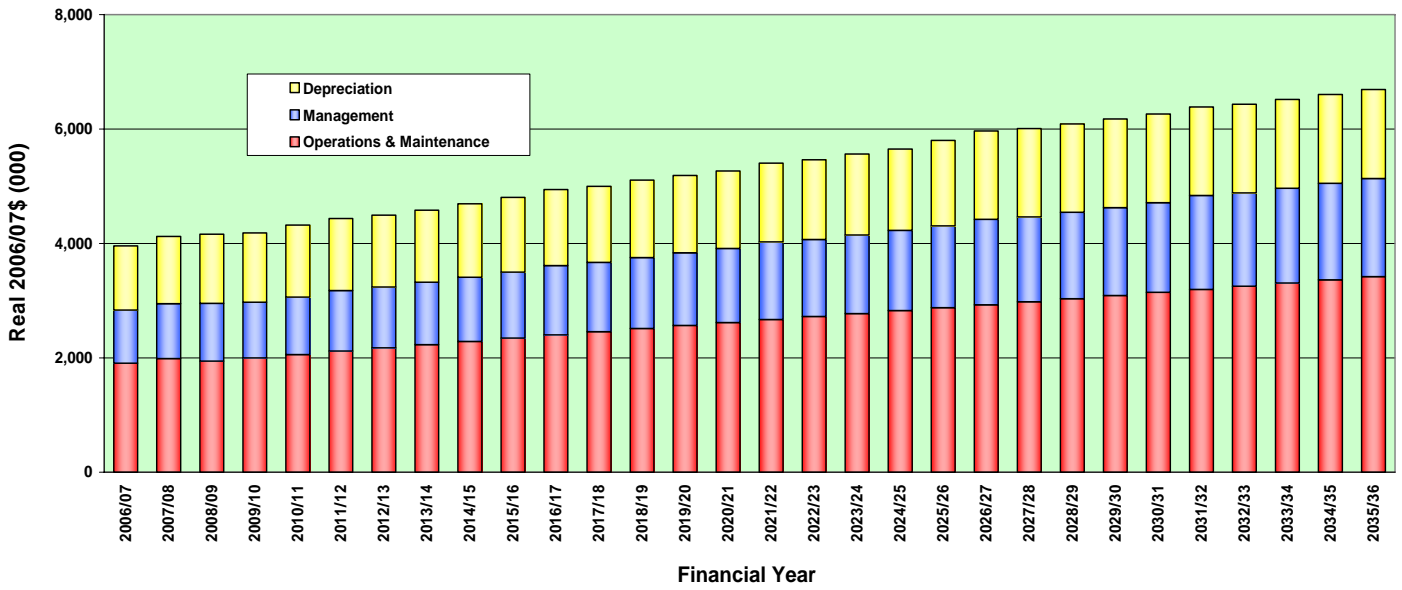


Figure 17 - Water Supply Capital Works Summary

2006/07 \$ (000)	Growth and Minor Works	Improved Levels of Service	Asset Renewals	Total Capital Works	Expected Subsidy	Cost to Council
2006/07	426	0	441	867	0	867
2007/08	3,615	350	418	4,383	0	4,383
2008/09	60	2,045	392	2,497	0	2,497
2009/10	460	10	392	862	0	862
2010/11	3,250	0	392	3,642	0	3,642
2011/12	10	0	407	417	0	417
2012/13	80	0	437	517	0	517
2013/14	130	0	437	567	0	567
2014/15	1,780	0	437	2,217	0	2,217
2015/16	1,530	0	437	1,967	0	1,967
2016/17	1,440	0	437	1,877	0	1,877
2017/18	120	0	437	557	0	557
2018/19	1,570	0	437	2,007	0	2,007
2019/20	90	0	437	527	0	527
2020/21	140	0	437	577	0	577
2021/22	1,290	0	437	1,727	0	1,727
2022/23	1,240	0	437	1,677	0	1,677
2023/24	1,590	0	437	2,027	0	2,027
2024/25	540	0	437	977	0	977
2025/26	4,990	0	437	5,427	0	5,427
2026/27	3,440	0	437	3,877	0	3,877
2027/28	120	0	437	557	0	557
2028/29	70	0	437	507	0	507
2029/30	90	0	437	527	0	527
2030/31	40	0	437	477	0	477
2031/32	90	0	437	527	0	527
2032/33	40	0	437	477	0	477
2033/34	90	0	437	527	0	527
2034/35	40	0	437	477	0	477
2035/36	90	0	437	527	0	527
Total	28,461	2,405	12,930	43,796	0	43,796

Financial Modelling Outcomes

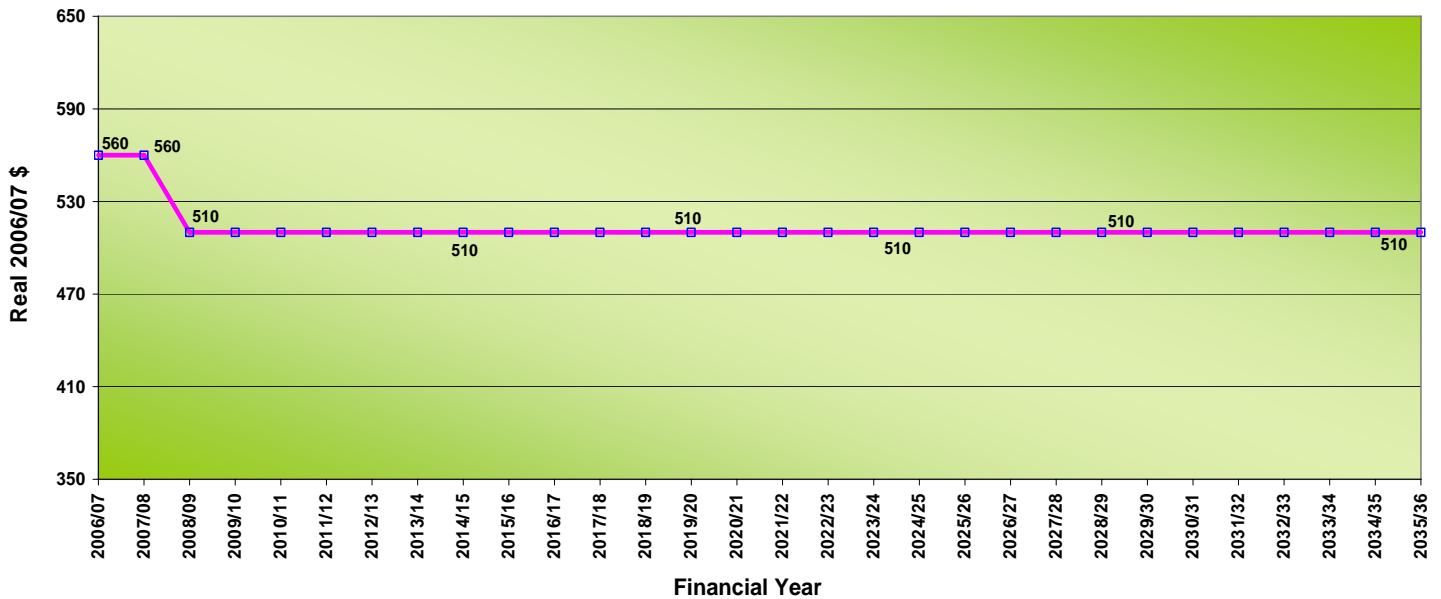
Contains summary of the financial modelling assumptions and outcomes

Results of Modelling Process

In line with current DWE guidelines, the financial plan identifies the lowest stable typical residential bill required with maximum utilisation of existing cash reserves. Financial projections (in 2006/07 \$) have been made considering that no subsidy will be available for the planned capital works during the forecast period.

Financial modelling has demonstrated that owing to the high projected growth rate, typical residential bills, measured in 2006 dollars, can be decreased to \$510 p.a. from the present (2007/08) level of \$560 p.a. from year 2008/09 onwards throughout the plan period. The large capital works to be taken up in the near future will be funded through borrowings. The projected level of residential charges is sufficient to maintain liquidity with a minimum of \$1,000,000 of cash in hand over the period. The typical residential bill projections are graphically presented in the following Figure.

Figure 18 - Typical Residential Water Bill



All the renewal capital works will be internally funded throughout the projection period. Capital works for major growth works planned for the next 5 years will also be partially funded internally, with the maximum utilisation of existing cash reserves and revenues.

The borrowing outstanding is expected to reach a peak of \$ 8,121 K in 2010/11, but all the loans will be retired towards by the end of the 2028/29. The levels of cash and borrowing outstanding during the forecast period are depicted in the following Figure. A summary of projected financial results is presented in the following Table.

Figure 19 - Cash and Borrowing Projections for Water Supply

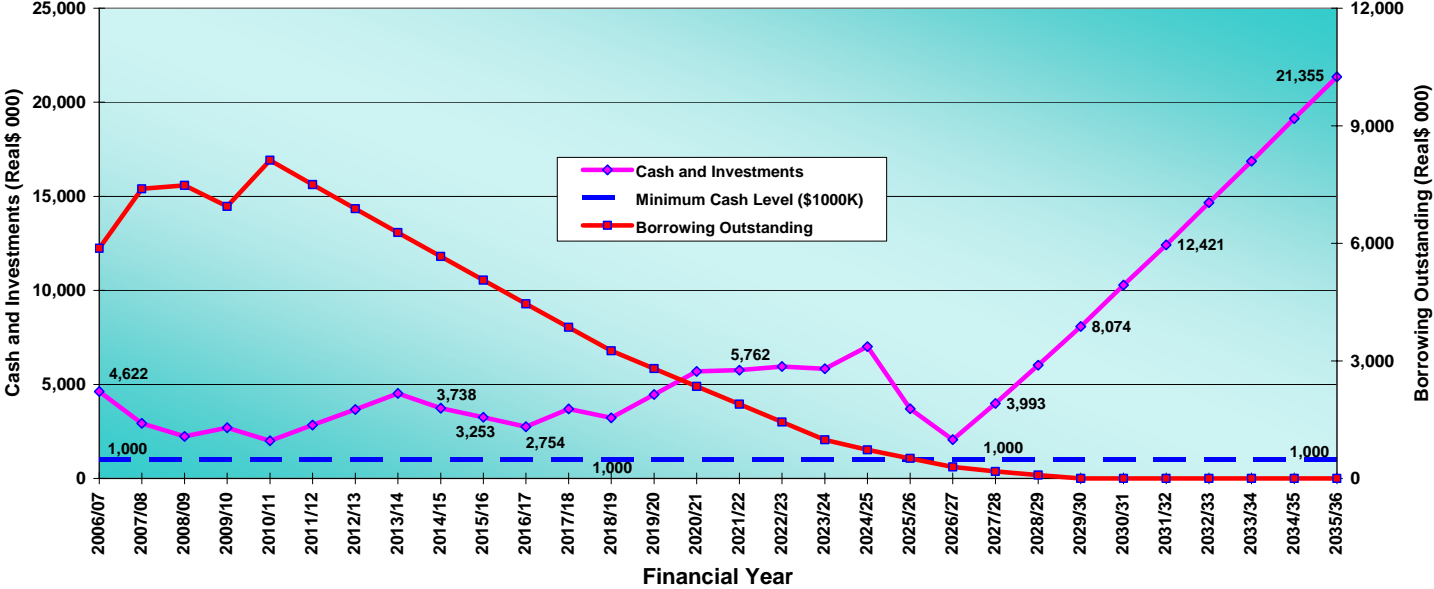


Figure 20 - Projected Financial Results for Water Supply

2006/07 \$ (000)	Revenue and Expenses			Capital Transactions		Financial Position					System Assets			
	Total Revenue	Total Expenses	Operating Result (Before Grants)	Acquisition of Assets	Principal Loan Payments	Cash and Investments	Borrowings	Total Assets	Total Liabilities	Net Assets Committed	Current Replacement Cost	Less: Accumulated Depreciation	Written Down Current Cost	
2006/07	4,633	4,337	296	867	231	4,622	5,876	53,180	6,339	46,841	74,923	27,283	47,640	560
2007/08	4,599	4,616	(17)	4,383	279	2,927	7,391	54,712	7,863	46,849	78,888	28,040	50,849	560
2008/09	5,063	4,658	404	2,498	304	2,234	7,478	55,328	7,958	47,370	80,994	28,853	52,142	510
2009/10	5,173	4,649	524	862	317	2,697	6,943	55,472	7,438	48,034	81,465	29,673	51,792	510
2010/11	5,281	4,863	418	3,642	370	2,003	8,121	57,193	8,631	48,562	84,715	30,538	54,177	510
2011/12	5,405	4,939	466	418	383	2,838	7,501	57,218	8,027	49,191	84,725	31,389	53,337	510
2012/13	5,560	4,959	601	518	398	3,670	6,885	57,339	7,426	49,913	84,806	32,210	52,596	510
2013/14	5,711	5,009	703	567	411	4,518	6,274	57,524	6,830	50,694	84,936	33,034	51,902	510
2014/15	5,820	5,080	740	2,217	425	3,738	5,666	57,706	6,236	51,470	86,717	33,882	52,834	510
2015/16	5,907	5,153	754	1,967	440	3,253	5,061	57,910	5,647	52,263	88,247	34,753	53,494	510
2016/17	5,882	5,253	630	1,877	455	2,754	4,458	57,988	5,059	52,929	89,686	35,645	54,041	510
2017/18	6,027	5,272	756	557	471	3,700	3,857	58,191	4,474	53,717	89,806	36,539	53,268	510
2018/19	6,146	5,342	804	2,007	488	3,223	3,257	58,397	3,888	54,509	91,376	37,454	53,921	510
2019/20	6,280	5,388	893	527	359	4,459	2,803	58,832	3,448	55,384	91,465	38,372	53,094	510
2020/21	6,427	5,440	987	577	372	5,692	2,350	59,314	3,009	56,305	91,606	39,292	52,314	510
2021/22	6,547	5,542	1,005	1,727	385	5,762	1,896	59,762	2,569	57,193	92,896	40,230	52,666	510
2022/23	6,650	5,577	1,073	1,677	398	5,953	1,443	60,265	2,131	58,134	94,136	41,186	52,950	510
2023/24	6,753	5,648	1,105	2,027	413	5,827	988	60,778	1,689	59,089	95,726	42,165	53,562	510
2024/25	6,883	5,709	1,174	977	231	7,013	728	61,545	1,443	60,102	96,266	43,151	53,115	510
2025/26	6,903	5,843	1,060	5,427	196	3,707	512	62,198	1,240	60,958	101,257	44,209	57,047	510
2026/27	7,027	5,996	1,030	3,877	202	2,061	295	62,912	1,037	61,875	104,697	45,317	59,380	510
2027/28	7,174	6,025	1,148	557	110	3,993	177	63,883	933	62,950	104,817	46,425	58,392	510
2028/29	7,328	6,099	1,229	507	83	6,027	89	64,905	858	64,047	104,887	47,534	57,352	510
2029/30	7,502	6,179	1,323	527	86	8,074	1	65,960	784	65,176	104,977	48,645	56,331	510
2030/31	7,673	6,260	1,412	477	0	10,285	0	67,129	799	66,330	105,017	49,757	55,259	510
2031/32	7,838	6,388	1,449	527	0	12,421	0	68,270	814	67,456	105,106	50,870	54,236	510
2032/33	8,002	6,432	1,569	477	0	14,664	0	69,469	829	68,640	105,146	51,984	53,162	510
2033/34	8,163	6,518	1,645	527	0	16,869	0	70,679	843	69,836	105,236	53,098	52,138	510
2034/35	8,324	6,603	1,721	477	0	19,134	0	71,900	858	71,042	105,276	54,213	51,063	510
2035/36	8,480	6,689	1,791	527	0	21,355	0	73,123	873	72,250	105,366	55,329	50,037	510

Sensitivity Analysis

In accordance with the DWE Financial Guidelines, the following sensitivities have been modelled to determine the impact of various scenarios on typical residential bill for water supply:

Criteria	Preferred Case	Sensitivity
Growth Rate	2.2% p.a.	1.1% p.a.
Interest Rates	Borrow @ 6.5% and invest @ 5.5%	Borrow @ 9% and invest @ 8%

The results of modelling are presented in both graphic and tabular form. Note that the cash and borrowings are similar for most years to facilitate comparability between cases. The financial model forecasts do not involve any subsidy. Hence, the sensitivity of the model in a 'no subsidy' scenario has not been analysed.

Figure 21 –Sensitivity of Typical Residential Bill

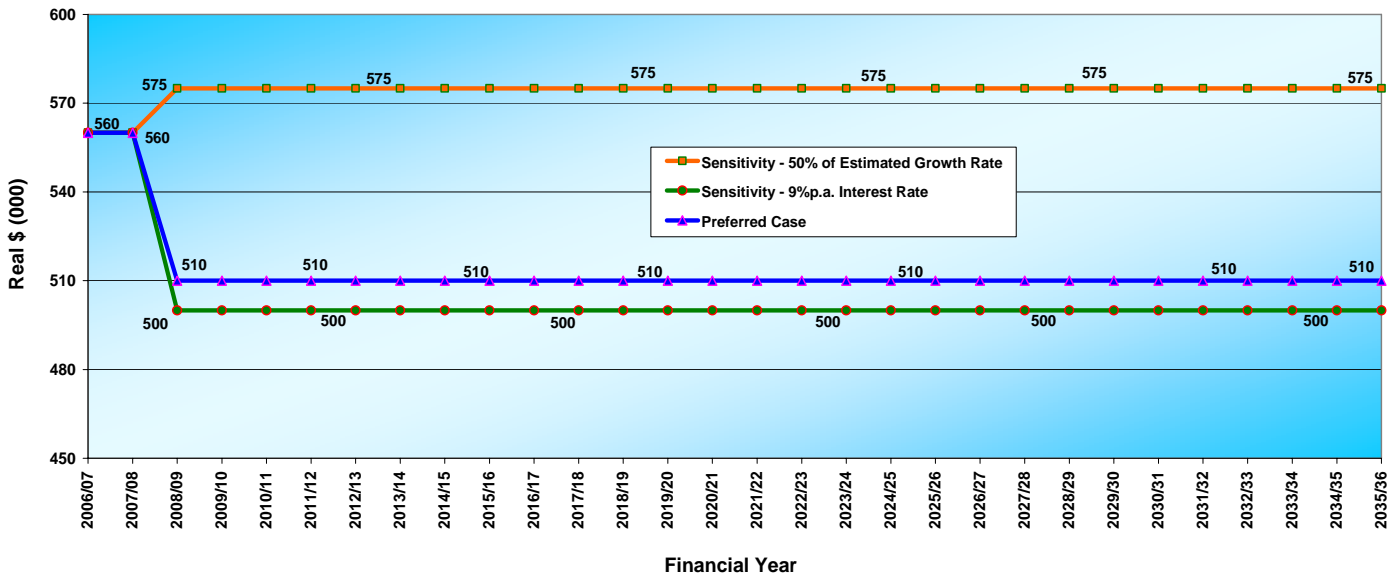


Figure 22 –Sensitivity of Cash Levels

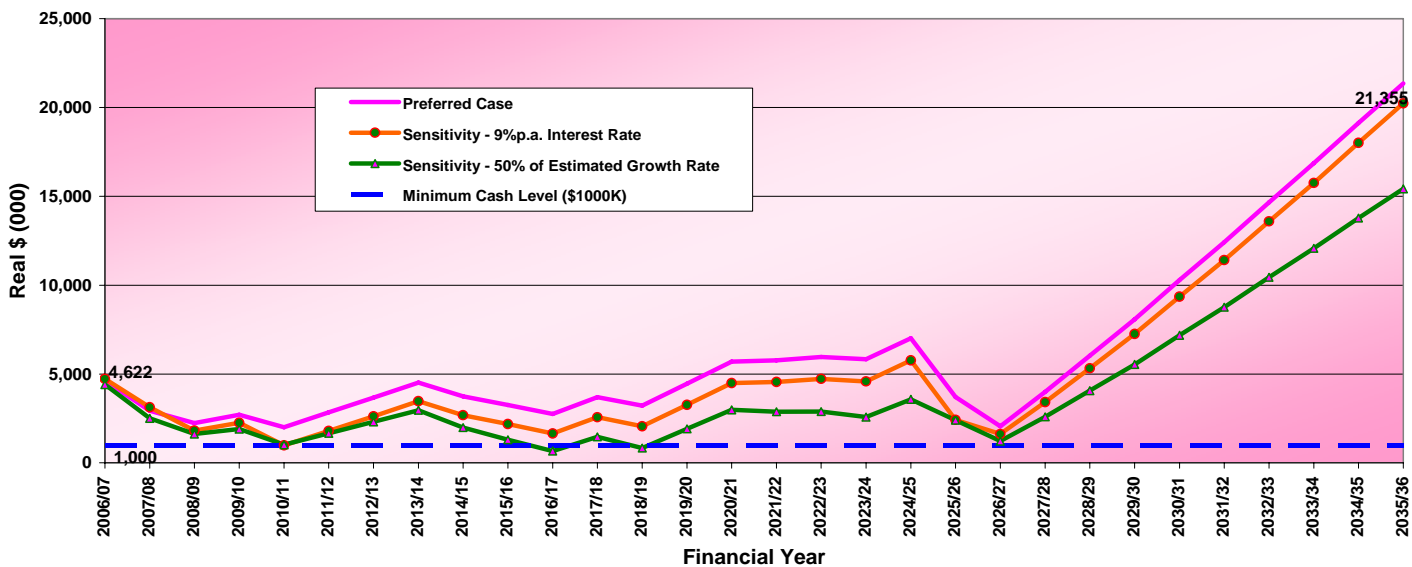


Figure 23 - Sensitivity of Borrowing Levels for Water Supply

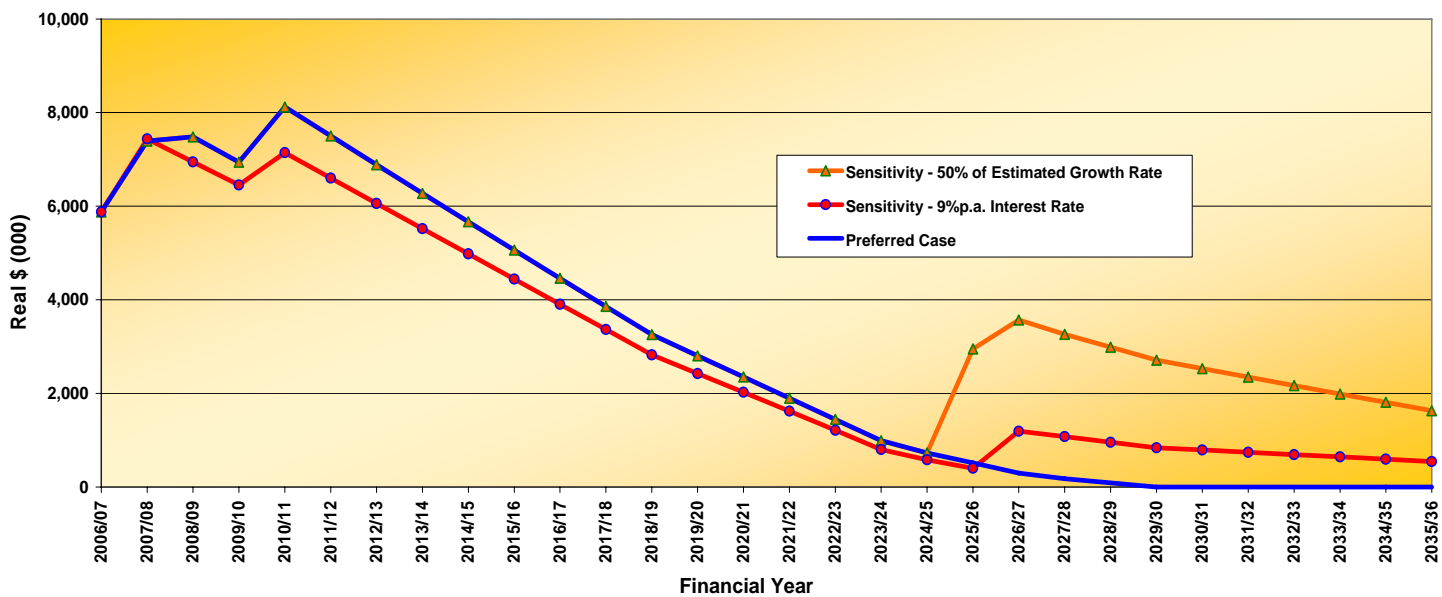
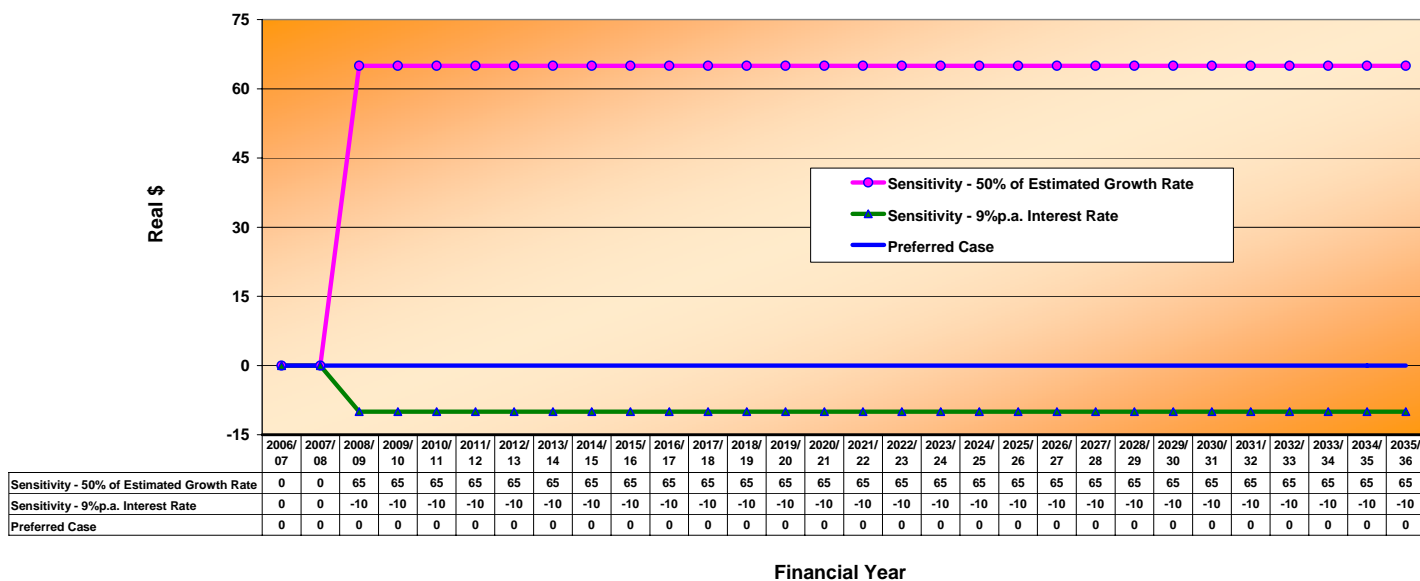


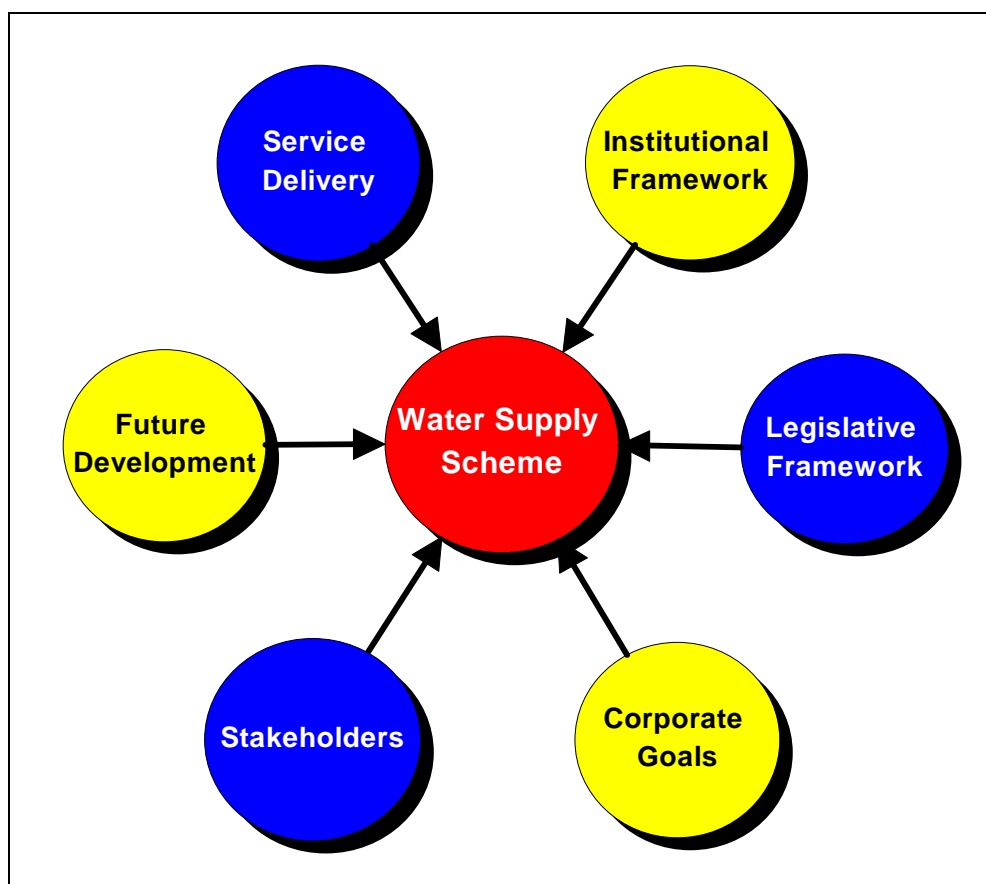
Figure 24 – Effect of Sensitivity on the Preferred Typical Residential Bill



Sensitivity analysis indicates that when all other parameters are similar, the projected typical residential charges are highly susceptible to the assessment growth rate.

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

There are several recognised options open to Council to structure its institutional arrangements. The purpose of this review is to anticipate change; to look ahead at possible future outcomes and ask what strengths should Council 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 of self-regulation, which suggests ways Council can improve its service delivery.

The following options exist:

Amalgamation: where Council would amalgamate its operations with those of surrounding Councils to form a single large organisation that would serve a wider regional area.

Advantages

- With the greater staff resources created as the result of amalgamation there would be more relief staff available and the opportunity for further staff developments
- The skills possessed by the larger staff resource would enable an improvement to other Council services
- With amalgamation the infrastructure for the provision of services is already in place.
- Potential reduction in the provision of the service due to operational efficiencies

Disadvantages

- Conflict involved with setup of an amalgamated organisation
- Continued sectional interests in the amalgamated organisation
- The resulting larger organisation with a greater asset base would be a bigger target for litigation
- The customer expectations from a larger organisation would be different

Mid-Western Regional Council is surrounded by 8 other Councils (Bathurst, Lithgow, Liverpool Plains, Muswellbrook, Upper Hunter, Warrumbungle and Wellington). MWRC has been formed recently with the amalgamation of former Mudgee Shire Council with Rylstone and parts of Merriwa. While this has generally benefitted the community and the Council, no further amalgamation with the surrounding Councils is expected in future.

County Council: where Council would amalgamate its water supply and/or sewerage services divisions with those of neighbouring Councils and set these divisions up as an independent organisation that would provide these services to a wider region.

Advantages

As for "Amalgamation"

- A regional county Council for the provision of services would provide access to greater financial power

Disadvantages

As for "Amalgamation"

- The formation of a County Council is an advanced option and as such the process involved in implementing the change would be complicated.

Council does not see economies of scale and increased resource availability with this arrangement. The view is that it would offer no obvious benefits and may be more expensive and less effective in the long term than the existing scheme.

Commercialisation: where Council would operate on a commercial basis, ie. each aspect of Council's operations would be self sustaining

Advantages

- Prices reflect costs
- User pays reduces consumption

Disadvantages

- Not necessarily consumer friendly
- Profit may be put before quality of service

Water supply and Sewerage operation of the Council are currently operated as part of the Asset Management Division of the Council. These operations are already carried out on a commercial basis in accordance with DWE Best Practice Management Guidelines.

Corporatisation: where Council would set up its operations and register as a company.

Advantages

- A corporation has the advantage of limited liability

Disadvantages

- Reduced government control of standards may occur due to a change of focus in the organisation from technical aspects to financial aspects

Council views this option is inappropriate because the size of their water supply and sewerage operations is too small and the revenues are below the \$2 Million threshold for corporatisation as identified by the Competition Policy.

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.

Advantages

- Reduced staffing levels can be achieved
- Access to financial power through private investors

Disadvantages

- Less motivation for community involvement and environment aspects
- Encouraging other industries to provide a competitive market would not be a priority
- Profits are put before quality
- Not in for the long haul

Council considers that this option is highly unlikely to be adopted due to the associated risks and difficulty in management.

The various institutional arrangements were rated on a scale of +1 (very possible) to –1 (very unlikely) with the following ranks:

Option	Ranking
Amalgamation	-1
County Council	-1
Commercialisation	+1
Corporatisation	-1
Privatisation	-1

Council looks favourably on the commercialisation model. Other options are either not preferred or considered irrelevant under the prevailing operating environment.

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.

Stakeholder Analysis

The 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.

Service Provision

The water supply system will need to be augmented and maintained to cope with growth, aging assets and increasing usage. Currently Council is not planning to service any additional areas outside the current designated service areas.

Corporate Policies and Practices

Mid-Western Regional Council 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	<ul style="list-style-type: none"> - Reliable and consistent service - Customer consultation
Support OH&S and EEO principles	<ul style="list-style-type: none"> - Socially responsible
No Private water lines policy	<ul style="list-style-type: none"> - Customer responsibilities for maintaining infrastructure
Rainwater tank (rebates) guidelines	<ul style="list-style-type: none"> - Demand Management
Water saving devices (rebates) policy	<ul style="list-style-type: none"> - Demand Management
Free mulch day every spring	<ul style="list-style-type: none"> - Demand Management
Construction over council assets not permitted	<ul style="list-style-type: none"> - Asset Management
Policy for water pipes across and along roads	<ul style="list-style-type: none"> - Asset Management
Resolution on water restrictions	<ul style="list-style-type: none"> - Drought Management
Asset management policy	<ul style="list-style-type: none"> - Asset Management
Developers contribution policy (detailed in DSPs) for water	<ul style="list-style-type: none"> - Improved levels of service

Service Delivery

Institutional arrangements are being reviewed throughout the State and initiatives such as the National Competition Policy and Self Regulation are currently being reviewed. The National Competition Policy's impact on Mid-Western Regional Council's future service delivery is minimal. Classed as a Category 2 business, the operation of the water supply branch is not seen as distortionary on competition at a state or national level. The separation of Council's water supply business from other activities is at the discretion of Council. The requirement of full cost attribution for water supply service is already in place.

The General Manager delegates authority to the Group Manager – Assets who in turn delegates the responsibility to Water Cycle and Waste Engineer to manage all the water supply and sewerage assets.

The operation, maintenance and construction of assets are contracted to Mid-Western Operations, an internal service provider. Mid-Western Operations has 23 staff, who operate and maintain the water supply and sewerage schemes.

Council has considered various methods of service delivery including the following:

Full Service Contract

Advantages

- There is the possibility that the operation of the sewerage 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 sewerage 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 sewerage 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 sewerage services.
- By having the operations of the sewerage system 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 operates under a 'purchaser-provider' model whereby asset operations, maintenance and construction are undertaken by Mid-Western Operations, an internal service provider.

Part Service Contract

Advantages

- Some degree of control over the sewerage 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 and effluent quality testing and calibration;
- Operator training;
- Telemetry upgrade;
- CCTV
- Pipe relining
- Mechanical maintenance;
- Strategic advice such as EIA, EMP, Best Practice Plans, OH&S audit etc.;
- Specialist contract staff for specific purposes; and
- Major engineering design and capital works (traditionally done in conjunction with the State Authorities and/or by tendered contract).

Council will continue with the current practice and will monitor the situation with a view to assess the need for considering other options for contract services.

B.O.O.T. (Build, Own, Operate and Transfer)

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 developers profit and risk must be paid for as part of the overall project

Council thinks that this option can be considered in future 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 suitable for this type of service delivery.

Resource Sharing

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 sewerage services with other organisations economies of scale would be achieved.
- May enables 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.

Currently there are no resources that Council share with other organisations or parties. Council is open to consider this option if need arises.

Conclusion

The various service delivery arrangements were rated on a scale of +1 (very possible) to -1 (very unlikely) with the following ranks:

Option	Ranking
Full Service Contract (Purchaser-Provider Model)	+1
Part-Service Contract	+1
BOOT	0
Service Share	0

As can be seen from the discussion Council sees that the Purchaser – Provider model and part service contract hold advantages to them.

Therefore the present strategy is to continue with its current service delivery arrangements.

APPENDICES

Appendix A
Abbreviations

Appendix B
Legislative Framework

Appendix C
Stakeholder Review

Appendix D
Performance Indicators

Appendix E
Financial Input Data

Appendix F
Detailed Projected Financial Statements

Appendix A

Abbreviations

The following list of abbreviations may be used in the Strategic 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.
DoC	Department of Commerce.
DUAP	Department of Urban Affairs and Planning.
DWE	Department of Water and Energy
EEO	Equal employment opportunity.
EIS	Environmental impact statement.
EP	Equivalent population.
EPA	Environment Protection Authority.
ET	Equivalent tenements.
LEP	Local environment plan.
NFR	Non-filtrable 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.
SEPP	State Environmental Planning Policy.
STP	Sewage treatment plant (also referred to as STW).
WTP	Water treatment plant (also referred to as WFP).
TCM	Total catchment management.
WDCC	Written down current cost. The current replacement cost less the accumulated depreciation to date.

Appendix B

Legislation Affecting Water Supply Services

Legislative Framework

Mid-Western Regional Council delivers water supply and sewerage services for Mudgee, Gulgong, Rylstone and Kandos 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.
Local Government Regulation 1993 (Savings and Transitional)	Determining developer charges.

<p>Independent Pricing and Regulatory Tribunal Act 1992</p>	<p>Gives powers to the Independent Pricing and Regulatory Tribunal to inquire into and regulate prices.</p> <p>IPART has developed a set of consistent pricing principles to be adopted by local government authorities.</p> <p>Charging guidelines.</p> <p>Trend towards a user pay system in the industry.</p>
<p>2. Environmental Protection</p>	
<p>Protection of the Environment Operations Act 1997</p> <p>Brings together:</p> <ul style="list-style-type: none"> - Clean Air Act 1961 - Clean Waters Act 1970 - Pollution Control Act 1970 - Noise Control Act 1975 - Environmental Offences and Penalties (EOP) Act 1989 	<p>Regulating pollution activities and issue of licenses as well as the monitoring of and reporting on waste output.</p> <p>Council is required to be “duly diligent” in undertaking the scheme operations</p> <p>The Department of Environment and Conservation, which administers the Act has been imposing increasing monitoring requirements on the Council due to its geographic location within the Sydney’s water catchment.</p>
<p>Soil Conservation Act 1938</p>	<p>Conserves soil resources and farm water resources and the mitigation of erosion and land degradation.</p> <p>Preservation of watercourse environments.</p>
<p>Environmental Planning and Assessment Act 1979</p>	<p>Encourages the proper management of natural and man-made resources, the orderly use of land, the provision of services and protection of the environment.</p>
<p>Catchment Management Act 1989</p>	<p>Promotes the coordination of activities within catchment areas. Council believes this Act has implications for the management of river water quality and quantity.</p> <p>Requirement for ongoing management plan.</p> <p>Requirement of Capital Works Plan under Sydney Catchment Authority Regulations.</p>
<p>Water Management Act 2000</p>	<p>The act provides for sustainable and integrated management of NSW’s water sources.</p> <p>Water rights, licences, allocations.</p>

3. Health and Safety	
Public Health Act 1991	Prevention of the spread of disease. Effluent disposal methods. Delivery of quality water.
Occupational Health and Safety Act 2000 (and Regulations 2001)	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. The Minister for Energy, Utilities and Sustainability 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 Energy, Utilities and Sustainability 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. The provisions of Section 94 of the Environmental Planning and Assessment Act are no longer available to councils for obtaining sewerage developer contributions.)
- Section 68 - Council approval of plumbing works
- Sections 634-651 - water supply, sewerage and drainage offences
- 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 Energy, Utilities and Sustainability. 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 Energy, Utilities and Sustainability.

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 Energy, Utilities and Sustainability.

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 Energy, Utilities and Sustainability 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 Energy, Utilities and Sustainability 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 Energy, Utilities and Sustainability.

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 Energy, Utilities and Sustainability, 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 of Energy, Utilities and Sustainability.

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 recently released *Pricing Principles for Local Water Authorities*, which sets out pricing recommendations for Council's to adopt in the pricing of their services.

Occupational Health and Safety Act 2000

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 Department 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 (eg amalgamation of authorities).
Competition Policy	<p>In 1995 the Council of Australian Governments (COAG) ratified the National Competition Policy. Of particular significance to the water and sewerage functions of Council is the application of competitive neutrality to operations. The purpose of this is to have councils “<i>operate under similar competitive pressures to those experienced by the private sector</i>”.</p> <p>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 <u>NSW Government Policy Statement on the Application of National Competition Policy to Local Government</u>.)</p>
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 water supply and sewerage schemes of country towns under the care of Local Governments is well managed.
Financial Assistance	<p>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 Department of Energy, Utilities and Sustainability.</p> <p>The Minister for Energy, Utilities and Sustainability 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 <u>Country Towns Water Supply and Sewerage Program: Technical and Financial Assistance Available to Councils</u>.</p>
Pricing and Developer Charges	<p>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.</p> <p>Guidelines are issued from time to time by the Minister for Energy, Utilities and Sustainability. These guidelines, which include a methodology for calculating development contributions, were issued in February 2003.</p>

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.

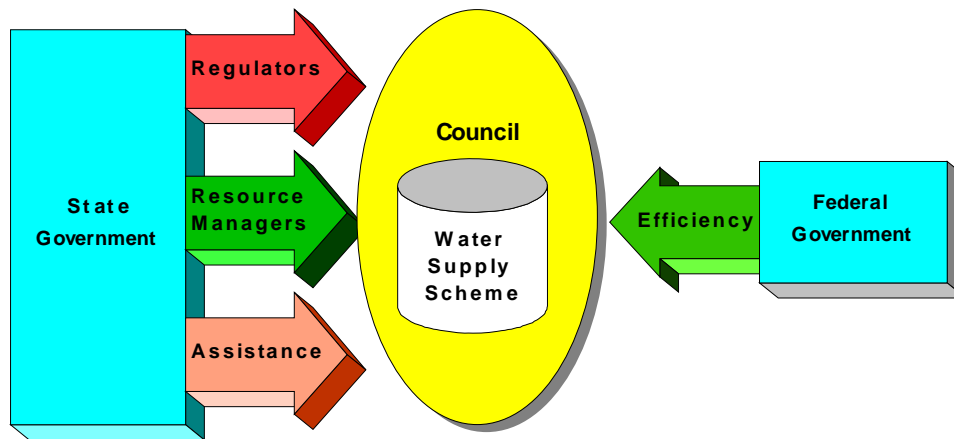
Appendix C

Stakeholder Review

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 Department of Energy, Utilities and Sustainability, 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 sewerage schemes through the Country Water, Sewerage and Drainage 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 Department of Energy, Utilities and Sustainability.

Other assistance is in the form of services, such as the professional services provided by the Department of Commerce.

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's 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/ Ratepayers	<ul style="list-style-type: none"> - Rates/ value for money - Levels of Service 	M/G - 8 R/K - 5	8 6
Residents/ Families	<ul style="list-style-type: none"> - Quality services - Public health standards met and maintained - Guaranteed service - Reasonable cost - Palatability of water 	M/G - 8 R/K - 5	8 6
Pensioners	<ul style="list-style-type: none"> - Rebates - Quality services - Public health standards met and maintained - Guaranteed service - Reasonable cost - Palatability of water 	M/G - 8 R/K - 5	8 6
Commercial and Industrial customers	<ul style="list-style-type: none"> - Quality - Sufficient supply - Guaranteed service - Reasonable cost 	M/G - 9 R/K - 5	8 3
Other Users			
Downstream water users (Irrigators)	<ul style="list-style-type: none"> - Clean quality water - Continued supply - No future interference with their operations 	8	8
Environmental groups	<ul style="list-style-type: none"> - Environmental responsibility - Minimisation of wastage - Environmental sustainability 	8	8
Tourists	<ul style="list-style-type: none"> - Quality and quantity of service - Aesthetics 	8	7

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 	M/G - 9 R/K - 3	9 3
	<ul style="list-style-type: none"> - Compliance - Continued availability - Price 		
Council employees	<ul style="list-style-type: none"> - Recognition for work - Safe workplace - Competency/training - Security - Pride in workplace/ schemes - Support 	8	6
Engineering Services Department	<ul style="list-style-type: none"> - Efficient service - Chargeable service - Working relationship - Timeliness - Innovation and technology - Informed advice 	8	6
Government			
DLG	<ul style="list-style-type: none"> - Accountability - Financial stability 	8	8
DWE	<ul style="list-style-type: none"> - Efficient operations - Performance - Best practice management 	7	7
DEC /EPA	<ul style="list-style-type: none"> - Environmental requirements - Sludge disposal 	6	6
Others (Dept. of Health, Work Cover etc.)	<ul style="list-style-type: none"> - Water quality - Catchment management 	8	8

Note: M – Mudgee; G – Gulgong; R – Rylstone; and K – Kandos

Appendix D

Performance Indicators

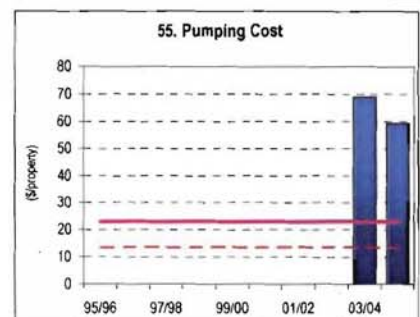
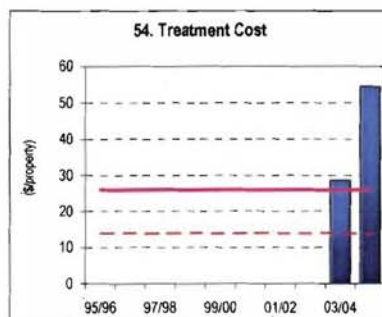
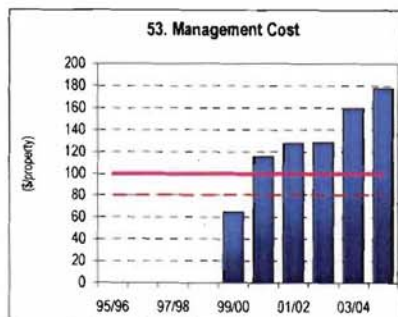
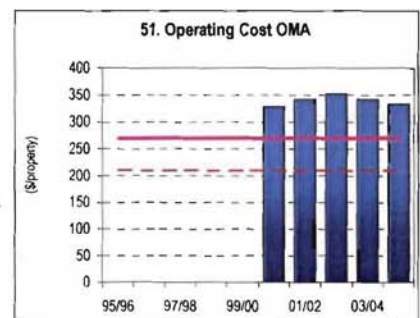
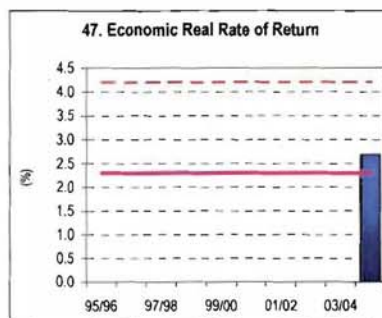
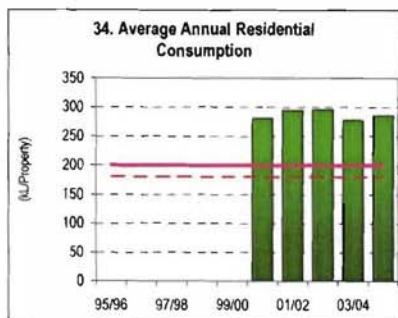
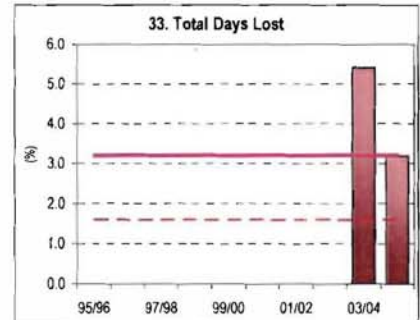
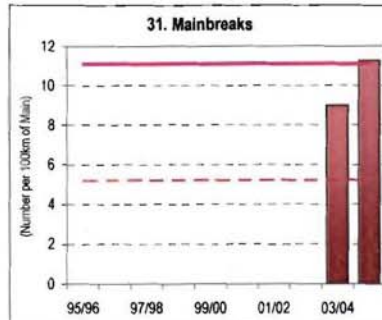
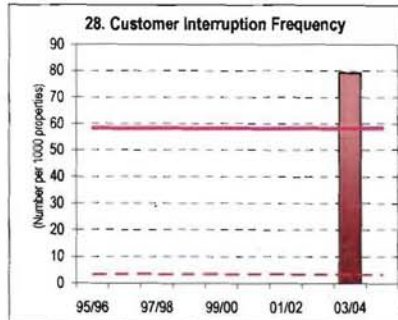
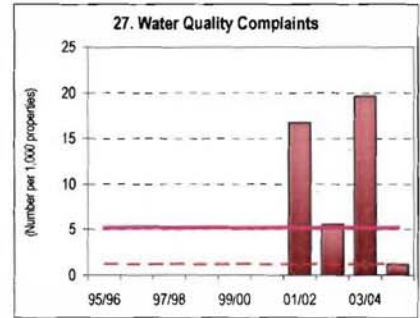
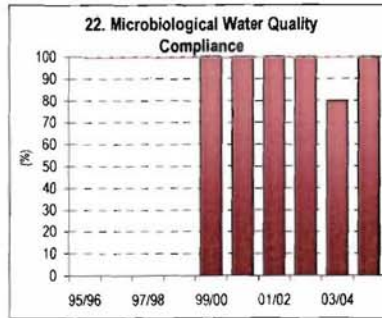
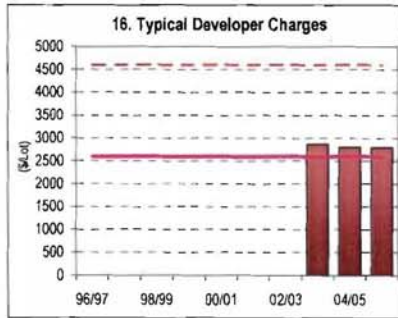
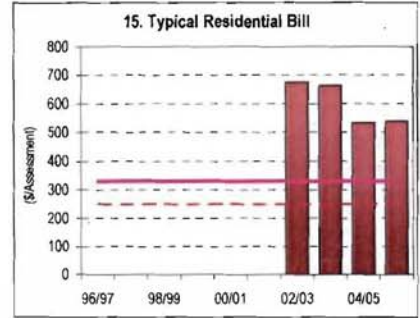
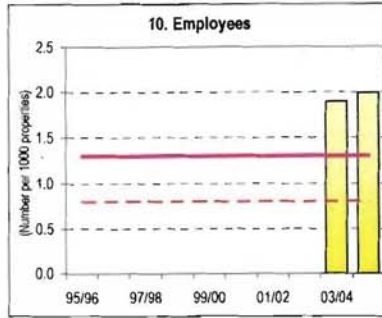
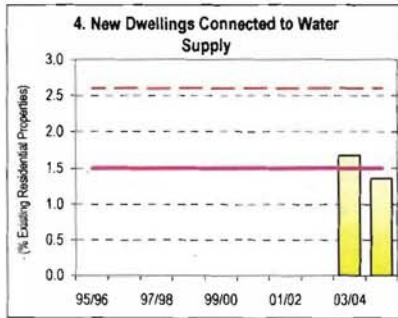
Mid-Western Regional Council has been submitting performance information about its water supply scheme to the Department of Energy, Utilities and Sustainability for inclusion in its annual State-wide performance reports. This will allow Council to compare its system against equivalent councils and then 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

Following comments can be made when comparing Council's water supply scheme to the rest in the State:

- ☹️ - New water connections to Council's water supply is slightly lower than the 2005/06 State median level
- ☺️ - Typical residential bill is decreasing after the amalgamation but still much higher than State median level
- ☹️ - Typical developer charges is slightly higher than the State average
- ☺️ - Improved water quality following construction of water treatment facilities has resulted in reducing numbers of complaints about quality.
- ☺️ - Number of main breaks in year 2005/06 it was at par with State average
- ☹️ - Council's average annual residential water consumption is about 50% higher than the State average
- ☹️ - The OMA costs and treatment cost of Council's water supply schemes are increasing over the years and are well above the State average

(Results shown for 10 years together with 2004/05 Statewide Median and Top 20%)



1 Costs are in Jan 2005\$.
 2 Microbiological water quality compliance after 1998/99 was on the basis of E. coli in the 1996 NHMRC ARMCANZ Australian Drinking Water Guidelines. Compliance prior to 1998/99 was on the basis of the 1987 NHMRC AWRC Guidelines.

LEGEND
 2004/05 State Median ———
 2004/05 Top 20% - - - - -

Appendix E

Financial Input Data

Details of data input to the financial model are presented in the following pages.

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Historical Operating Statement

FINMOD
DEPARTMENT OF
COMMERCE

	2004/05*	2005/06*
EXPENSES		
Management Expenses	1158	854
Administration	1158	854
Engineering and Supervision	0	
Operation and Maintenance Expenses	1474	1752
Operation Expenses	27	106
Maintenance Expenses	1275	1504
Energy Costs	155	122
Chemical Costs		
Purchase of Water	17	20
Depreciation	753	1082
System Assets	753	1082
Plant & Equipment		
Interest Expenses	372	335
Other Expenses		
TOTAL EXPENSES	3757	4023
REVENUES		
Rates & Service Availability Charges	1875	1864
Residential	1875	1625
Non-Residential		239
User Charges	1701	1774
Sales of Water : Residential	1369	1354
Sales of Water : Non-Residential	332	420
Extra Charges		
Interest Income	217	207
Other Revenues	223	163
Grants	1589	289
Grants for Acquisition of Assets	1523	223
Pensioner Rebate Subsidy	66	66
Other Grants		
Contributions	488	399
Developer Charges	488	399
Developer Provided Assets		
Other Contributions		
TOTAL REVENUES	6093	4696
OPERATING RESULT	2336	673
OPERATING RESULT (less Grants for Acq of Assets)	813	450

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Historical Statement of Financial Position

FINMOD
DEPARTMENT OF
COMMERCE

	2004/05*	2005/06*
Cash and Investments		4326
Receivables		757
Inventories		117
Property, Plant & Equipment	0	46498
System Assets (1)		46498
Plant & Equipment		
Other Assets		
TOTAL ASSETS	0	51698
LIABILITIES		
Bank Overdraft		
Creditors		104
Borrowings		6107
Provisions		337
TOTAL LIABILITIES	0	6548
NET ASSETS COMMITTED	0	45150
EQUITY		
Accumulated Operating Result		45150
Asset Revaluation Reserve		
TOTAL EQUITY	0	45150
(1) Notes to System Assets		
Current Replacement Cost		72327
Less: Accumulated Depreciation	0	25829
Written Down Current Cost		46498

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Base Forecast Data

FINMOD
DEPARTMENT OF
COMMERCE

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	
Financial Data																										
Inflation Rate - General (%)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
Inflation Rate - Capital Works (%)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
Borrowing Interest Rate for New Loans (%)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	
Investment Interest Rate (%)	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	
Number of Assessments																										
Growth Rate (%)																										
Residential Assessments	1.83	1.79	1.76	3.15	3.05	2.96	2.88	2.80	2.72	2.65	2.58	2.52	2.45	2.22	2.17	2.12	2.08	2.03	1.99	1.96	1.92	1.88	1.85	1.96	1.92	
Non-Residential Assessments	3.32	3.21	3.11	3.17	3.08	2.99	2.90	2.82	2.74	2.67	2.60	2.53	2.47	1.81	1.78	1.74	1.71	1.69	1.66	1.63	1.60	1.58	1.55	1.53	1.51	
Total Assessments	1.96	1.92	1.88	3.15	3.05	2.96	2.88	2.80	2.72	2.65	2.58	2.52	2.45	2.18	2.13	2.09	2.04	2.00	1.96	1.93	1.89	1.85	1.82	1.92	1.89	
Number of New Assessments																										
Residential	110	110	110	200	200	200	200	200	200	200	200	200	200	185	185	185	185	185	185	185	185	185	185	200	200	
Non-Residential	19	19	19	20	20	20	20	20	20	20	20	20	20	15	15	15	15	15	15	15	15	15	15	15	15	
Total New Assessments	129	129	129	220	220	220	220	220	220	220	220	220	220	200	200	200	200	200	200	200	200	200	200	215	215	
Projected Number of Assessments																										
Residential	6132	6242	6352	6552	6752	6952	7152	7352	7552	7752	7952	8152	8352	8537	8722	8907	9092	9277	9462	9647	9832	10017	10202	10402	10602	
Non-Residential	592	611	630	650	670	690	710	730	750	770	790	810	830	845	860	875	890	905	920	935	950	965	980	995	1010	
Total Projected Assessments	6724	6853	6982	7202	7422	7642	7862	8082	8302	8522	8742	8962	9182	9382	9582	9782	9982	10182	10382	10582	10782	10982	11182	11397	11612	
Backlog Assessments																										
Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Non-Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Backlog Assessments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Developer Charges / Vacant Assessments (Values in 2006/07 \$)																										
Developer Charges \$/Assessment																										
Residential	1800	1800	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	5531	
Non-Residential	2400	2400	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	8597	
Number of Vacant Residential Assessments	270	360	450	450	450	450	450	450	450	450	435	420	405	405	405	405	405	405	405	405	420	435	450	450	450	
Average Charge of Vacant Assessments	55	35	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
% of Occupied Assessments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Depreciation of Existing Plant and Equipment (Values in 2006/07 \$'000)																										
Current Replacement Cost of System Assets	74497																									
Override																										
Written Down Current Cost of System Assets	47893																									
Override																										
Annual Depreciation of Existing System Assets	1114																									
Override																										
Written Down Value of Plant and Equipment	0																									
Override																										
Annual Depreciation of Existing Plant and Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Base Forecast Data

FINMOD
DEPARTMENT OF
COMMERCE

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Existing Loan Payments (Values in Inflated \$'000)																									
Existing Loan Payments : Principal (Total:6107)	231	236	252	269	286	304	326	347	369	393	420	446	477	294	314	334	356	380	73	0	0	0	0	0	0
Existing Loan Payments : Interest (Total:3943)	381	376	360	344	326	309	287	266	243	219	193	166	136	108	89	68	46	23	3	0	0	0	0	0	0
Capital Works Program (Values in 2006/07 \$'000)																									
Subsidised Scheme (Total:2405)	0	350	2045	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other New System Assets (Total:28461)	426	3615	60	460	3250	10	80	130	1780	1530	1440	120	1570	90	140	1290	1240	1590	540	4990	3440	120	70	90	40
Renewals (Total:12930)	441	418	392	392	392	407	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437
Total Capital Works (Total:43796)	867	4383	2497	862	3642	417	517	567	2217	1967	1877	557	2007	527	577	1727	1677	2027	977	5427	3877	557	507	527	477
Grant For Acquisition of Assets (% of Subsidised Scheme)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grant For Acquisition of Assets (\$) (Total:0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Developer Provided Assets (Total:0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant and Equipment Expenditure / Asset Disposal (Values in 2006/07 \$'000)																									
Plant and Equipment Expenditure	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proceeds from Disposal of Plant and Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Written Down Value of Plant and Equipment Disposed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gain/Loss on Disposal of Plant and Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proceeds from Disposal of Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Written Down Value of Assets Disposed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gain/Loss on Disposal of System Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Revised/Additional Forecast Data

FINMOD
DEPARTMENT OF
COMMERCE

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	
OMA / Revenue Overrides (Values in 2006/07 \$'000)																										
Administration	897	914	931	960	989	1018	1047	1076	1105	1134	1163	1192	1221	1248	1275	1302	1329	1356	1383	1410	1437	1464	1491	1520	1549	
Override	931	963	1010	973	1003	1060	1063	1092	1122	1152	1212	1211	1241	1268	1295	1356	1349	1376	1403	1430	1495	1484	1511	1540	1569	
Engineering and Supervision	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Override																										
Operating Expenses	111	113	115	119	123	127	131	135	139	143	147	151	155	158	161	164	167	170	173	176	179	182	185	189	193	
Override	162	180	120	124	128	132	135	139	143	147	151	154	158	162	165	169	172	175	179	182	186	189	193	196	200	
Maintenance Expenses	1579	1609	1639	1691	1743	1795	1847	1899	1951	2003	2055	2107	2159	2206	2253	2300	2347	2394	2441	2488	2535	2582	2629	2679	2730	
Override	1572	1633	1653	1705	1757	1810	1862	1914	1966	2018	2070	2122	2174	2222	2269	2316	2364	2411	2458	2506	2553	2600	2648	2699	2750	
Energy Costs	128	130	132	136	140	144	148	152	156	160	164	168	172	176	180	184	188	192	196	200	204	208	212	216	220	
Override	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
Chemical Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Override																										
Purchase of Water	21	21	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
Override																										
Other Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Override																										
Other Revenue	171	174	177	183	189	195	201	207	213	219	225	231	237	242	247	252	257	262	267	272	277	282	287	293	299	
Override	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
Other Grants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Override																										
Other Contributions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Override																										
Developer Charges Overrides (Values in 2006/07 \$'000)																										
Calculated from Scheme Data	244	244	772	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1235	1235	
Override	408	408	1278	1278	1278	1278	1278	1278	1278	1278	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1235	1235	1235	1235	1235	
Pensioner Rebate (Values in Inflated \$)																										
Pensioner Rebate per Pensioner (\$)	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50
Override																										
Pensioner Rebate Subsidy (%)	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	
Override																										
Number of Pensioner Assessments	1396	1421	1446	1492	1537	1583	1629	1674	1720	1765	1811	1856	1902	1944	1986	2028	2070	2112	2154	2197	2239	2281	2323	2369	2414	
Override																										
Percentage of Pensioners (%)	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	
Override																										
Pensioner Rebate	122	124	127	131	134	139	143	146	151	154	158	162	166	170	174	177	181	185	188	192	196	200	203	207	211	
Override	67	68	70	72	74	76	79	80	83	85	87	89	91	94	96	97	100	102	103	106	108	110	112	114	116	
Revenue Split (%)																										
Residential Rates	48.42	48.33	48.24	48.23	48.23	48.23	48.23	48.23	48.22	48.22	48.22	48.22	48.22	48.24	48.27	48.29	48.32	48.35	48.37	48.39	48.41	48.43	48.45	48.48	48.50	
Override																										
Non-Residential Rates	3.35	3.39	3.43	3.43	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.43	3.42	3.41	3.40	3.39	3.38	3.37	3.36	3.35	3.34	3.33	3.32	
Override																										
Sales of Water: Residential	37.67	37.60	37.53	37.53	37.52	37.52	37.52	37.52	37.52	37.52	37.52	37.52	37.52	37.54	37.56	37.58	37.60	37.61	37.63	37.65	37.67	37.68	37.70	37.72	37.74	
Override																										
Sales of Water: Non-Residential	10.56	10.68	10.80	10.81	10.81	10.81	10.81	10.81	10.82	10.82	10.82	10.82	10.82	10.79	10.75	10.72	10.68	10.65	10.62	10.59	10.56	10.54	10.51	10.47	10.44	
Override																										
Extra Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Override																										
Total Non-Residential Revenue (%)	13.91	14.07	14.23	14.24	14.25	14.25	14.25	14.25	14.26	14.26	14.26	14.26	14.26	14.22	14.17	14.13	14.08	14.04	14.00	13.96	13.92	13.89	13.85	13.80	13.76	
Override																										
Total Residential Revenue (%)	86.09	85.93	85.77	85.76	85.75	85.75	85.75	85.75	85.74	85.74	85.74	85.74	85.74	85.78	85.83	85.87	85.92	85.96	86.00	86.04	86.08	86.11	86.15	86.20	86.24	
Override																										
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Revised/Additional Forecast Data

FINMOD
DEPARTMENT OF
COMMERCE

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
<u>New Loan Payment Overrides (Values in Inflated \$'000)</u>																									
Standard Loan Payments: Principal	0	51	71	77	131	140	149	158	170	181	192	206	219	233	248	266	282	303	320	343	364	204	159	169	0
Standard Loan Payments: Interest	0	131	169	163	286	277	269	260	248	237	225	213	199	185	169	152	136	116	96	74	53	31	19	8	0
Structured Loan Payments: Principal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Structured Loan Payments: Interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capitalised Interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total New Loan Payments: Principal	0	51	71	77	131	140	149	158	170	181	192	206	219	233	248	266	282	303	320	343	364	204	159	169	0
Override																									
Total New Loan Payments: Interest	0	131	169	163	286	277	269	260	248	237	225	213	199	185	169	152	136	116	96	74	53	31	19	8	0
Override																									
Capitalised Interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Override																									

Appendix F

Detailed Projected Financial Statements

Details of financial projections made using FINMOD financial model are presented in the following pages.

MWRC Water Fund Financial Model 2006-07 : Preferred Case

Operating Statement

FINMOD
DEPARTMENT OF
COMMERCE

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
EXPENSES																									
Management Expenses	931	963	1010	973	1003	1060	1063	1092	1122	1152	1212	1211	1241	1268	1295	1356	1349	1376	1403	1430	1495	1484	1511	1540	1569
Administration	931	963	1010	973	1003	1060	1063	1092	1122	1152	1212	1211	1241	1268	1295	1356	1349	1376	1403	1430	1495	1484	1511	1540	1569
Engineering and Supervision	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation and Maintenance Expenses	1905	1984	1944	2000	2059	2116	2172	2229	2285	2344	2400	2456	2513	2566	2617	2669	2721	2772	2824	2876	2928	2979	3032	3087	3143
Operation Expenses	162	180	120	124	128	132	135	139	143	147	151	154	158	162	165	169	172	175	179	182	186	189	193	196	200
Maintenance Expenses	1572	1633	1653	1705	1757	1810	1862	1914	1966	2018	2070	2122	2174	2222	2269	2316	2364	2411	2458	2506	2553	2600	2648	2699	2750
Energy Costs	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Chemical Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchase of Water	21	21	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Depreciation	1120	1176	1206	1212	1257	1258	1259	1260	1285	1308	1329	1331	1353	1354	1357	1376	1393	1416	1423	1495	1544	1545	1546	1548	1549
System Assets	1120	1176	1206	1212	1257	1258	1259	1260	1285	1308	1329	1331	1353	1354	1357	1376	1393	1416	1423	1495	1544	1545	1546	1548	1549
Plant & Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Expenses	381	492	499	464	544	505	466	428	388	349	311	274	235	200	171	141	113	84	58	42	29	17	10	4	0
Other Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	4337	4616	4658	4649	4863	4939	4959	5009	5080	5153	5253	5272	5342	5388	5440	5542	5577	5648	5709	5843	5996	6025	6099	6179	6260
REVENUES																									
Rates & Service Availability Charges	1951	1953	1776	1836	1899	1961	2023	2083	2145	2205	2271	2338	2403	2460	2516	2575	2629	2687	2743	2800	2854	2908	2960	3023	3084
Residential	1825	1825	1658	1714	1773	1830	1888	1944	2002	2058	2120	2182	2243	2297	2349	2404	2456	2511	2564	2618	2669	2720	2769	2829	2886
Non-Residential	126	128	118	122	126	130	135	139	143	147	151	155	160	163	167	170	173	176	179	182	185	188	191	195	198
User Charges	1817	1822	1661	1719	1776	1833	1891	1949	2007	2064	2124	2187	2248	2300	2350	2405	2454	2507	2558	2609	2658	2708	2756	2812	2867
Sales of Water : Residential	1419	1419	1289	1334	1379	1423	1468	1513	1558	1602	1649	1698	1745	1787	1827	1871	1911	1954	1995	2036	2076	2116	2155	2201	2246
Sales of Water : Non-Residential	398	403	371	384	397	410	423	436	449	462	475	490	503	513	523	534	543	553	563	573	582	592	601	611	621
Extra Charges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Income	240	199	132	124	113	117	152	186	174	144	120	135	130	154	195	203	203	195	220	132	70	113	170	224	279
Other Revenues	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Grants	67	66	66	66	66	66	66	65	66	65	65	64	64	64	63	62	62	62	61	60	60	59	58	58	57
Grants for Acquisition of Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pensioner Rebate Subsidy	67	66	66	66	66	66	66	65	66	65	65	64	64	64	63	62	62	62	61	60	60	59	58	58	57
Other Grants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contributions	408	408	1278	1278	1278	1278	1278	1278	1278	1278	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1235	1235	1235	1235	1235
Developer Charges	408	408	1278	1278	1278	1278	1278	1278	1278	1278	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1235	1235	1235	1235	1235
Developer Provided Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Contributions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL REVENUES	4633	4599	5063	5173	5281	5405	5560	5711	5820	5907	5882	6027	6146	6280	6427	6547	6650	6753	6883	6903	7027	7174	7328	7502	7673
OPERATING RESULT	296	-17	404	524	418	466	601	703	740	754	630	756	804	893	987	1005	1073	1105	1174	1060	1030	1148	1229	1323	1412
OPERATING RESULT (less Grants for Acq of Assets)	296	-17	404	524	418	466	601	703	740	754	630	756	804	893	987	1005	1073	1105	1174	1060	1030	1148	1229	1323	1412

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Cashflow Statement

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	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Cashflow From Operating Activities																									
Receipts																									
Rates and Charges	3768	3776	3437	3554	3675	3794	3914	4032	4152	4269	4395	4525	4651	4761	4866	4980	5083	5194	5301	5409	5512	5616	5715	5836	5951
Interest Income	240	199	132	124	113	117	152	186	174	144	120	135	130	154	195	203	203	195	220	132	70	113	170	224	279
Other Revenues	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Grants	67	66	66	66	66	66	66	65	66	65	65	64	64	64	63	62	62	62	61	60	60	59	58	58	57
Contributions	408	408	1278	1278	1278	1278	1278	1278	1278	1278	1152	1152	1152	1152	1152	1152	1152	1152	1152	1235	1235	1235	1235	1235	1235
Total Receipts from Operations	4633	4599	5063	5173	5281	5405	5560	5711	5820	5907	5882	6027	6146	6280	6427	6547	6650	6753	6883	6903	7027	7174	7328	7502	7673
Payments																									
Management	931	963	1010	973	1003	1060	1063	1092	1122	1152	1212	1211	1241	1268	1295	1356	1349	1376	1403	1430	1495	1484	1511	1540	1569
Operations (plus WC Inc)	1927	2007	1965	2030	2088	2145	2202	2259	2317	2374	2432	2488	2545	2597	2649	2702	2754	2805	2858	2910	2963	3014	3068	3124	3180
Interest Expenses	381	492	499	464	544	505	466	428	388	349	311	274	235	200	171	141	113	84	58	42	29	17	10	4	0
Other Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Payments from Operations	3239	3462	3474	3467	3635	3711	3730	3778	3826	3876	3955	3973	4021	4065	4115	4199	4216	4265	4319	4383	4487	4514	4588	4668	4749
Net Cash from Operations	1394	1137	1588	1707	1646	1694	1830	1933	1994	2031	1927	2055	2125	2216	2312	2348	2433	2487	2564	2521	2540	2659	2740	2834	2924
Cashflow from Capital Activities																									
Receipts																									
Proceeds from Disposal of Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Payments																									
Acquisition of Assets	867	4383	2498	862	3642	418	518	567	2217	1967	1877	557	2007	527	577	1727	1677	2027	977	5427	3877	557	507	527	477
Net Cash from Capital Activities	-867	-4383	-2498	-862	-3642	-418	-518	-567	-2217	-1967	-1877	-557	-2007	-527	-577	-1727	-1677	-2027	-977	-5427	-3877	-557	-507	-527	-477
CashFlow from Financing Activities																									
Receipts																									
New Loans Required	0	1965	606	0	1750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Payments																									
Principal Loan Payments	231	279	304	317	370	383	398	411	425	440	455	471	488	359	372	385	398	413	231	196	202	110	83	86	0
Net Cash from Financing Activities	-231	1686	302	-317	1380	-383	-398	-411	-425	-440	-455	-471	-488	-359	-372	-385	-398	-413	-231	-196	-202	-110	-83	-86	0
TOTAL NET CASH	296	-1560	-608	528	-616	894	915	955	-649	-376	-405	1027	-370	1330	1363	236	359	47	1356	-3102	-1539	1993	2150	2222	2447
Current Year Cash	296	-1560	-608	528	-616	894	915	955	-649	-376	-405	1027	-370	1330	1363	236	359	47	1356	-3102	-1539	1993	2150	2222	2447
Cash & Investments @Year Start	4326	4487	2842	2169	2618	1944	2755	3563	4387	3629	3159	2674	3592	3129	4329	5526	5594	5780	5657	6809	3599	2001	3877	5852	7838
Cash & Investments @Year End	4622	2927	2234	2697	2003	2838	3670	4518	3738	3253	2754	3700	3223	4459	5692	5762	5953	5827	7013	3707	2061	3993	6027	8074	10285
Capital Works Funding:																									
Internal Funding for New Works (\$'000)	426	2000	1500	470	1500	10	80	130	1780	1530	1440	120	1570	90	140	1290	1240	1590	540	4990	3440	120	70	90	40
Internal Funding for Renewals	441	418	392	392	392	407	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437
New Loans	0	1965	606	0	1750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Capital Works	867	4383	2498	862	3642	418	518	567	2217	1967	1877	557	2007	527	577	1727	1677	2027	977	5427	3877	557	507	527	477

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Statement of Financial Position

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	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Cash and Investments	4622	2927	2234	2697	2003	2838	3670	4518	3738	3253	2754	3700	3223	4459	5692	5762	5953	5827	7013	3707	2061	3993	6027	8074	10285
Receivables	795	811	826	852	878	904	930	956	982	1008	1034	1060	1086	1109	1133	1157	1180	1204	1228	1251	1275	1299	1322	1348	1373
Inventories	123	125	127	131	135	139	143	147	152	156	159	163	167	170	174	178	181	185	189	192	196	199	203	207	211
Property, Plant & Equipment	47640	50849	52142	51792	54177	53337	52596	51902	52834	53494	54041	53268	53921	53094	52314	52666	52950	53562	53115	57047	59380	58392	57352	56331	55259
System Assets (1)	47640	50849	52142	51792	54177	53337	52596	51902	52834	53494	54041	53268	53921	53094	52314	52666	52950	53562	53115	57047	59380	58392	57352	56331	55259
Plant & Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL ASSETS	53180	54712	55328	55472	57193	57218	57339	57524	57706	57910	57988	58191	58397	58832	59314	59762	60265	60778	61545	62198	62912	63883	64905	65960	67129
LIABILITIES																									
Bank Overdraft	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Creditors	109	111	113	116	120	123	127	131	134	138	141	145	149	152	155	159	162	165	169	172	175	178	182	185	188
Borrowings	5876	7391	7478	6943	8121	7501	6885	6274	5666	5061	4458	3857	3257	2803	2350	1896	1443	988	728	512	295	177	89	1	0
Provisions	354	361	368	379	390	402	414	425	437	448	460	472	483	494	504	515	525	536	546	557	567	577	588	599	610
TOTAL LIABILITIES	6339	7863	7958	7438	8631	8027	7426	6830	6236	5647	5059	4474	3888	3448	3009	2569	2131	1689	1443	1240	1037	933	858	784	799
NET ASSETS COMMITTED	46841	46849	47370	48034	48562	49191	49913	50694	51469	52263	52929	53717	54508	55384	56304	57193	58135	59088	60102	60958	61875	62951	64047	65175	66330
EQUITY																									
Accumulated Operating Result	45446	44106	43226	42491	41672	40924	40333	39861	39440	39046	38538	38171	37864	37654	37544	37456	37438	37452	37536	37503	37441	37498	37635	37862	38172
Asset Revaluation Reserve	1395	2825	4397	6057	7755	9584	11439	13323	15238	17246	19340	21519	23731	26037	28376	30750	33212	35761	38417	41130	44131	47349	50608	53905	57240
TOTAL EQUITY	46841	46849	47370	48034	48562	49191	49913	50694	51469	52263	52929	53717	54508	55384	56304	57193	58135	59088	60102	60958	61875	62951	64047	65175	66330
(1) Notes to System Assets																									
Current Replacement Cost	74923	78888	80994	81465	84715	84725	84806	84936	86717	88247	89686	89806	91376	91465	91606	92896	94136	95726	96266	101257	104697	104817	104887	104977	105017
Less: Accumulated Depreciation	27283	28040	28853	29673	30538	31389	32210	33034	33882	34753	35645	36539	37454	38372	39292	40230	41186	42165	43151	44209	45317	46425	47534	48645	49757
Written Down Current Cost	47640	50849	52142	51792	54177	53337	52596	51902	52834	53494	54041	53268	53921	53094	52314	52666	52950	53562	53115	57047	59380	58392	57352	56331	55259

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Performance Indicators

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	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	
Typical Residential Bills	560	560	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	
Average Residential Bills (2006/07\$)	529	519	464	465	466	468	469	470	471	472	474	476	478	478	479	480	480	482	482	482	483	483	483	483	483	484
Mgmt Cost / Assessment (2006/07\$)	138	141	145	135	135	139	135	135	135	135	138	135	135	135	135	139	135	135	135	135	138	135	135	135	135	
OMA Cost per Assessment (2006/07\$)	419	427	420	410	410	412	408	407	407	407	410	406	405	405	405	408	404	404	404	403	406	403	402	402	402	
Operating Sales Margin (%)	9.95	6.29	15.64	17.11	16.43	16.15	16.91	17.09	16.89	16.65	14.24	15.18	15.12	15.32	15.45	14.87	15.26	15.16	15.19	14.33	14.23	14.89	14.93	15.16	15.33	
Economic Real Rate of Return (%)	0.92	0.54	1.48	1.67	1.57	1.60	1.74	1.82	1.80	1.79	1.52	1.68	1.69	1.77	1.84	1.79	1.86	1.86	1.91	1.70	1.67	1.80	1.86	1.96	2.05	
Debt Service Ratio	0.13	0.17	0.16	0.15	0.17	0.16	0.16	0.15	0.14	0.13	0.13	0.12	0.12	0.09	0.08	0.08	0.08	0.07	0.04	0.03	0.03	0.02	0.01	0.01	0.00	
Debt/Equity Ratio	0.13	0.16	0.16	0.14	0.17	0.15	0.14	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	
Interest Cover	1.78	0.97	1.81	2.13	1.77	1.92	2.29	2.64	2.91	3.16	3.02	3.76	4.42	5.47	6.79	8.12	10.46	14.14	21.19	26.12	36.11	69.90	124.95	327.38	0.00	
Return on capital (%)	1.27	0.87	1.63	1.78	1.68	1.70	1.86	1.96	1.95	1.91	1.62	1.77	1.78	1.86	1.95	1.92	1.97	1.96	2.00	1.77	1.68	1.82	1.91	2.01	2.10	
Cash and Investments (2006/07\$'000)	4622	2927	2234	2697	2003	2838	3670	4518	3738	3253	2754	3700	3223	4459	5692	5762	5953	5827	7013	3707	2061	3993	6027	8074	10285	
Debt outstanding (2006/07\$'000)	5876	7391	7478	6943	8121	7501	6885	6274	5666	5061	4458	3857	3257	2803	2350	1896	1443	988	728	512	295	177	89	1	0	
Net Debt (2006/07\$'000)	1254	4464	5244	4246	6118	4663	3215	1756	1928	1808	1704	157	34	0	0	0	0	0	0	0	0	0	0	0	0	

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STANDARD LOAN PAYMENT SCHEDULE

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Drawdown		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2007/08	Principal 2024		51	55	59	63	67	71	75	81	86	92	98	104	111	118	126	134	144	153	163	173	0	0	0	0
	Interest		131	127	123	119	115	111	107	101	96	91	85	78	72	64	56	48	39	29	19	9	0	0	0	0
2008/09	Principal 643			16	18	18	20	21	22	24	26	27	29	31	33	35	38	40	43	45	49	51	55	0	0	0
	Interest			42	40	40	38	37	36	34	32	31	29	27	25	23	20	18	15	13	9	6	3	0	0	0
2010/11	Principal 1970					50	53	57	61	65	69	73	79	84	89	95	102	108	116	122	131	140	149	159	169	0
	Interest					127	124	121	117	113	109	103	99	94	88	82	76	70	62	54	46	38	28	19	8	0
Total Principal	4637	0	51	71	77	131	140	149	158	170	181	192	206	219	233	248	266	282	303	320	343	364	204	159	169	0
Total Interest		0	131	169	163	286	277	269	260	248	237	225	213	199	185	169	152	136	116	96	74	53	31	19	8	0

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Summary Report of Assumptions and Results

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	2006/07	2010/11	2015/16	2020/21	2025/26	2030/31	2035/36
Inflation Rates - General (%)	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Inflation Rates - Capital Works (%)	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Borrowing Interest Rate (%)	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Term of New Loans (years)	20	20	20	20	20	20	20
Investment Interest Rate (%)	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Growth Rate - Residential (%)	1.83	3.05	2.65	2.17	1.96	1.92	1.75
Developer Charges per Assessment - Residential (2006/07 \$)	1800	5531	5531	5531	5531	5531	5531
Subsidised Scheme Capital Works (\$m)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grants on Acquisition of Assets (\$m)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewals (\$m)	0.44	0.39	0.44	0.44	0.44	0.44	0.44
Renewals (%)	0.59	0.46	0.50	0.48	0.43	0.42	0.41
Borrowing Outstanding (\$m)	5.88	8.12	5.06	2.35	0.51	0.00	0.00
Mgmt Cost / Assessment	138	135	135	135	135	135	135
Debt Equity Ratio	0.13	0.15	0.07	0.03	0.00	0.00	0.00
OMA Cost Per Assessment	419	410	407	405	403	402	401
Economic Real Rate of Return (%)	0.92	1.57	1.79	1.84	1.70	2.05	2.56
Return on Capital (%)	1.27	1.68	1.91	1.95	1.77	2.10	2.45
Net Debt (\$m)	1.25	6.12	1.81	0.00	0.00	0.00	0.00
Debt Service Ratio	0.13	0.17	0.13	0.08	0.03	0.00	0.00
Average Residential Bills	529	466	472	479	482	484	487
Typical Residential Bills (2006/07\$)	560	510	510	510	510	510	510

