Lower Murray Water

Exposure Draft Water Plan

2008-09 to 2012-13

July 2007

Part B

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B2. Outcomes for First Regulatory Period

B2.1 Service standards and other outcomes

LMW has met outcomes or made progress in line with expectations in the statement of obligations, service standards, environment obligations, water quality, and other obligations and initiatives outlined in the inaugural Water Plan 2006-07 – 2007-08.

LMW's progress against other outcomes for the first regulatory period for the following obligations are summarised in Appendix A.

- Statement of Obligations
- Service Standards
- Environmental Obligations
- Water Quality Obligations
- Other Obligations & Initiatives

B2.2 Delivery of key capital projects

Table 1 summarises progress on key capital projects planned for the first regulatory period.

Table 1 Delivery of key capital projects

Project	Progress	Comment
Water		
Filter Refurbishment:		
Mildura WTP	Completed	
Red Cliffs WTP	In progress	To be completed in 2007
Robinvale WTP	In progress	To be completed in 2007
Swan Hill WTP	In progress	To be completed in 2008
Mildura WTP - Process Upgrade	In progress	Detailed design completed
Swan Hill - Refurbish Raw Water Pump Station	In progress	Due for completion August 2007
Swan Hill – Replace Treated Water pump Station	Completed	
Automation:		
Red Cliffs WTP	In progress	Design is well advanced
Robinvale WTP	In progress	Design is well advanced
Swan Hill – New Trunk Mains	Completed	
Sewerage		

Project	Progress	Comment
Mildura WWTP – Replace and upgrade of screening and sludge handling	Review	Upgrade of screening being reviewed. Upgrade of sludge handling at final design stage.
Koorlong WWTP - Augmentation	In progress	Project will not be completed in 2007-08 due to delays in design and changes in procurement process.
Corporate		
Fourteenth Street Head Office Extension	Stage 1 Completed Stage 2 Postponed	Contract is ready to award – project on hold pending water allocation for 2007-08.

B2.3 Actual capital expenditure associated with the delivery of outcomes

Table 2 compares actual capital expenditure against forecast capital expenditure outlined in the 2006 Water Review.

Table 2 Capex associated with outcomes

	Forecast Capex 1st Water Plan	06/07 Actual Capex	07/08 Forecast Capex	Total Capex 1st Water Plan	Comment
Water	**7.32**	5.87	6.41	**12.28**	Reprioritisastion of renewal projects. Construction cost escalation above forecast.
Sewerage	**23.57**	3.78	9.49	**13.27**	Koorlong Project delayed.
Corporate	**1.80**	0.71	3.10	**3.81**	Construction cost escalation above forecast.
Total	**32.70**	10.36	19.00	**29.36**	

B2.4 Changes in legislative obligations

Table 3 lists changes in legislative obligations introduced since the first Water Plan and costs associated with outcomes.

Table 3 Changes in legislative obligations

Change in Legislation	Outcome Delivered	Costs
Traffic Management – training, signage, plans	Improved safety outcomes	$75,000

B2.5 Drought Related Outcomes

B2.5.1 Drought Response

LMW has not achieved its forecast volumes for water demand in 2006/07 due to the introduction of restrictions. Although LMW had a full allocation for 2006/07, restrictions were introduced due to the ongoing drought and expected reduction in future allocations. Stage 1 restrictions were introduced in December 2006, followed by stage two in April 2007, stage 3 in June 2007, and stage 4 in July 2007. LMW's revenue was still close to budget in 2006-07, due to the increased demand in the first quarter.

From July 2007 LMW has had a zero allocation, with the potential for an increase to 60% allocation by February 2008. The Minister for Water and Environment has approved a special allocation for basic needs (250 litres per person per day plus industry). LMW has revised the 2007/08 demand forecast, which is expected to be 55% lower than the first Water Plan.

B2.5.1 Cost of Restrictions

Reduced water production has resulted in some cost offsets associated with marginal costs such as chemicals and power.

The introduction of restrictions has also resulted in more work and unbudgeted cost increases related to communications and restrictions enforcement. LMW has been able to resource a call centre and enforcement team from within current resources, however communication costs includes new pamphlets, television, radio, and print media advertising of $110,000 have been incurred in 2006-07 with an additional $100,000 forecast for 2007-08.

B3. Service Outcomes

LMW is not proposing to introduce any changes in service outcomes for the regulatory period. Existing service outcomes are documented in:

- Customer Charter (Urban)
- July 2004 Water Performance Reporting Framework
- Statement of Obligations
- Environmental Obligations
- Water Quality Obligations
- Other Obligations

The following section overviews customer consultation on service outcomes and summarises LMW's key service outcomes for the regulatory period.

B3.1 Overview of Customer Consultation

LMW customer consultation includes:

- Two area based urban customer consultative committees
- Customer Satisfaction survey
- Public Notices
- Customer Complaint Tracking

LMW's Customer Consultative Committees typically meet 2 or 3 times a year. There have been four meetings since the last Water Plan with no new issues raised by customers. At the last meeting LMW officers met with each committee and covered the following issues:

- Service Standards
- Guaranteed Service Levels
- Operating and capital expenditure forecast
- Tariffs and charges for the forthcoming regulatory period
- Switch to green energy

LMW conducts an annual customer satisfaction survey. The survey seeks views on satisfaction and value for money associated with a range of services offered by LMW.

During 2006 LMW initiated a project to introduce a system to provide formal tracking and reporting on key customer interactions. The emphasis is on tracking customer complaints through to resolution, but all significant customer interactions are tracked to assist in improving corporate performance and reporting. Workflow improvements have been introduced to formalise and support key customer related processes.

A new Telephone Management System and customer call group structure has improved customer service and enabled peak loads to be better managed.

B3.1.1 Service Standards

Since August 2005, LMW has operated under a Customer Charter (Urban) incorporating the requirements of the Customers Service Code (ESC, November 2004).

Neither committee has made any recommendations for changes to the current service standards, thus the exposure draft Water Plan has been prepared on the existing service standards.

B3.1.2 Guaranteed Service Levels (GSLs)

The Board of LMW has considered the matter of GSLs and notes the ESC's preferential views on their application.

Both Customer Consultative Committees prefer that the business focus on delivering and maintaining service standards, and did not support the GSL system as a business priority.

LMW is aiming for consistency of systems and processes across its urban and rural customer base. The rural system is not in a position to contemplate GSLs as the history of performance of the rural networks is very limited due to the 2004 merger of Lower Murray Water and Sunraysia Rural Water Authority and the absence of any meaningful data pre-dating this event.

B3.1.3 Green Energy

Utilising a mail out process, committee members' views were canvassed on LMW's aim to reduce greenhouse emissions by changing over to green power. A report detailed the impact on customer charges and received unanimous support for a switch to green power.

B3.2 Regulatory and government obligations – Business as Usual

The following section deals with outcomes that LMW will deliver due to obligations placed on the business from government and regulatory agencies.

B3.2.1 Statement of obligations

LMW has no new obligations added to the Statement of Obligations for the 2008-09 – 2012-13 regulatory period, however there has been several modifications to the existing Statement of Obligations since the 2006-07 – 2007-08 Water Plan.

Obligations introduced since the first regulatory period are set out in Table 4.

Table 4 Obligations introduced during first regulatory period

Title	Obligation
Conserving and Recycling Water	Work with large non residential water users to improves water management outcomes
Water Supply Demand Strategy	Develop Water Supply Demand Strategy
Sewerage Services to Unsewered Urban Areas	Country Towns Water Supply and Sewerage Program . 2 Schemes approved by Minister. Customers only contribute the amount included in the approval.

Title	Obligation
Researched Knowledge	Must identify research needs, prioritise and how to meet needs
Sustainability	Responsibility to improve sustainability beyond water savings
River Health	Incorporate environmental management obligations to LMW through plans agreed by LMW to protect, restore or improve waterways and wetlands within LMW systems
Smart Water Fund	Participate in Smart Water Fund

Table 5 lists LMW's obligations in the Statement of Obligations with associated financial implications for the next regulatory period.

Table 5 Statement of Obligations

Obligation Topic and Drivers	Target and Outcomes	Financial implications ($000's 1/1/07)	
		Capex	Opex
Corporate Governance	Refer 3.2.1.1	Nil	Nil
Preparation & Delivery of Water Plan	LMW must deliver a Water Plan to the ESC before the end of the second review period.	Nil	360
Customer and Community Engagement	LMW will engage its customers and community in planning processes, so that the services it provides reflect the needs and expectations of customers. Through the Customer Charter and consultation through the Water Plan process LMW meets this obligation. Refer to B3.1 and B3.2.1.2	Nil	689
Managing Risks	Refer B3.2.1.3	Nil	21
Responding to Incidents and Emergencies	Refer B3.2.1.4	Nil	Nil
Managing Assets	LMW manages its assets through its Asset Management Plan where all relevant information is held. Refer B3.3.5	Nil	1,784
Conserving and Recycling Water	Refer to B3.2.1.5	Nil	Nil
Water Supply Demand Strategy	Refer to B3.2.1.6	Nil	Nil
Metering	LMW meters all new urban water supply services.	Nil	Nil
Responding to Drought	Drought response plan is completed and reviewed.	Nil	25
Sewerage Services to Unsewered Urban Areas	Nichols Point and Murrabit Sewerage Schemes to be completed in the current regulatory period.	1,970	20

Obligation Topic and Drivers	Target and Outcomes	Financial implications ($000's 1/1/07)	
		Capex	Opex
Sewerage Connections to Properties	LMW ensures properties provided with a sewerage service are connected to LMW's works.	Nil	Nil
Trade Waste	Refer to Trade Waste Principles B6.3.1.4	Nil	342
Regional and Local Government Planning	Refer to B 3.2.1.7	Nil	Nil
Research and Knowledge	Currently no research needs are identified, however this is an ongoing target and outcome.	Nil	Nil
Sustainable Management	Response to Climate Change	Nil	193
Environmental Management Systems	LMW continues to implement and update its Environmental Management systems in accordance with Australian Standards.	Nil	332
Blue-Green Algae Blooms	LMW's new Mildura West Water Treatment Plant has the ability to deal with blue-green algae toxins.	Nil	Nil
River and Aquifer Health	LMW manages the impact on any waterway, aquifer or wetland to minimise environmental impacts.	Nil	Nil
Monitoring River Health	LMW makes available to the public water quality and flow data through control data agency on its (LMW) website.	Nil	Nil
Capital Contributions by Property Owners	LMW offers to property owners the ability to pay contributions over 20 quarterly instalments.	Nil	Nil
Providing Concessions and Rebates	LMW continues to administer all government funded programs listed in the Statement of Obligation.	Nil	Nil
Compliance	LMW must arrange audit of its compliance of the Statement of Obligations.	Nil	Nil

B3.2.1.1 Corporate Governance

LMW is a State owned Government Business Enterprise. The Water Governance Act varied the form and title of LMW and established new governance arrangements that took effect from 1 July 2007. Lower Murray Urban and Rural Water Authority is now Lower Murray Urban & Rural Water Corporation.

LMW continues to operate under the Water Act 1989 and is responsible to the Minister for Water, Environment and Climate Change and now the Treasurer for the governance and performance of the Corporation.

The Board has the following Committees to assist in its governance role:

- Audit Committee
- Governance Committee

B3.2.1.2 Social and Community Initiatives

LMW has supported a wide range of community initiatives, as part of its role as environmental custodian and corporate citizen. Some of these include:

- LMW continues to support the Chances for Children fund, which has assisted 400 young people since June 2001. The fund was established by the former Lower Murray Water, Sunraysia Rural Water Authority and First Mildura Irrigation Trust under the auspices of Mallee Family Care
- LMW has continued its sponsorship to local schools and community groups, such as Country Fire Authority, garden and swimming clubs, and the River Health Conference for school students
- Water conservation is actively promoted through LMW's involvement in National Water Week
- LMW provides funding assistance to Mallee Waterwatch, providing a valuable forum for community education on the importance of water quality
- LMW actively participates in visits to schools across the region

B3.2.1.3 Risk

Although LMW had a comprehensive risk register, during the first regulatory period work has been undertaken to revise plans and processes to ensure that risk management is consistent with Australian and New Zealand Standard AS/NZS 4360:1999 Risk Management.

LMW's risk management framework is an ongoing process of identification, analysis, evaluation, treatment, monitoring and review. The process uses a generic consequence, likelihood and risk matrix and is applied to all areas across the business, except Water Quality which utilises HACCP. The risk profile is regularly reviewed and updated.

LMW has worked to establish a risk management culture that recognises risks in daily activities, which are appropriately addressed and managed.

B3.2.1.4 Emergency Management Plan (EMP)

LMW is involved in a number of Emergency Management Planning actions, which it is obligated to complete under the Statement of Obligations.

LMW also has its own internal Emergency Management Plan consisting of numerous contingency plans, databases, standard operating procedures and are participants to a number of Municipal Emergency Plans.

LMW's Risk Management Policy provides a corporate framework with more specific Contingency Plans developed for critical assets such as pump stations. LMW has improved the availability and management of risks through coordinated file management on the intranet and document management system.

B3.2.1.5 Water Conservation & Reuse and Recycling

LMW introduced its Permanent Water Savings Plan on 1 July 2006. Due to continued dry conditions, LMW introduced staged water restrictions reaching Stage 3 at the beginning of June 2007. Stage 4 restrictions were introduced in July 2007.

Restrictions do not apply to:

- Recycled water supplied by LMW

- Watering a residential or commercial garden with greywater
- Rainwater collected by an occupier of land in a rainwater tank, provided that rainwater within the tank is not augmented in any way by water supplied by LMW

LMW's long-term objective is to reduce per capita consumption and expects that most gains can be attained in the area of garden usage, largely through price signals and education.

LMW's current and anticipated water conservation programs do not create any significant expense items beyond those already provided for in normal operating expenditure budgets.

LMW supplies recycled water from two water treatment plants, and six wastewater treatment plants. The Mildura wastewater treatment plant is used to irrigate pasture and tree plantations on LMW owned properties. The volumes are considered immaterial in most cases, and are included as costs for disposal in the water and wastewater products.

The exception is recycled water supplied by the Koorlong Wastewater Treatment Plant where volumes are expected to exceed 3,000 ML per annum by 2008-09. This has been classified as a non-prescribed service as the water has been sold at commercial prices to a private third party.

B3.2.1.6 Water Supply Demand Strategy

LMW has developed its Water Supply Demand Strategy (WSDS), which was submitted to the Minister for Water and Environment in July 2007.

The WSDS will support smarter urban water use across the region through a total water cycle approach.

LMW aims are to:

- Determine the expected long term water demand across the LMW region
- Determine the available water supply to meet this demand
- Identify and evaluate a range of demand reduction and water supply enhancement options
- Contribute to maintaining the condition of environmental assets within the Mallee Region
- Develop a series of actions to sustainably manage the water supply system to meet the regions demand over the next 50 years

B3.2.1.7 Catchment Management Authorities and Local Government

LMW is a partner agency for the Mallee Catchment Management Authority in implementing the Mallee Regional Catchment Strategy (2003-2008).

LMW undertakes various salinity and drainage management activities and projects on behalf of the Mallee CMA and is also represented on many of their implementation committees and groups.

Advice and assistance had been provided to Councils on a range of issues including:

- Swan Hill Shire Council - assistance in implementation of conversion of irrigation of reserves from treated water to raw water
- Gannawarra Shire Council - LMW has worked with Council to assess suitable and cost effective options for wastewater treatment at Murrabit. After many months of negotiations, DSE have advised their support for the Murrabit Sewerage Scheme as part of the Country Towns Water Supply and Sewerage Program

- Mildura Rural City Council - LMW has assisted in detailed/functional design for sewerage at Nichols Point/Kings Billabong.

LMW will continue to work proactively with Councils to plan and prepare for the implementation of the various stages of water restrictions.

B3.2.1.8 Sustainability and Environment

LMW is committed to planning and managing all its operations in an environmentally responsible and sustainable manner.

LMW has been and continues to be involved in the following areas in relation to the environment:

- Efficiency of Irrigation Systems
- Water Recycling Targets
- Environmental Water Allocation
- Permanent Water Saving Rules
- Community Education and Water Awareness such as;
  - Water Wise Nature Strip
  - National Water Week
  - Mildura Show
  - Mallee Environmental Schools Festival
- Water Supply Demand Strategy
- Regional Catchment Management Strategy
- Victorian Biodiversity Strategy
- Corporate Water Consumption
- Greenhouse Gas Emissions
- Waste Reduction

LMW was a member of a water industry committee that developed a 'Greenhouse Emissions Reduction Framework' in response to the challenge to reduce greenhouse emissions whilst providing services to a growing population with a reduced water supply.

The framework provides recommendations for five key goals:

- Demonstrate leadership in greenhouse gas reduction
- Set realistic stretch greenhouse gas reduction targets for a benchmarked water industry
- Influence the behaviour change based on communication and education
- Influence the adoption of a whole of system method to infrastructure design, operation and new markets
- Incorporate an industry wide collaborative and cooperative approach

LMW has since identified a number of actions to save energy and reduce operating costs, which are detailed in section B.4.2.

B3.2.1.9 Affordability, Financial Hardship and Vulnerable Customer

LMW's policy on payments is generally in accord with the requirements set out in the VicWater guide – "Victorian Water Industry Residential Hardship Guide".

Assessments of the capacity of customers to pay are made through evaluation of a range of inputs from customer consultation, reference to pricing of comparable services provided elsewhere in Australia and pricing of complimentary services provided by other agencies in the Sunraysia region.

Our customer consultative committees are used as reference points for proposed changes to tariffs. LMW has continued to work with community based agencies such as Mallee Family Care.

Mallee Family Care have hosted meetings between key local government and utilities, including LMW and Killdonen with the aim to provide innovative assistance programs to low income and vulnerable customers.

LMW also gives consideration to special cases where customers in difficult circumstances have requested relief from payment of amounts owing.

B3.2.2 Environment Obligations

Environmental requirements, programs and activities for LMW proposed during the regulatory period are summarised in Table 6.

Table 6 Environmental Obligations Summary

Environmental obligation topic area		Key activities directly relevant to 2008-09–12/13 price path	Financial implications ($'000 1/1/07)	
			Capex	Opex
1.0	**Water Conservation and Resource Efficiency**			
1.1	Water Conservation	Water conservation program focuses on community education and demand management. There are two existing By-Laws, Water Conservation Strategy and Water Supply Demand Strategy. The WSDS sets conservation targets.	Nil	1,000
		Watermain leak detection program. Scaled back due to low NRW of 8.6%. Small investigation program initially.	Nil	40
		In cooperation with other Water Corporations and DSE implement and use modelling to set "in-house" water conservation targets	Nil	100
		Assist non residential customers to develop and implement water MAP	Nil	300
1.2 Resource Efficiency		Green house gas omissions are high due to flat terrain. Purchase Green Power to offset impacts.	Nil	1,565
		Implement proposals from initial Greenhouse and Energy Review, which was undertaken under the Victorian Water Industry Greenhouse Emissions Reduction Framework.	600	600
		Undertake Greenhouse and Energy Review for all Corporation Assets	Nil	100
2.0 Wastewater Management				

Environmental obligation topic area	Key activities directly relevant to 2008-09–12/13 price path	Financial implications ($'000 1/1/07)	
		Capex	Opex
2.1 Waste Hierarchy (Trade Waste Management)	There is an existing by-law and pricing model, which are to be reviewed especially with regard to penalties for discharge of high EC and pH wastes. Sodium charge has been introduced.	Nil	Nil
	There is an existing By-Law and pricing model which meet the ESC pricing principals. Penalties are in place for high EC, pH and sodium wastes	Nil	Nil
	Work with EPA and industry under sustainability Covenant to minimise waste production, protect the environment and contribute to a more sustainable Victoria.	75	100
2.2 Wastewater Treatment and Disposal	Review/Implement finding of report on Ecological Risk Assessment for discharge to Fosters Swamp from Kerang WWTP.	3,300	100
2.3 Biosolids Management	Participation in the National Biosolids Research Program will continue with application on test site in Mildura area.	Nil	50
	Biosolids handling upgrade at the Koorlong WWTP.	1,000	50
2.4 Sewerage Planning	Complete construction of sewerage infrastructure for Murrabit and Kings Billabong/Nichols Point under the Country Towns Water Supply and Sewerage Program.	Nil	Nil
2.5 Management of Sewerage System	Undertake sewer root foaming to limit tree root growth, which lead to sewer blockages.	Nil	350
	Undertake sewer rehabilitation to avoid sewer collapse and overflows.	3,800	Nil
	Undertake CCTV inspection to monitor sewerage system conditions	Nil	153
	Implementation of sewerage system management plans and conduct an EPA statutory audit of the implementation	Nil	150
2.6 Tradewaste Management	Refer to 2.1 above		
2.7 Odour, Greenhouse and Noise	Ongoing management as required for odour and noise. Refer to 1.2 above for Greenhouse management.	Nil	Nil
2.8 Licence Compliance	Work with EPA toward single licence to cover all treatment plants	Nil	Nil
3.0 Catchment, Waterway and Groundwater Management - Refer Part C			
4.0Assessment, Monitoring, Auditing and Reporting			
4.1 Monitoring, auditing and Risk Assessment	Nil	Nil	Nil
4.2 Water Industry Reporting	Work with EPA to ensure annual reporting meets appropriate standards.	Nil	Nil
5.0 Sewerage System Management Plans	Develop Plans before final submission of Water Plan 2008-09 to 2012-13		

B3.2.3 Water Quality Objectives

All of LMW's water supply systems are currently compliant with water quality requirements.

The Safe Drinking Water Act (SDWA) came into effect from 1 July 2004, and has been included as business as usual. A summary of the obligations associated with the SDWA and proposed LMW key activities is provided in Table 7 below.

Table 7 Safe Drinking Water Act Obligations

Obligation Topic and Drivers	Key Activities and Status	Financial implications ($000's 1/1/07)	
		Capex	Opex
1.0 Risk Management Plan Audits Regulatory: SDWA Cl. 10, 11.	LMW will have its RMP audited when required.	Nil	20
2.0 Publish Water Quality Information Regulatory: SDWA Cl. 23.	LMW will compile water quality information on each of its systems and publish these quarterly. The information will be available from LMW's website and on request from LMW's offices.	Nil	10
3.0 Annual Report to DHS Regulatory: SDWA Cl. 25.	LMW will supply, by 31 October each year, a report on water quality and any related issues, for the previous financial year. The report will include other requirements of regulations, which are yet to be developed.	Nil	25
4.0 Administration Levy Regulatory SDWA Cl.51.	LMW must pay levy to assist in defraying the cost of administering the Act.	Nil	70
5.0 Regulations Regulatory SDWA Cl.56.	LMW will comply with the additional frequency and locations of collecting and analysing water samples.	Nil	425

LMW has undertaken risk assessments and developed HACCP plans for the water treatment plants.

There are no specific capital projects identified during the regulatory period derived from the Safe Drinking Water Act or the preparation of HACCP plans.

Additional activities associated with implementing HACCP across LMW, such as improved monitoring and control of treatment facilities, completion of risk assessments and other operational activities will be completed within "Business as Usual" costs.

LMW has not allowed for an accreditation system for water sample collectors or for the use of independent person(s) as collectors.

B3.3 New Obligations

B3.3.1 Other Obligations

LMW only has two new obligations, which are classed as other obligations.

B3.3.1.1 Mandatory Water Management Plans for Non Residential Customers

In May 2006 the Victorian Government announced expansion of the waterMAPS Program to include coverage of all urban Victorian Water Corporations. This program is part of Pathways to Sustainability, which requires all non-residential customers with an annual usage of 10ML or more to develop Water Management Plans by 30 June 2008. This will be enacted through the Statement of Obligations.

LMW is to co-ordinate and assist businesses in the development of these plans. LMW have 65 customers using 10ML or more annually.

LMW has budgeted $200K in 2008/09 and $100K 2009/10 as priority initiatives to maximise water savings and to capitalise on the initial momentum from businesses in developing their waterMAPS.

B3.3.1.2 End Use Demand Modelling

DSE will require all Water Corporations to participate in a State wide program called “End Use Demand Modelling”. The aim of the program is to model and then set water conservation targets for in house use. $0.1M has been budgeted to implement this program.

B3.4 Service Standards

Service Standards for the second regulatory period are set out in Appendix 2. Most of these standards are similar to those in the first regulatory period and have been developed in conjunction with the customer consultative committees.

Service standards related to time to rectify bursts or spillages have been affected due to the implementation of the Road Management Act.

B3.4.1 Core Service Standards

Core Service Standards are set out in Appendix B.

B4. Revenue Requirement

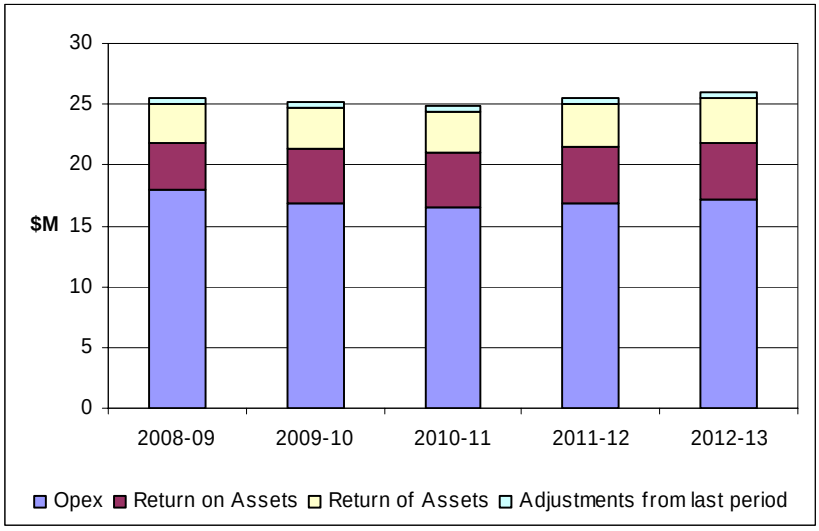
B4.1 Overview of revenue requirement

LMW's revenue requirement increases gradually over the regulatory period. Operational expenditure remains relatively stable, however regulatory depreciation and return on assets increase due to LMW's planned capital expenditure program. LMW's derivation for revenue requirement is in Table 8 below and Figure 1 below.

Table 8 Revenue Requirement

	2008-09	2009-10	2010-11	2011-12	2012-13
($m 1/1/07)					
Operating expenditure	17.90	16.87	16.53	16.82	17.21
Return on assets to 30/6/08	3.51	3.34	3.19	3.04	2.90
Regulatory depreciation of assets to 30/6/08	2.83	2.70	2.36	2.35	2.29
Return on new assets	0.49	1.10	1.35	1.58	1.74
Regulatory depreciation of new assets	0.29	0.70	.094	1.19	1.42
Adjustments from last period	0.44	0.44	0.44	0.44	0.44
Benchmark tax liability	-	-	-	-	-
Total revenue requirement	**25.46**	**25.15**	**24.80**	**25.43**	**26.01**

Figure 1 Revenue Requirement ($M 1/1/07)



Increased revenue associated with growth in customer assessment occurs in the two largest centres in LMW's region (Mildura and Swan Hill). Only marginal increases in costs are associated with growth.

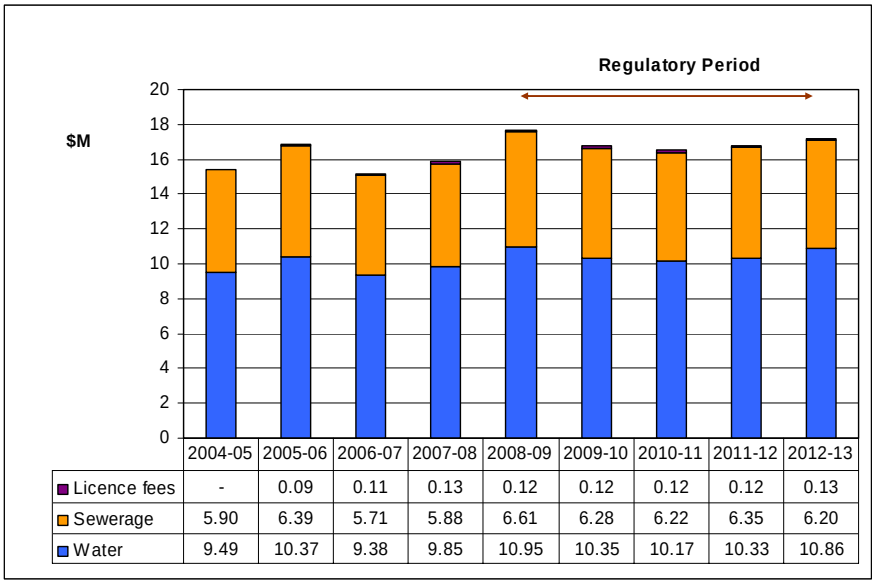
B4.2 Operating Expenditure

LMW's planned regulatory operating expenditure totals $84.92 M over the regulatory period. The planned operating expenditure reflects initiatives expected to yield efficiency savings, however increases in costs related to growth and improved service levels offset these savings.

All expenditure is expressed in real 2007-08 dollars unless otherwise specified.

Figure 2 shows total operating expenditure by service since 2005-06 and forecast total expenditure over the regulatory period.

Figure 2 Actual and Planned Operating Expenditure 2004-05 – 2012-13 ($M 1/1/07)



	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Licence fees	-	0.09	0.11	0.13	0.12	0.12	0.12	0.12	0.13
Sewerage	5.90	6.39	5.71	5.88	6.61	6.28	6.22	6.35	6.20
Water	9.49	10.37	9.38	9.85	10.95	10.35	10.17	10.33	10.86

Total operating expenditure remains fairly stable in aggregate over the regulatory period. LMW continues to drive efficiency through various initiatives,

Table 9 is the Operating Expenditure Summary from the ESC template.

Table 9 ESC Operating Expenditure &New Obligations Summary

Operating Expenditure Summary	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Business as Usual	15.39	16.76	15.09	15.73	17.56	16.63	16.39	16.68	17.06
Licence fees	-	0.09	0.11	0.13	0.12	0.12	0.12	0.12	0.13
Total prescribed BAU opex	15.39	16.85	15.20	15.86	17.68	16.75	16.51	16.80	17.19

New Obligations Summary	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Operating expenditure					0.22	0.12	0.02	0.02	0.02
Gross capital expenditure					-	-	-	-	-
Government contributions					-	-	-	-	-
Customer contributions					-	-	-	-	-
Net capital expenditure on new obligations					-	-	-	-	-
Regulatory Depreciation					-	-	-	-	-
Return on assets					-	-	-	-	-

The Licence fees of $120,000 per annum are for the ESC, DHS and EPA and are consistent with the current regulatory period.

The new obligations described in Section B3.3.1 meeting the ESC definition include:

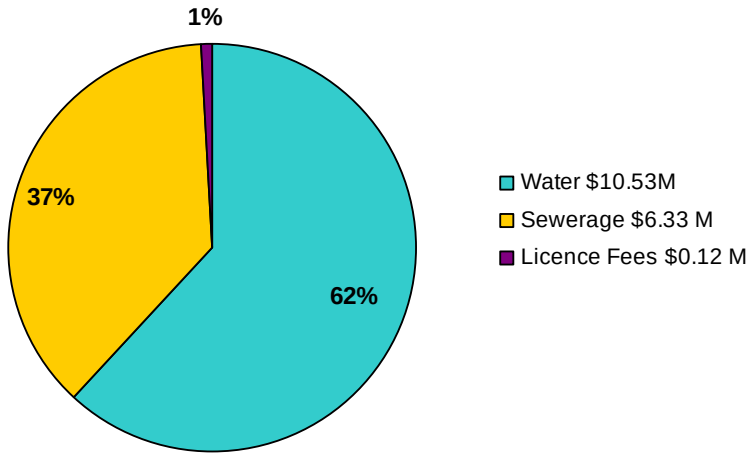
- End Use Demand Modelling $0.1M
- Mandatory Water Management Plans $0.30M

B4.2.1 Key drivers of operating expenditure

The key drivers of business as usual operating expenditure are different for each product.

Error! Reference source not found. shows average annual forecast operating expenditure over the regulatory period by product. Water services account for 62% of operating costs, 37% of costs are sewerage related with 1% allocated to licence fees.

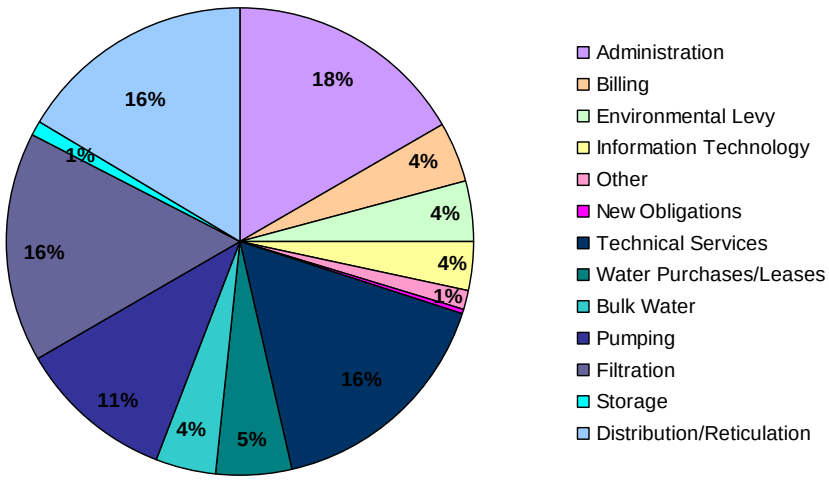
Figure 3 Average Annual Operating Expenditure by Product



Water

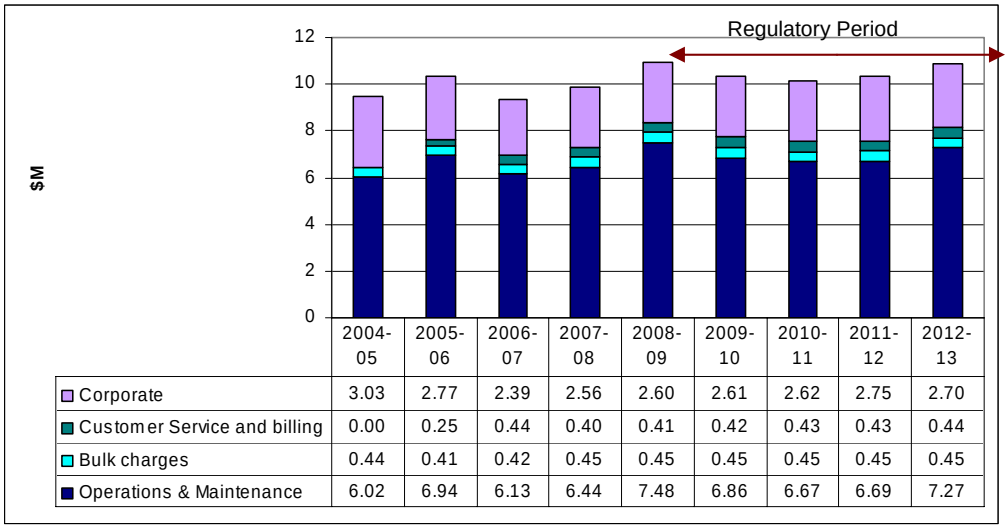
Water operating expenditure accounts for $52.66 million or 62% of Business as Usual (BAU) operating expenditure. Figure 4 shows the composition of water expenditure for the period 2004-05 to 2012-13.

Figure 4 Average Annual Water Operating Expenditure



Technical services, pumping, filtration and distribution / reticulation account for nearly 60% of water operating costs. Bulk water and water purchases / leases and storage accounts for 10%. The remaining 30% comprises corporate related costs including billing, environment levy, IT and administration. Figure 5 shows the variation in water expenditure over time.

Figure 5 Water BAU Opex 2004-05 – 2012-13



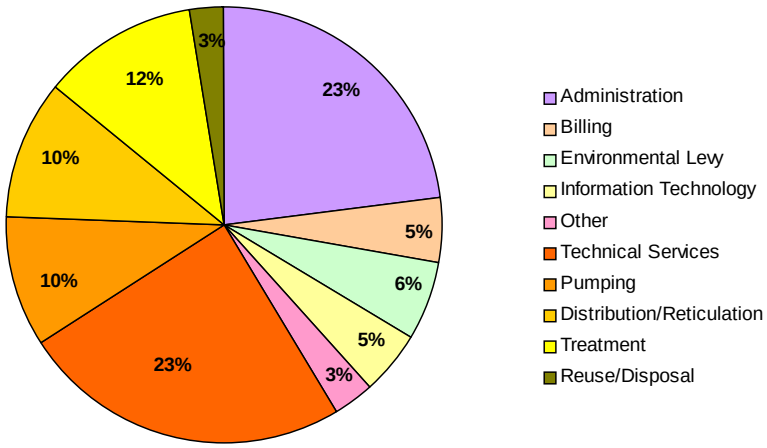
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Corporate	3.03	2.77	2.39	2.56	2.60	2.61	2.62	2.75	2.70
Customer Service and billing	0.00	0.25	0.44	0.40	0.41	0.42	0.43	0.43	0.44
Bulk charges	0.44	0.41	0.42	0.45	0.45	0.45	0.45	0.45	0.45
Operations & Maintenance	6.02	6.94	6.13	6.44	7.48	6.86	6.67	6.69	7.27

There is a slight increase in operating and maintenance expenditure over the regulatory period due to the recruitment of two engineers, three trainees and safety upgrades. This is partially offset by a decrease in consultant costs and savings achieved through the replacement of ISDN with a microwave link. These costs are shared across both water and sewerage services. Variations in operations and maintenance is associated with a cyclical air scouring at Mildura, Swan Hill and Kerang as well as specific maintenance on clarifiers and repainting of the Koondrook standpipe.

Sewerage

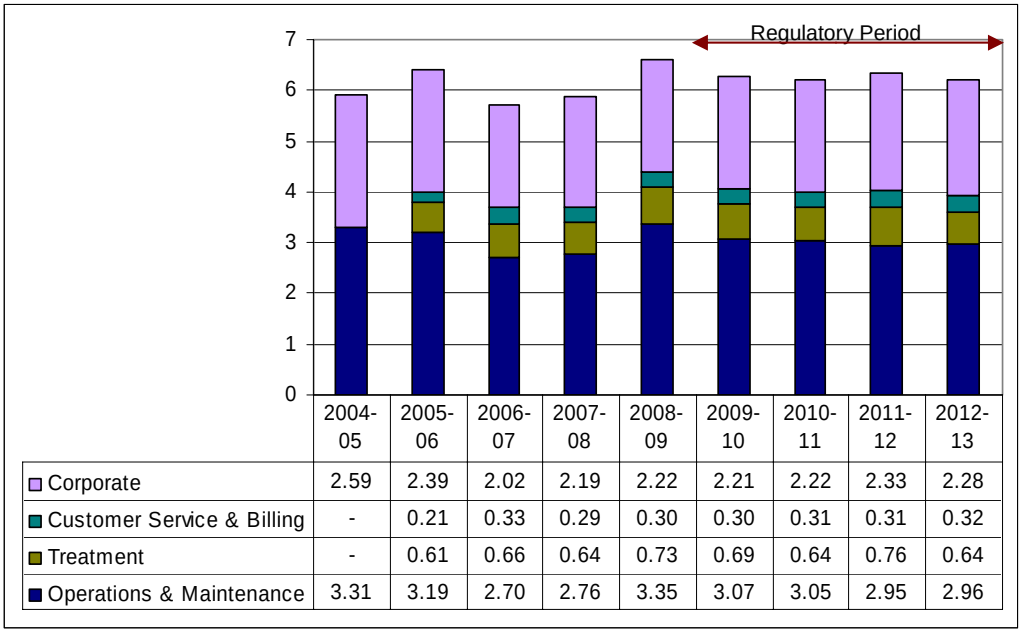
Sewerage operating expenditure accounts for $31.65 million or 37% of BAU operating expenditure. Figure 6 shows the composition of average annual sewerage operating expenditure.

Figure 6 Average Annual Sewerage Expenditure



Technical services, pumping and distribution / reticulation account for 43% of sewerage operating costs. Treatment and reuse / disposal account for 15%. The remaining 42% comprises corporate related costs including billing, environment levy, IT and administration. Figure 7 shows the variation of sewerage expenditure over time

Figure 7 Sewerage BAU Opex 2004-05 – 2012-13



	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Corporate	2.59	2.39	2.02	2.19	2.22	2.21	2.22	2.33	2.28
Customer Service & Billing	-	0.21	0.33	0.29	0.30	0.30	0.31	0.31	0.32
Treatment	-	0.61	0.66	0.64	0.73	0.69	0.64	0.76	0.64
Operations & Maintenance	3.31	3.19	2.70	2.76	3.35	3.07	3.05	2.95	2.96

As for water there is a slight increase in operating and maintenance expenditure over the regulatory period associated with the recruitment of two engineers, three trainees and safety upgrades. This is partially offset by IT savings achieved from the replacement of ISDN with a microwave link. Variations in operations and maintenance costs are associated with specific maintenance such as de-sludging of lagoons and replacement of air valves.

Treatment costs at the Koorlong Treatment Plant will increase by $100,000 per annum from 2010, which is driven by growth and improved treatment levels. There is a corresponding decrease of $20,000 at the Mildura Treatment Plant associated with the diversion of flows.

Corporate

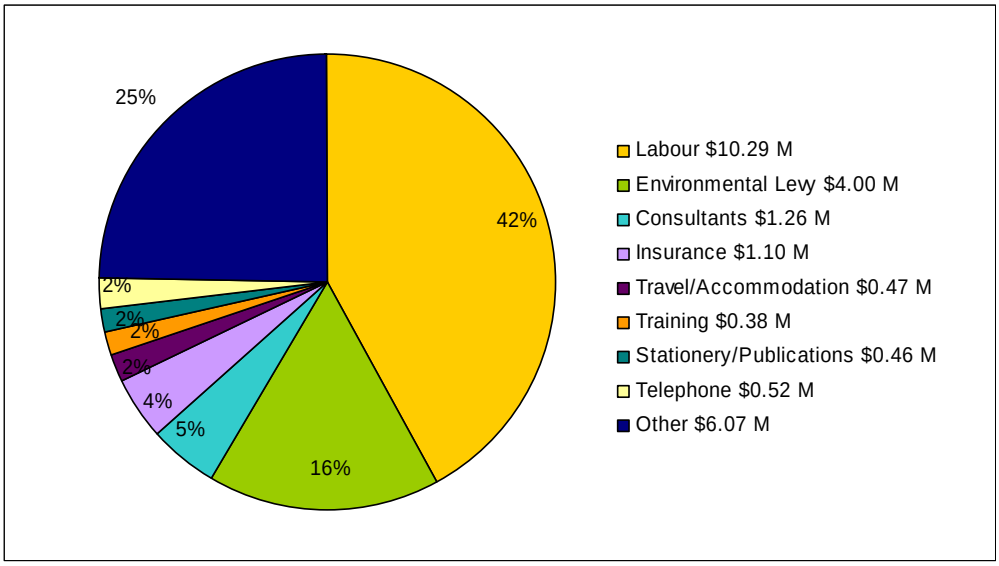
Corporate related costs such as finance and human resources, are allocated 60:40 to the urban and rural businesses respectively, while IT and billing costs are allocated 90:10 to the urban and rural businesses, respectively.

The corporate costs allocated to urban are then allocated into water and sewerage based on the number of customers which is 54:46 respectively.

Corporate operating expenditure accounts for $24.57 million or 29% of total urban operating expenditure during the regulatory period.

LMW is forecasting an increase in corporate related costs as a result of labour increases of 4.0% in the Corporation's Enterprise Agreement, 2006. The Enterprise Agreement will be reviewed in 2009.

Figure 8 Average Annual Corporate Expenditure



B4.2.2 Productivity Improvements over the period

Whilst operating expenditure appears to be fairly stable in aggregate over the regulatory period, increasing costs in some areas mask efficiencies and improvements in service achieved including:

- Expected savings from a single energy contract will be offset by increased energy charges associated with green energy and greenhouse efficiency actions. The ESC has indicated that electricity prices associated with general increases in generation and transmission costs may rise by up to 30%, which have been factored in.
- The merits of outsourcing pump maintenance for urban pumps will be reviewed with the introduction of new irrigation pumps.

- Chemical costs are significant input cost. LMW seeks competitive prices by comparing the government strategic purchasing tender price with its own tender prices.
- The merger of urban and rural businesses continues to yield operational efficiencies and improvement in service levels through the integration of systems and processes.
- The introduction of a new planning engineer will improve rigour in capital works planning. LMW is also hiring three trainee technical officers over three years as regional areas experience difficulty in attracting professional engineers. This will reduce overtime and consulting fees over time.

Efficiency Case Study – Saving Energy & Costs

An MOU for Greenhouse Gas Emissions Reduction has been signed between VicWater and Sustainability Victoria, which resulted in LMW securing funding for an external review of opportunities to reduce greenhouse gas emissions. Recommendations from this review have been incorporated into LMW's capital and operating plans which will result in energy savings and reduced operating costs in the long term. Initiatives include:

Table 10 Greenhouse Emissions Reduction Action Plan

Initiative	Timing
Mildura WWTP - Increase the energy efficiency of aerators - Reprogram the Program Logic Control on raw water pumps - Replace the existing non variable speed drives starters on the 2 smaller pump sets with 2 new variable speed drives - Install variable speed drives pumps at treated water pumps	2007-2009
Red Cliffs WTP - Purchase a smaller Compressor and shave the Recycle Pump Impeller	2007-08
Koorlong WWTP - Upgrade high energy efficient equipment - Program pumps delivering influent to provide a flow that matches the required flow rate of the operating WWTP	2007-08
Merbein Pump Stations - Replace with high efficiency pumps - Algorithm to be implemented for optimal pumping control.	Subject to business case approval
Red Cliffs main Pump Station - Replace with high efficiency pumps	Subject to business case approval
Mildura Workshop - Upgrade skylights and install daylight compensation control	2008-09
Offices - Install T5 Tri-phosphor lights throughout all offices	
Green Energy - Purchase Green Power for supply of Water and Sewerage services	2008-09

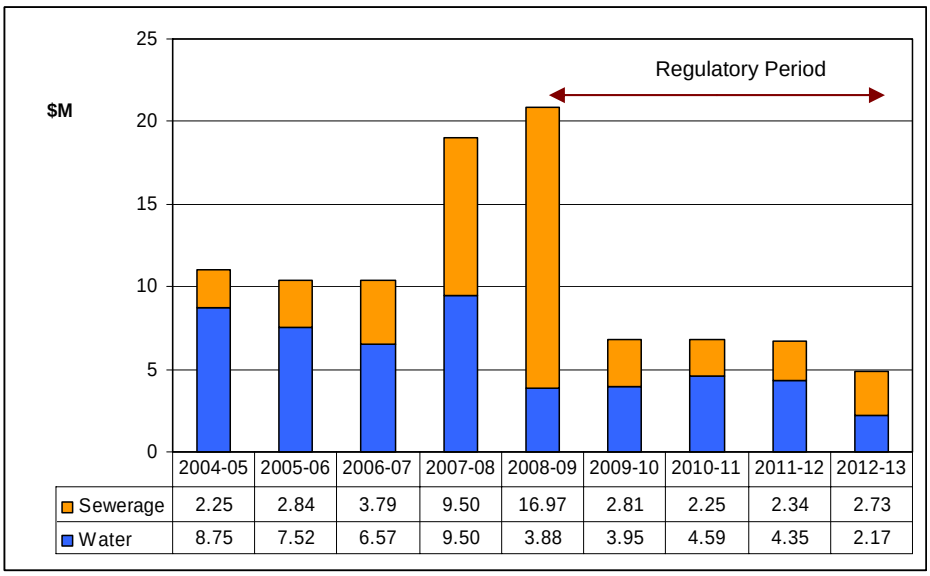
B4.3 Capital Expenditure

B4.3.1 Overview of Capital Expenditure

LMW is planning to invest $46.04M in capital over the regulatory period. There are approximately 28 active projects. Details are provided in the information templates in Appendix E.

Figure 9 shows the forecast capital expenditure for the regulatory period in the context of actual expenditure over the last four years and the long term forecast.

Figure 9 Actual and planned capital expenditure 2004-05 – 2012-13



	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Sewerage	2.25	2.84	3.79	9.50	16.97	2.81	2.25	2.34	2.73
Water	8.75	7.52	6.57	9.50	3.88	3.95	4.59	4.35	2.17

The investment profile is quite variable with significant projects carrying over from the previous regulatory period. Significant projects include:

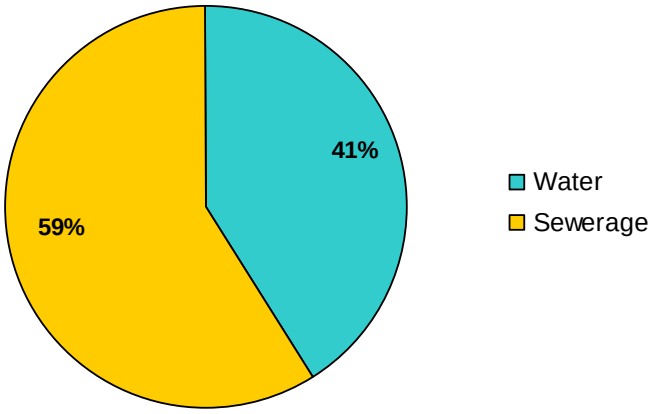
- Relocation of 14th Street tower ($2M)
- Mildura trunk main extension ($3.37M)
- Water Main replacements ($3.7M)
- Rehabilitation of sewers ($3.8M)
- Koorlong Wastewater Treatment Plant augmentation for growth ($8.5M)
- Decommission of Red Cliffs Wastewater Treatment Plant

The remaining projects consist of various renewals and minor works as well as developer gifted assets.

An additional $4.2M is planned for Koorlong Wastewater Treatment Plant treatment upgrade to supply recycled water, which has been classified as non-prescribed.

Figure 10 shows that the majority of investment is in sewerage (59%) with major projects including Koorlong Wastewater Treatment Plant and sewer rehabilitation.

Figure 10 Capex by product 2008-09 – 2012-13



The following section discusses the key drivers and major investments.

B4.3.2 Key Drivers of Capital Expenditure

Table 11 summarises capital expenditure by cost driver. Renewals and growth account for the majority of investment. There is no capital expenditure relating to new obligations during the regulatory period.

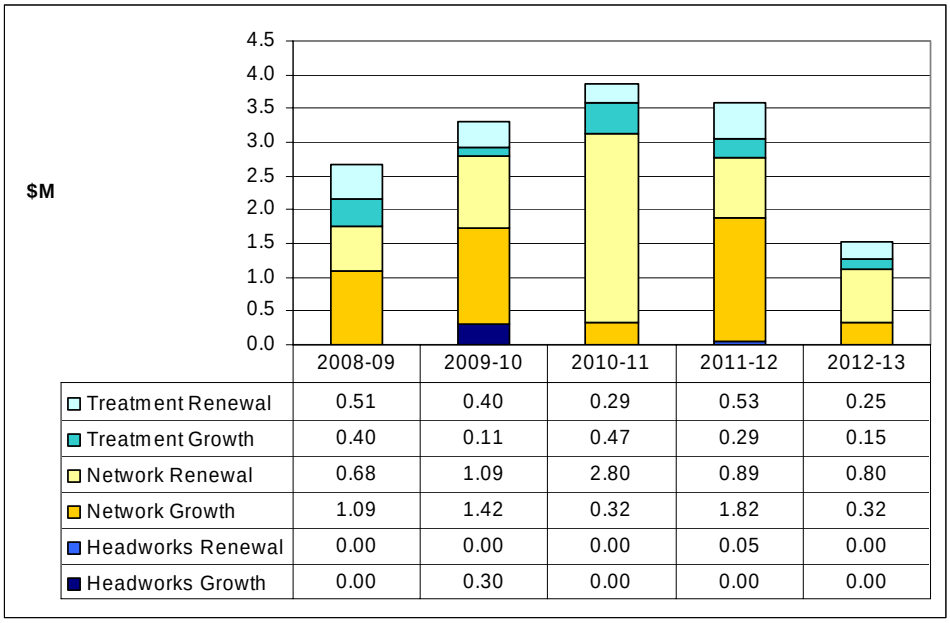
Table 11 ESC Cost Driver Summary

Capital Expenditure Summary	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Net capital expenditure - renewals					9.05	3.58	5.00	3.41	2.88
Net capital expenditure - growth					10.46	1.97	0.63	2.08	0.81
Net capital expenditure - improved service					-	-	-	-	-
Net capital expenditure - compliance					-	-	-	-	-
Government contributions					-	-	-	-	-
Customer contributions					1.34	1.21	1.21	1.21	1.21
Total prescribed BAU capex					**20.85**	**6.76**	**6.84**	**6.69**	**4.90**
Regulatory Depreciation					0.29	0.70	0.94	1.19	1.42
Return on assets					0.48	1.07	1.29	1.49	1.63
Gifted Assets		0.78	0.45	0.80	0.80	0.80	0.80	0.80	0.80
Proceeds from disposals					0.48	0.48	0.48	0.48	0.48

The following sections discuss expenditure drivers and significant investments for each product.

B4.3.3 Water Capital Expenditure

Figure 11 Water Capital Expenditure by Function and Driver



	2008-09	2009-10	2010-11	2011-12	2012-13
Treatment Renewal	0.51	0.40	0.29	0.53	0.25
Treatment Growth	0.40	0.11	0.47	0.29	0.15
Network Renewal	0.68	1.09	2.80	0.89	0.80
Network Growth	1.09	1.42	0.32	1.82	0.32
Headworks Renewal	0.00	0.00	0.00	0.05	0.00
Headworks Growth	0.00	0.30	0.00	0.00	0.00

The majority of water investment over the regulatory period is in network replacement and network growth. Significant investments include:

- Mildura trunk main extension ($3.37M) - growth
- Relocation of 14th Street tower ($2M) – renewal/growth
- Water Main replacements ($3.7M) - renewal
- Developer – Gifted Assets ($1M) - growth

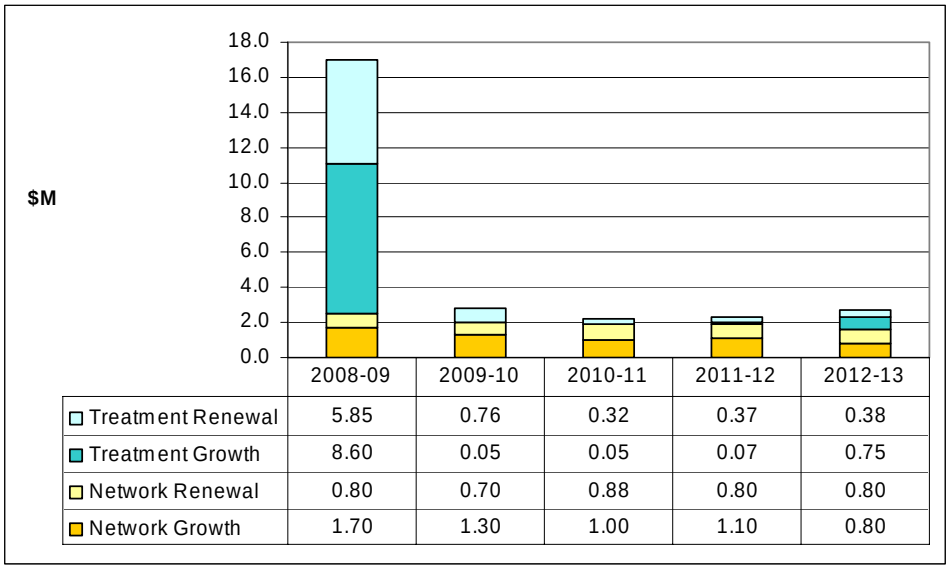
The Mildura trunk main extension program and relocation of the 14th Street tower form part of the ongoing water supply strategy to manage growth.

The ongoing water main replacement program is prioritised using asset condition and service level data including breakage history, customer interruptions and asset criticality.

The infrastructure provided by developers for reticulation is estimated based on historical and forecast growth.

B4.3.4 Sewerage Capital Expenditure

Figure 12 Sewerage Capital Expenditure by Function and Driver



	2008-09	2009-10	2010-11	2011-12	2012-13
Treatment Renewal	5.85	0.76	0.32	0.37	0.38
Treatment Growth	8.60	0.05	0.05	0.07	0.75
Network Renewal	0.80	0.70	0.88	0.80	0.80
Network Growth	1.70	1.30	1.00	1.10	0.80

The majority of sewerage investment over the regulatory period is in treatment growth and replacement. Significant investments include:

- Koorlong Wastewater Treatment Plant augmentation ($8.5M) – growth
- Red Cliffs Decommission Wastewater Treatment Plant ($2.22M) - renewal
- Kerang Wastewater Treatment Plant ($3.3M) - renewal
- Rehabilitation of sewers ($3.8M) – renewal
- Developer gifted assets ($3M) - growth

An additional $4.2M (total project $5.3M) is planned for Koorlong Wastewater Treatment Plant treatment upgrade to supply recycled water, which has been classified as non-prescribed. The treatment upgrade will produce class C effluent suitable for high value horticultural crops, which has been contracted through a commercial arrangement to a private third party.

The growth component for the upgrade of the Koorlong Wastewater Treatment Plant is $8.5M (total project $10.7M), and involves the upgrade of capacity from 4.5 ML/day to 8.5 ML/day. The growth relates to development in Mildura and the transfer of wastewater from the Red Cliffs Wastewater Treatment plant and Mildura Wastewater Treatment Plant. This will enable the Red Cliffs WWTP, which was due for replacement, to be decommissioned in 2009-10.

The timing of this project is subject to EPA and other statutory approvals, and may commence in 2007-08 if approvals are not delayed. LMW is attempting to expedite these approvals.

The $3.3M for the Kerang WWTP is for the reconstruction of lagoons which discharge to Fosters swamp. LMW have recently received a report, at the request from the EPA, evaluating the impacts of the discharge to Fosters swamp. The report identifies that the swamp benefits from the volume of water discharged, however the nitrogen, phosphorous and salt content does pose a risk to the ecological

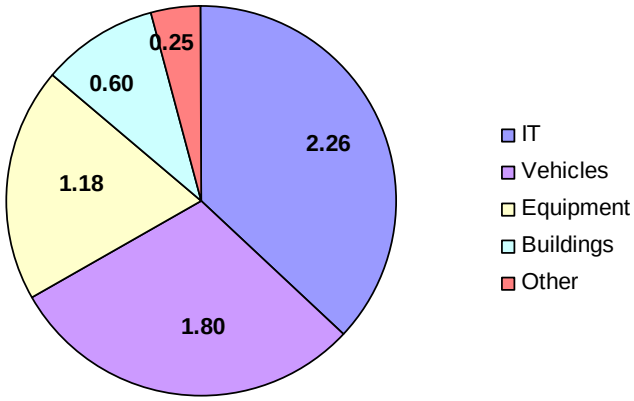
sustainability of the swamp. There may be further investment required beyond the $3.3M to either improve treatment or relocate the discharge point.

LMW has developed an on-going sewer rehabilitationprogram using a priority matrix. The matrix calculates the alternate maintenance and rehabilitation costs, to optimise lifecycle costs and evaluates social and environment impact (eg recurring blockages, number of properties impacted, impact on waterway) to evaluate priorities.

The infrastructure provided by developers for reticulation is estimated based on historical and forecast growth.

Corporate

Figure 13 Corporate Capital 2008-09 – 2012-13 $M



LMW has budgeted $3.96 M for renewal of corporate assets including vehicles, hardware, software, equipment and buildings. The purchase of vehicles is partially offset by trade-ins.

B4.4 Prudent and efficient capital expenditure levels

LMW ensures that proposed investments are prudent by using good asset information and planning tools to evaluate investment opportunities. The capital plan has been developed from:

- Master Plans – growth & improved service levels
- Asset Management Plans – water and sewerage renewals

LMW prepares Business Cases for major programs and projects incorporating options, life-cycle cost and triple bottom line analysis. Investments are recommended to the Board for approval. The Board also review prioritisation and timing of projects each year.

The Asset Management Plans summarise asset condition and consequence criteria used to evaluate risk and also review impacts of growth and changes in service levels on investment.

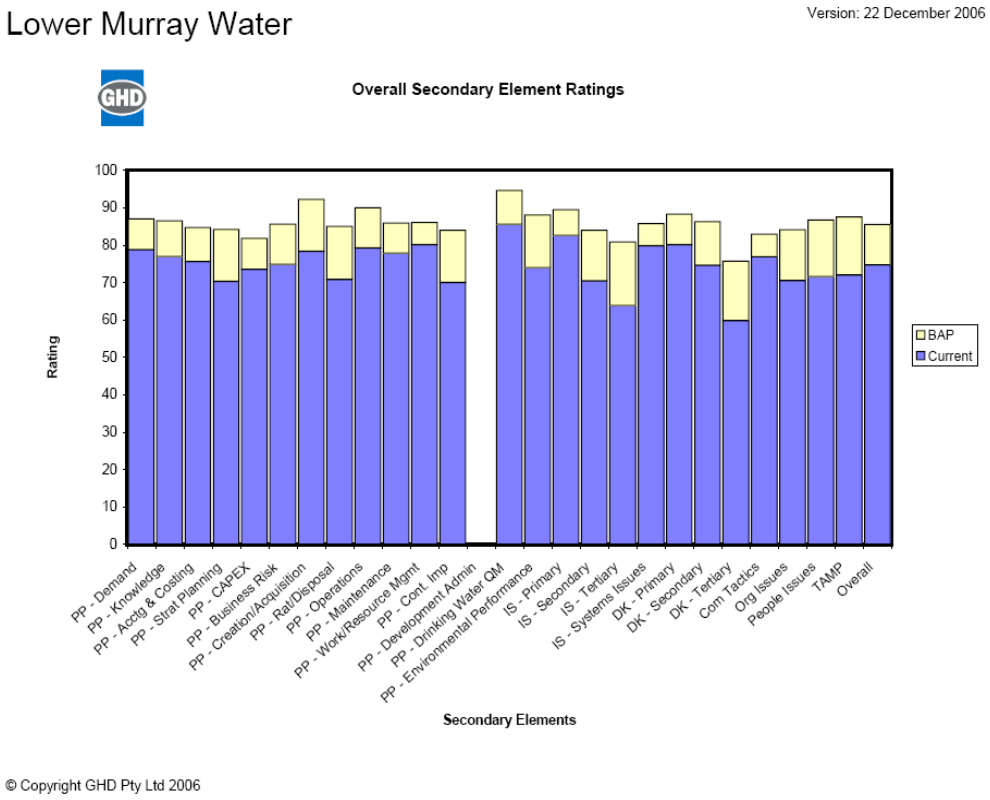
B4.4.1 Asset Management Operational Review

An Operational Review was undertaken by GHD for LMW, covering all asset management activities across urban water supply and wastewater, irrigation, domestic and stock and drainage services, as well as drinking water quality management and environmental management as applied to wastewater and reuse (recycling) systems. The approach prioritised the outcomes against LMW's business drivers.

Overall, LMW was assessed as performing at a higher level of asset management practice than its rural and regional counterparts, with some improvements to meet metropolitan water agency performance. Operational performance in drinking water quality and environmental performance is similar to other regional water agencies assessed by GHD.

The chart below is the result of the Gap Analysis, where LMW's *current performance* (the top of the blue bar) is measured against the *long term Best Appropriate Practice (BAP)* (to 2010 – top of the yellow bar) for the organisation. The distance between the top of the blue bar and the top of the yellow bar is the 'gap' between current performance and BAP.

Figure 14 Summary Gap Analysis Chart



B4.4.2 Asset Management and Operational Improvement Plan

The priority areas of improvement identified in the review are largely process-oriented activities, which will provide the framework, policy and strategies to allow LMW to identify and derive significant benefits from the asset management investments to date and into the future. The improvements are designed to strengthen the links between asset management and LMW business objective.

The improvement projects derived from the analysis are summarised below in **Table 12**.

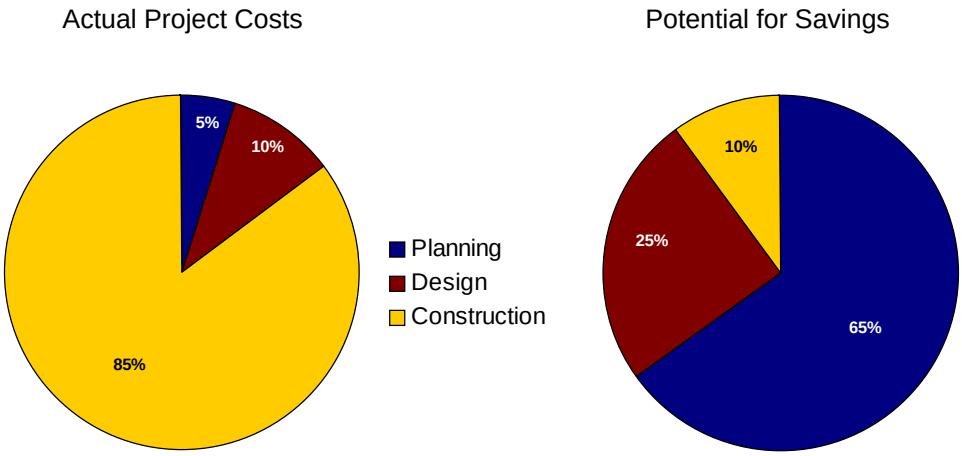
Table 12 Improvement Plan Project Summary

Project Number	Title
1.	Training Programmes
2.	Resource and Skills Management
3.	Asset Condition, Performance and Risk Data Improvements
4.	Optimised Renewal Decision Making
5.	Change Management
6.	Asset Management Plans
7.	Risk Management
8.	Commercialisation
9.	Demand Analysis
10.	Contract Management
11.	Knowledge Management
12.	Maintenance Strategy
13.	Stakeholder / Customer Consultation
14.	Corporate Asset Management Structures
15.	Spatial Plans and Data
16.	Construction Standards, Asset Handover and Contract Administration
17.	Complaints / Enquiries System
18.	Life Cycle Costing
19.	Asset Rationalisation
20.	Emergency Plans

B4.4.3 Capital Efficiency

The majority of opportunities to capital efficiency gains are captured through the planning process by focussing on strategies to achieve cost-effective solutions for capital and operating expenditure. Figure 15 shows that the largest gains are made in the planning and design phases, which represent only a small proportion of total project costs.

Figure 15 Capital Efficiency



LMW seeks to achieve capital efficiencies during each stage of the capital process.

The *planning stage* identifies needs, potential solutions, scope, relative priority and timing of projects. Innovative solutions and prioritisation have the most significant impact on costs. Examples of innovation include:

- Engaged GHD to assist in developing a criticality matrix for sewer rehabilitation, enabling deferral of capital works or substitution with maintenance, reducing life cycle costs. Refer Case Study
- Concept design for augmentation of the Koorlong WWTP identified an alternate sludge handling process which should realise approximately $1.0M in capital savings

The *design stage* includes the detailed definition and design for projects. Project design for major projects is contracted out to up to four Engineering Consultants. Examples of capital efficiencies captured at the design stage include:

- An international process specialist has been engaged to work with design consultants on the Koorlong Wastewater Treatment Plant augmentation to optimise the footprint of the plant through innovative process solutions

The delivery stage includes materials purchase and construction of assets. Effective project management, contract management and strategic purchasing arrangements improve capital efficiency at the delivery stage:

- LMW analyse forward pipe requirements over a 12 month period and issue a tender to the market place, which can result in savings of up to 20%
- LMW is evaluating bundling opportunities for similar project characteristics such as the Koorlong WWTP augmentation and the Robinvale High Pressure Irrigation Pump Station
- Scale efficiencies have been achieved by increasing the size of the sewer rehabilitation contract from 12 to 24 months. A longer contract makes the program more attractive to contractors as they can reduce site establishment costs and commit a dedicated team. Further consideration will be given to issuing period contracts for a 3 to 4 year period to carry out sewer rehabilitation.

Efficiency Case Study – Sewer Rehabilitation

The age of LMW's sewerage assets ranges from 1 year to 75 years.

Service performance is measured in terms of sewer blockages, sewer spills and response times. Service standards set for the regulatory period require an improvement in performance for blockages and in particular for customers experiencing more than 3 sewer blockages per year. This has required a review of LMW's criteria for assessing priority sewers, failure analysis and remediation options.

LMW engaged GHD to develop a criticality matrix for sewer rehabilitation. The matrix calculates the alternate maintenance and rehabilitation costs, to optimise lifecycle costs and evaluates social and environment impact (eg recurring blockages, number of properties impacted, impact on waterway) to evaluate priorities.

Tree roots and material types such as reinforced concrete and vitrified clay are the primary cause of blockages and asset failure. LMW specifies materials for new and replacement assets, and is planning to evaluate the lifecycle cost of fully sealed systems, which prevent groundwater and tree root infiltration.

LMW is also planning to take proactive steps with councils to influence tree planting.

This strategic asset management plan is expected to result in reduced lifecycle costs, improved performance against service standards and reduced impact on the environment.

B4.4.4 Assumptions about Accuracy and Contingency

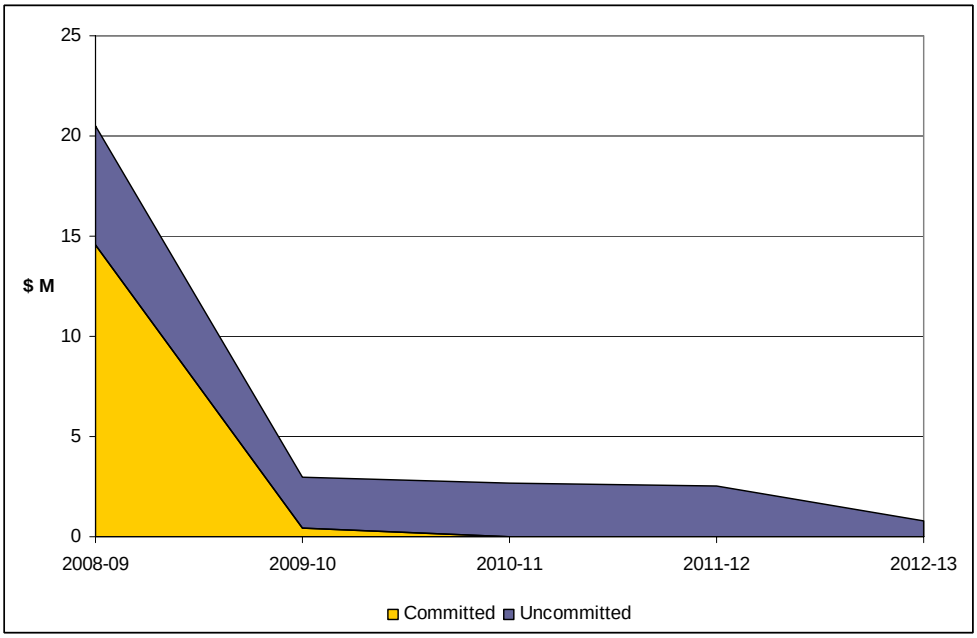
LMW's capital planning requires the following accuracy levels for project estimates at different planning stages:

- Feasibility study: +/- 30%
- Functional design: +/- 20%
- Detailed design: +/- 10%
- Project approval or tender: +/- 5%

These accuracy requirements reflect the levels of certainty for planning estimates at different stages in a project lifecycle and are consistent with planning accuracy levels used by other water businesses.

The accuracy of investment in the Capital Plan varies for each project according to its maturity when the plan was formulated. Figure 16 shows the profile of committed projects (project approval) compared to uncommitted projects (preliminary project approval, contingent on detailed design). Committed projects are projects with carry-over from previous years or with detailed design and formal project approval.

Figure 16 Committed vs Uncommitted Project Expenditure ($M 1/1/07)



This means that the level of certainty in the Capital Plan in the short term (Year 1) is high by comparison to later years. The main committed project in Year 1 is the upgrade of the Koorlong Wastewater Treatment Plant. Projects at the early feasibility or design stage are subject to the most variation whilst the project scope is defined, conditions are assessed and design innovations are considered. Figure 16 shows the majority of projects in the last four years of the next regulatory period are uncommitted and therefore the estimates have a higher degree of uncertainty.

LMW is working towards developing probabilistic risk based estimates for significant projects earlier in the planning phases to better manage future uncertainty. Project values in this capital plan only include a small contingency (up to 15%) based on past experience.

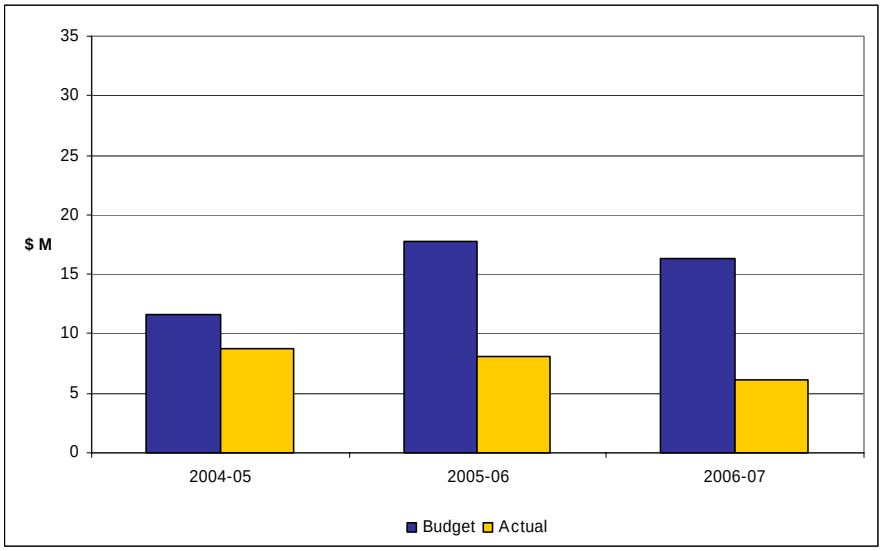
The level of construction activity in the water industry in Victoria and across Australia is very high. This has created a heated market for civil construction. LMW is partially shielded from this effect due the use of its internal construction team and local contractors. The larger treatment and rehabilitation projects will be completed by national based firms and will be subject to a higher degree of uncertainty for construction prices.

LMW is investigating opportunities to smooth the profile of this capital program by analysing priorities and approval conditions as well as delivery methods.

B4.4.5 Capability to deliver capital program

Figure 17 shows LMW's track record in delivering its capital expenditure over the last three years.

Figure 17 Actual vs Budget Capital Expenditure ($M 1/1/07)



The capital plan has increased by 40% in the last three years. The difference between planned and actual investment is explained by delays in the delivery of the Mildura West Water Treatment Plant and the Koorlong Wastewater Treatment Plant. The Mildura West WTP was delayed due to the main contractor going into receivership and the Koorlong WWTP project was delayed by a change in procurement method from an alliance to separate design and construct, following strategic advice.

In recognition of the growing capital program, LMW is recruiting an additional planning engineer to help manage the planning phases and the stakeholder approvals going forward.

The major delivery challenges during the regulatory period include:

- Project uncertainties due to number of projects in planning and design phase
- Stakeholder approvals including EPA and DTF
- Competitive market for design and construction contractors
- Developing appropriate procurement strategies, to manage risk and attract the market
- Attracting/retaining professional staff

All projects are managed against budgets approved by the Board, and project progress against budget and program is reported to the Board on a monthly basis.

B4.5 Financing capital investments

The Regulatory Asset Base (RAB) is based on actual outcomes to date, and with forecasting changes updated to 2007-08. The rolled forward RAB is updated by adding new capital expenditure, deducting government and customer contributions and disposal of assets for the review period.

B4.5.1 Updating the regulatory asset base

The value of the initial RAB (at 1 July 2004) was set by the Minister for Water. The value of the RAB at the start of the second regulatory period is updated to reflect the value of capital expenditure, customer and government contributions and disposals.

Table 13 shows the calculation of the RAB across the first regulatory period and at 1 July 2008, based on actual outcomes, except the last year of the first regulatory period which is based on forecasts.

Table 13 Updating the Regulatory Asset Base

			First Regulatory Period	
$M, 1/1/07	**2004-05**	**2005-06**	**2006-07**	**2007-08**
Rolled forward asset base				
Opening asset base	40.58	49.48	52.19	58.07
plus Gross capex	11.00	10.36	10.36	19.00
less Government contributions	-	0.21	-	-
less Customer contributions	-	4.85	1.67	0.87
less Proceeds from disposals	0.26	0.48	0.48	2.99
less Regulatory depreciation	1.83	2.11	2.32	2.79
Closing asset base	49.48	52.19	58.07	70.42

B4.5.2 Rolling forward the RAB

The calculation of the return on new assets follows the ESC's methodology for rolling forward new capital expenditure into the RAB, by accumulating new capital expenditure net of regulatory depreciation and customer contributions, and allowing a cost of capital on the average RAB in each period.

Table 14 shows the rolling forward of capital expenditure on new assets, based on the expenditure projections contained in the Water Plan.

Table 14 Rolling Forward the Regulatory Asset Base

	Second Regulatory Period				
$M, 1/1/07	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Rolled forward asset base					
Opening asset base	70.42	86.33	88.01	89.86	91.31
plus Gross capex	20.85	6.76	6.84	6.69	4.90
less Government contributions	-	-	-	-	-
less Customer contributions	1.34	1.21	1.21	1.21	1.21
less Proceeds from disposals	0.48	0.48	0.48	0.48	0.48
less Regulatory depreciation	3.12	3.39	3.30	3.55	3.71
Closing asset base	86.33	88.01	89.86	91.31	90.81

To be consistent with the approach used for regulatory depreciation in the first regulatory period, LMW has used the annual provision of book depreciation for existing assets, which is embedded within the current Corporate Plan. LMW has used the straight-line approach in determining its regulatory depreciation.

The ESC template calculates depreciation on the rolled forward RAV for new assets, based on the asset lives of each capital expenditure category as per the first Water Plan.

B4.5.3 Weighted average cost of capital

The Weighted Average Cost of Capital (WACC) is the return that LMW seeks to earn on its RAB. LMW has used the indicative WACC of 5.1% included in the ESC templates.

B4.6 Taxation

The ESC requires information on actual tax payments forecast as payable for NTER purposes under the Corporate Plan. Carried forward losses mean that there will be no tax forecast as being payable in the regulatory review period. Carried forward losses mean that there will be no tax payable.

Tax depreciation allowances have been calculated using the opening allowances and the amount of capital expenditure for each tax category.

B5. Demand

B5.1 Summary of Demand Forecasts

The factors impacting on demand for services include:

- Growth
- Restrictions
- Water Supply Demand Strategy
- Prices

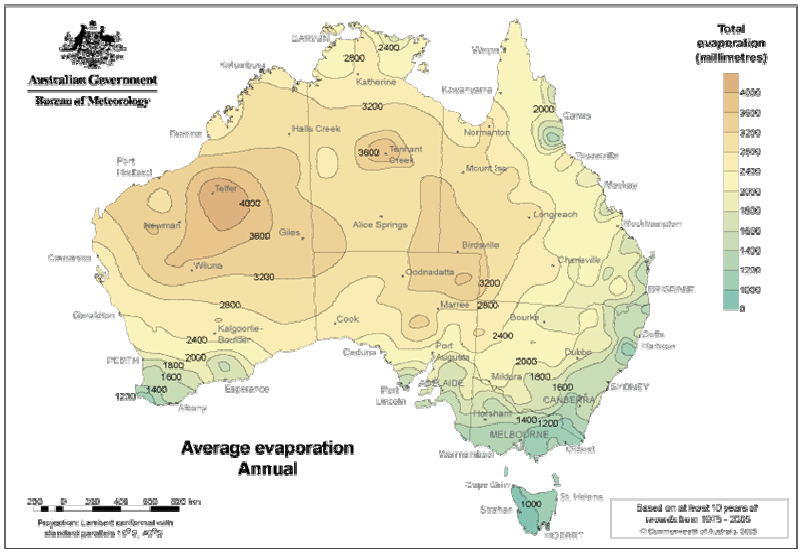
LMW is in stage 4 restrictions, which is expected to result in ongoing demand reductions. LMW's Permanent Water Savings Plan and Water Supply Demand Strategy are expected to derive continued savings up to 10% by 2015. This will be partially facilitated by a stronger price signal with a proposed change in the first two steps of the volumetric charge from 400 kL to 300 kL

This section presents LMW's methodology for calculating demand and demand forecasts with an introduction on context and assumptions used

B5.2 LMW Context

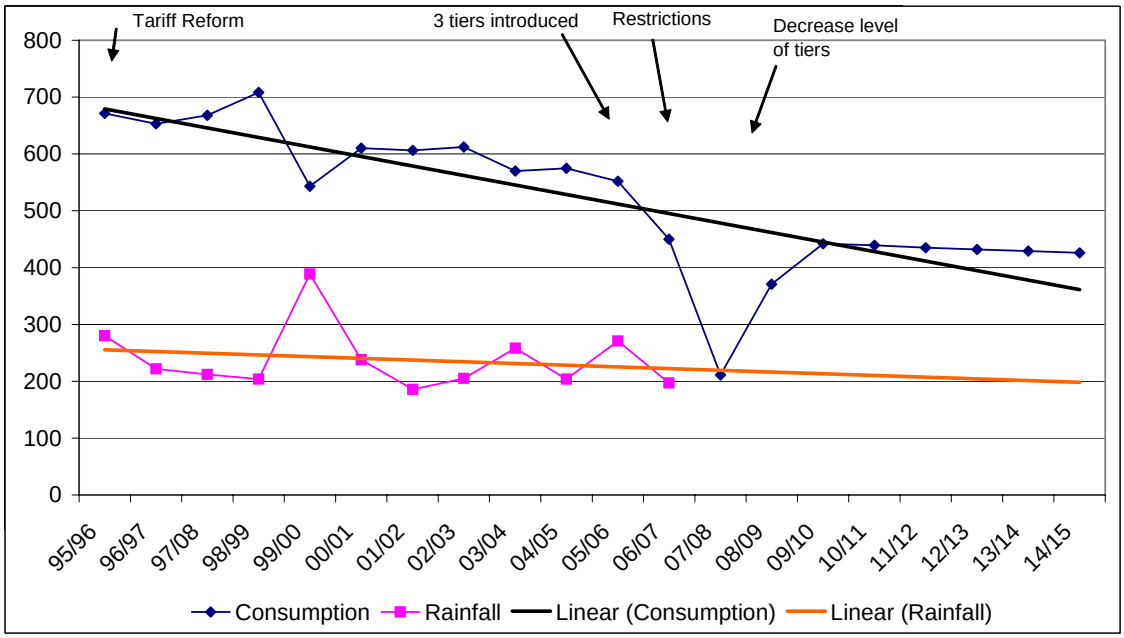
The LMW region is one of the driest regions in Victoria receiving an average annual rainfall of about 300 mm in comparison to the 400-600 mm of rainfall received per year in most other non-alpine regions of Victoria. In addition, the region experiences about 1 800 mm of evaporation per year on average, compared to 1 400 mm or lower experienced in other regions. The longer days and generally dryer climate significantly influences water consumption and the community's dependence on reliable water sources. Over the last 60 years, average temperature has increased and average rainfall has declined. Figure 18 shows the average evaporation rate for the LMW's region compared to other regions of Victoria

Figure 18 Average Annual Evaporation



LMW has experienced decreased consumption per connection since 1995-96, despite increased growth in population and the decreasing of rainfall as shown in Figure 19.

Figure 19 Consumption and Rainfall Trends



B5.3 LMW Demand Assumptions

LMW have a number of key assumptions that have been used in the demand forecasts.

B5.3.1 Growth Rates and Connections

LMW has sourced the growth in households from Victoria in Future 2004 produced by DSE. This report includes changes in population, households, household sizes. The change in number of households is assumed to be the same as the number of connections. For the period 2007-08 and beyond, growth is assumed to reflect the population forecast.

The growth rates in the number of non-residential customers are assumed to mirror the growth of residential customers.

B5.3.2 Influence of weather on demand

LMW has undertaken a regression analysis of average demand per connection and related it to weather conditions. The data available for the analysis is constrained by the need to ensure a consistent definition is used for connections. LMW has a consistent series available on equivalent connections for the period 1999-2000 to 2005-06 inclusive. In order to increase the sample size, we have used quarterly consumption data, which is available for the period from 2000-01. This provides a total of 24 quarterly observations. In converting annual connection numbers to quarterly, equivalent connections were assumed to increase evenly over the course of the financial year.

The analysis involved regressing average consumption per connection against average maximum temperature and average monthly rainfall per quarter. The fit of the regression was quite good, with an adjusted R squared of 86.3%.

Table 15 Demand Forecast regression r-square statistics

Parameter	Statistic
Multiple R	0.9353
R Square	0.8748
Adjusted R Square	0.8629
Standard Error	20.7416
Observations	24

The regression coefficients are given in Table 16. As expected, higher temperatures result in increased demand for water, and higher rainfall results in a reduction in demand. Each degree increase in average maximum temperature results in an increase of 8.1 kL/per quarter in demand per connection. Each additional mm in monthly rainfall results in a decrease of 1.6 kL/per quarter.

Table 16 Demand forecast regression coefficients

Variable	Coefficients	Standard Error	t Stat
Intercept	-28.1506	23.3240	-1.2069
Average Maximum Temperature	8.0968	0.7952	10.1814
Average monthly rainfall	-1.6372	0.4188	-3.9092

The results of the regression allows LMW to identify predict demand levels for a given weather year. Table 17shows the predicted versus observed demand per connection for each year, and for the average weather conditions over the six year period as a whole and over 60 years. Over the last 60 years, average temperature has increased and average rainfall has declined, so that predicted demand is significantly higher for the recent period.

Table 17 Average temperature and rainfall in Mildura

	Average for last 60 years	Average for last 6 years
Mean daily maximum temperature of Mildura from 1946 - 2006 (annual), Degrees Celsius	23.7	24.5
Mean monthly rainfall of Mildura from 1946 - 2006 (annual), mm	23.9	18.9

***Data source*: Bureau of Meteorology**

Figure 20 shows the relationship between average demand per connection and temperature and rainfall.

Figure 20 Demand per connection versus temperature and rainfall

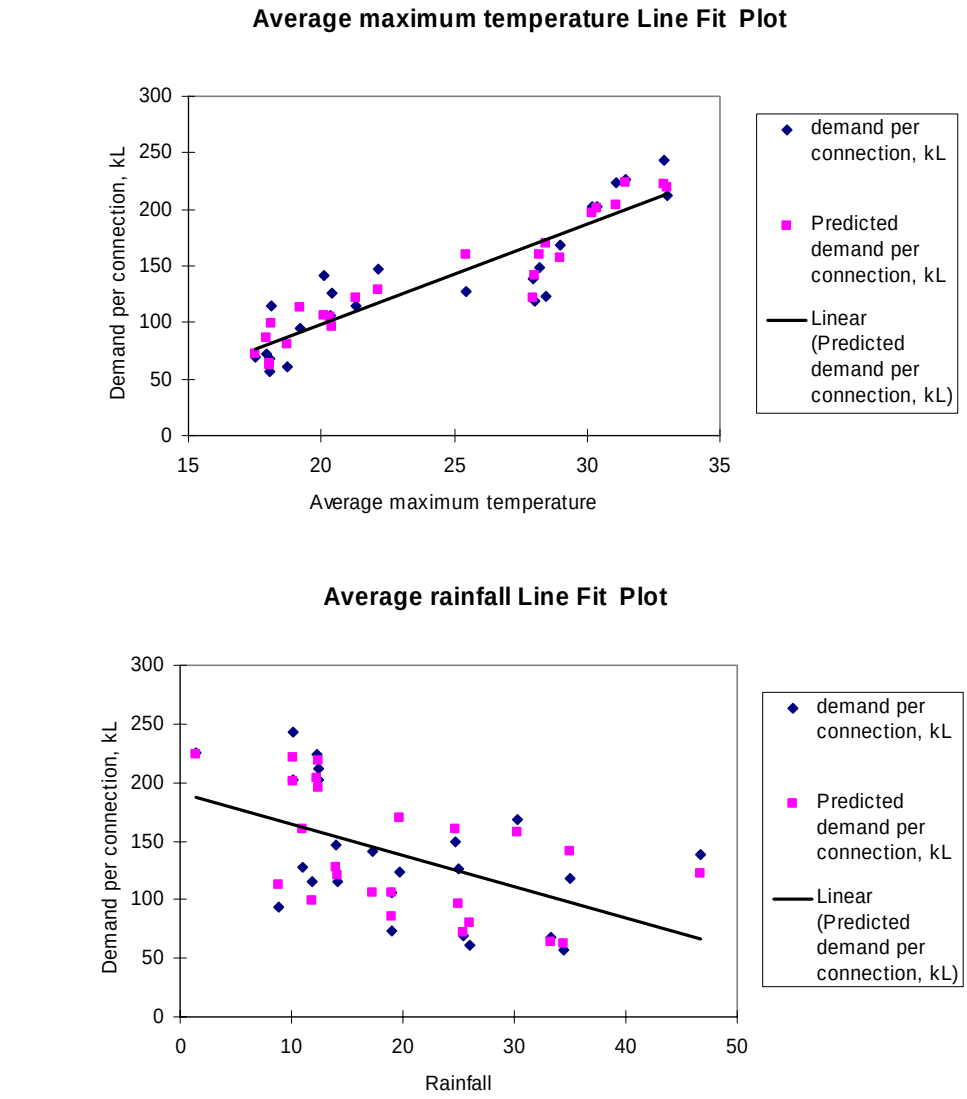
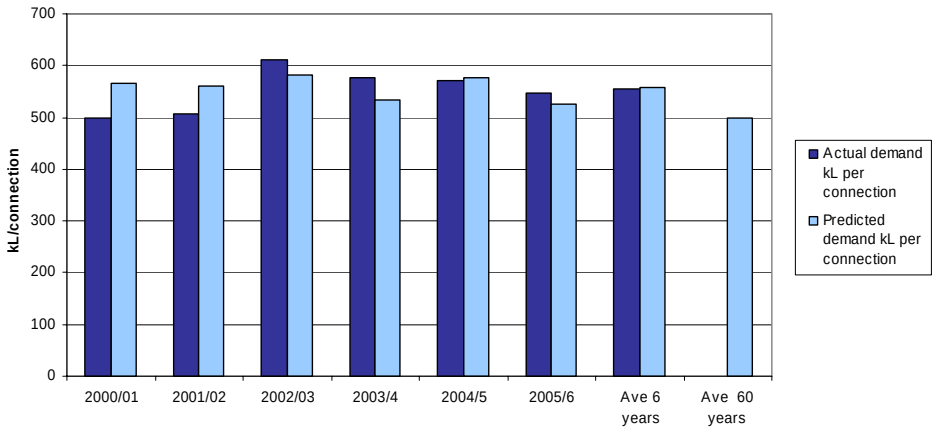


Figure 21 shows a close correlation between the actual average demand and the predicted demand using this analysis.

Figure 21 Predicted versus average demand for alternative weather assumptions



B5.3.3 Impact of Restrictions

The demand forecasts provided for are calculated on the basis that no staged water restrictions are imposed on residential water users. Permanent Water Saving Rules were introduced and were in place up until the staged restrictions were enforced.

Stage 1 water restrictions were implemented for LMW customers from December 4, 2006 up to May 2007, after which Stage 2 restrictions applied. Stage three was introduced June 1 2007, and Stage 4 introduced July 2007.

From this point LMW anticipates the following water restrictions scenario:

- Stage 4 restrictions to apply from July 2007 through to the end of September
- Restrictions are then scaled back to Stage 3 from October 1 2007 through to the end of November.
- Stage 2 restrictions to apply from the beginning of December 2007 for 12 months.
- Stage 1 restrictions to apply indefinitely from December 1, 2008

LMW has assumed that some of the water savings achieved under the restrictions regime would be maintained permanently into the future even after restrictions are scaled back to Level 1. Table 18 summarises the impact on demand estimated for each restriction stage

Table 18 Impact of restrictions on demand

Stage	Impact on Demand	Comment
Stage 1	10%	Permanent changes being made in consumption behaviour as households make investments in water saving technologies (for example rain water tanks) or practices or simply change their attitudes to water usage.
Stage 2	50%	No lawn watering, garden watering on alternate days

Stage	Impact on Demand	Comment
		and between certain hours.
Stage 3	55%	No lawn watering, garden watering on specified days and between certain hours.
Stage 4	60%	No outdoor watering

Due to the high temperatures, rainfall patterns and evaporation levels, a high proportion of residential water uses is used on lawns and gardens. The impact on demand for stage 2 – 4 reflect the savings achieved through the ban on lawn watering.

B5.3.4 Price Elasticity

Table 19 sets out LMW's price elasticity assumptions for each consumption tier. The detailed rationale for the elasticity assumptions is discussed it LMW's previous Water Plan. This price sensitivity has been combined with the price increases proposed in section B7, to determine the final projections for residential water demand.

Table 19 Price Elasticity

	Consumption Tiers		
	0-300 kL	300-600 kL	>600 kL
Price Elasticity	-0.05	-0.2	-0.3

The elasticity assumptions reflect an increasing level of discretionary use as consumption increases.

Significant reductions in water demand have occurred from the peak demands occurring in the late 1980's and early 1990's due to water restrictions, the introduction of two-part tariffs, and community awareness campaigns. Recent years have been relatively dry driving consistently higher water demands than would otherwise occur under "average" conditions.

Real price increases and a change in the threshold from 400kl to 300kl is expected to result in reduced demand, however this may be masked if water restrictions continue.

B5.4 Demand Forecast methodology

B5.4.1 Residential and Non-Residential Water Connection Demand Forecast

The connection forecast methodology involves:

- Establish the 2005-06 base for the demand forecast, using "equivalent connections" by converting all meter connection sizes to an equivalent standard residential 20mm connection. This has been undertaken for both residential and non-residential connections.
- Review historic growth in connections.
- Estimate the growth in water connections over the regulatory period, considering historic growth in connections and the expected rate of population growth and change in average household size.

B5.4.2 Residential and Non-Residential Water Volumetric Demand Methodology

The water demand forecast methodology is to:

- Calculate the 2005-06 base demands per connection for residential and non-residential
- Estimate the water demands for 2007-08, considering historic trends in water consumption related to restrictions, temperature and rainfall using a regression analysis. This has been based on "average" climatic conditions, considering the potential for both wet and dry years.
- Forecast the estimated average water demand per connection considering average weather conditions, impact of water conservation measures and restrictions.
- For revenue estimates, forecast the total demands by multiplying the forecast number of connections by the estimated demand per connection (for both residential and non-residential).
- For operational and capital works planning, develop appropriate daily and peak daily demands by system, from the total demands and specific understanding of each system demand behaviour.

LMW forecasts are based on a five-year rolling average of non-residential demand. It is assumed that volumes per non-residential equivalent connection remain constant over the review period (and beyond), based on the most recent five-year data.

Although there are real increases in prices for non-residential water, LMW has not assumed any reduction in demand due to price elasticity. Published studies on the price sensitivity of non residential demand are difficult to use, since they are specific to the nature of the industrial and commercial activity being undertaken, the price of water in alternative locations and the ability of the relevant industries to reduce their water usage.

Experience with large consumption non-residential customers has not indicated any significant changes in urban demand – eg through decisions to relocate.

B5.4.3 Wastewater flow methodology

The methodology for wastewater flow forecasting is relatively straightforward, given that:

- There is no flow-based pricing for wastewater;
- Growth in wastewater flows is relatively low; and
- Wastewater operating costs cannot be predicted with any reliability from growth forecasts as they are more influenced by rainfall.

The flow forecast has been prepared taking into account:

- Population growth in all Districts, provided by DSE for historic and future growth.
- Historic and expected growth in number of wastewater connections.
- Historic wastewater flow patterns and influences. Water demand management measures mainly impact on garden watering and consequently have little effect on wastewater flows. In addition, recent years have been relatively dry and given rise to consistently reduced wastewater flows from inflow/infiltration than would otherwise occur under "average" conditions.

B5.5 Water & Sewerage Connection Forecasts

B5.5.1 Residential Water and Sewerage Residential Connections

Table 20 shows total equivalent residential water and sewerage connections since 2003-04. Connection numbers represent the average number of connections for the year (which when multiplied by the tariff provide the amount of income derived).

The table also sets out the growth in connections adopted for 2007-08 onwards.

The large increase in sewerage connections for 2003-04 and 2004-05 are due to specific developments and small town sewerage schemes, where the total number of properties in the development or scheme is levied service tariffs for sewerage when the service becomes available.

Whilst historically the aggregate number of sewerage connections has been lower than water, future growth assumes water and sewerage connections will be the same.

Table 20 Equivalent Residential Connections (Number)

Residential Connections	Total 2003-04	Total 2004-05	Total 2005-06	Total 2006-07	Growth 2006-07	Growth to 2007-08 (p.a)	Growth 2008-09 to 2012-13 (p.a)
Water	24822	25340	25926	26430	504	400	370
Sewerage	20723	21498	22536	22977	441	400	370

B5.5.2 Water and Sewerage Non-residential Connections

Table 21 shows the actual number of non-residential connections and the number of equivalent connections. The service charge is based on the size of the meter. LMW derives revenue forecast, based on a standard service fee for a 20mm connection, this is adjusted for larger connections using a factor for an “equivalent connection”.

Table 21 Equivalent Non-Residential Connections (Number)

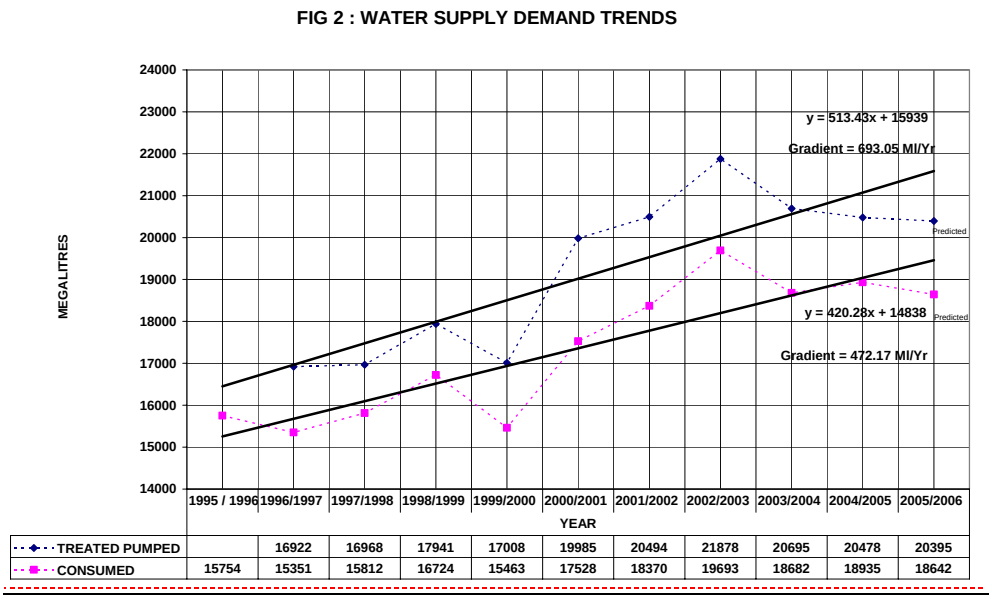
	Total 2003-04	Total 2004-05	Total 2005-06	Total 2006-07	Growth 2006-07	Growth to 2007-08 (p.a)	Growth 2008-09 to 2012-13 (p.a)
No. non-residential connections - water	3532	3588	3692	3709	17	32	30
Non-residential equivalent connections - water	6690	6785	6845	6905	60	60	56
No. non-residential connections - sewerage	2860	2897	2945	2954	9	37	34
Non residential equivalent connections - sewerage	4057	4253	4441	4512	71	71	49

B5.6 Water Volumetric Demand

B5.6.1 Historic Residential Volumetric Demand

LMW has traditionally used a five year rolling average of demand per connection to estimate residential volumes. Figure 22 shows the trend in total consumption in recent years.

Figure 22 Trend in water consumption



	1995 / 1996	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
TREATED PUMPED		16922	16968	17941	17008	19985	20494	21878	20695	20478	20395
CONSUMED	15754	15351	15812	16724	15463	17528	18370	19693	18682	18935	18642

Data source: LMW annual consumption data

The current rolling average estimate of demand (based on the years 2001-2002 to 2005-06) is 573 kl/connection. Adjusting average demand so that is expressed per equivalent connection gives a five year rolling average of 563 kl/connection.

Table 22 shows the actual average water demand per connection for residential customers, which has been influenced by changes to tariffs, education and restrictions.

LMW introduced a three-tier tariff for volumetric charges in 2005-06, from an earlier two-tier structure. Table 22 shows the volumes consumed within price tiers under the two-part tariff, according to whether the customer consumed below or above the 400 kL threshold. The thresholds were seasonally split – 50 kL each for April to June and July to September and 150 kL each for October to December and January to March, which were non-cumulative.

Table 22 Average Water Demand per Connection – Residential (kL)

	Total 2002-03	Total 2003-04	Total 2004-05	Total 2005-06	Total 2006-07
Total	606.6	568.3	565.6	548.5	490.08
1st Tier	324.1	311.5	311.6	305.1	298.1
2nd Tier	282.5	256.8	254.0	132.6	115.8
3rd Tier	-	-	-	110.8	76.9

LMW plans to continue the three tier tariff for residential customers, with the threshold for the first tier decreasing from 400 kL to 300 kL. The demand forecast disaggregates the high rate volumes into the volumes subject to the second tier and third tier volumetric rates. Previously the 800 kL threshold was applied quarterly, with seasonal allocations consistent with the 400 kL threshold. Analysis of LMW's billing data for the earlier years up to 2006-07 outcomes provides the tier breakdown of demand per connection based on 400kL steps (Table 23).

Table 23 Water Demand per Connection for Three Tiers – Residential (kL)

	2002-03	2003-04	2004-05	2005-06	2006-07
Total	606.6	568.3	565.6	548.5	490.08
First tier volumes	324.1	311.5	311.6	305.1	298.1
Second tier volumes	191.2	165.2	164.5	132.6	115.8
Third tier volumes	91.3	91.6	89.5	110.8	76.9

Table 24 shows the predicted demand per equivalent connection (pa) for a range of assumptions:

- the average weather over the last 6 years
- the average weather over the last 60 years
- the mid point of the two
- a weighted average which is closer to the average of the last 6 years (70:30)

Table 24 Predicted demand given alternative weather assumptions

Assumed weather	kL per equivalent connection (pa)
Predicted demand- average weather for last 6 years	557.1
Predicted demand- average weather for last 60 years	498.5
Predicted demand- interpolated mid point	527.8
Predicted demand- weighted average 70:30	539.5

Data source*: AT modelling*

B5.6.2 Impact of water restrictions

Predicted demand for 2006-07, 2007-08, 2008-09 and 2009-10 onwards under the impact of water restrictions scenario is presented in

Table 25.

Table 25 Expected demand under alternative weather assumptions with water restrictions

Year	2006-07	2007-08	2008-09	2009-10 onwards
Assumed weather	kL per equivalent connection (pa)			
Predicted demand - average weather for last 6 years	464.3	218.2	387.9	466.0
Predicted demand - average weather for last 60years	415.4	195.2	347.1	416.9
Predicted demand - interpolated mid point	439.8	206.7	367.5	441.5
Predicted demand - weighted average 70:30	449.6	211.3	375.6	451.3

Table 26 applies these assumptions to average demand per connection based on expected restrictions for the next 2 years and stage 1 restrictions thereafter. The demand per connection shown for 2007-08 and beyond uses the weighted average demand per connection as a base, but also reflects the impact of current and forecast restrictions, coupled with LMW's demand management policies, and the reduced threshold for the first tier from 400kL to 300kL.

Table 26 Average Demand per Connection – Residential (kL)

	Historic/Current					Average Projected		
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 onwards
Total	606.6	568.3	565.6	548.5	490.8	211.3	375.6	451.3
First tier component	324.1	311.5	311.6	305.1	298.1	117.5	208.9	251.0
Second tier component	191.2	165.2	164.5	132.6	115.8	51.1	90.8	109.1
Third tier component	91.3	91.7	89.5	110.8	76.9	42.7	75.9	91.2

Table 27 summarises the overall average demand forecast for residential customers, based on the number of connections and demand per connection set out above.

Table 27 Total Residential Demand Forecast for LMW (ML pa)

	Actual and Forecast 1st Review Period		Forecast 2nd Review Period				
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Total	12,969	5,648	10,107	12,229	12,311	12,392	12,471
First tier	7,878	3,149	4,827	5,866	5,933	5,999	6,064
Second tier	3,060	1,363	2,777	3,354	3,369	3,385	3,399
Third tier	2,031	1,136	2,502	3,009	3,009	3,009	3,008

B5.6.3 Historic - Non Residential Volumetric Water Demand Forecast

Table 28 sets out the historic volumes per non-residential customer. LMW has historically had two tiers for non-residential charges, however this was converted to a uniform volumetric rate from 2006-07, consistent with the rate used for the residential second tier.

Table 28 Historic Average Demand per Connection – Non-residential, (kL)

	Historic / Current			
	2002-03	**2003-04**	**2004-05**	**2005-06**
Total	706.6	632.3	618.1	637.6
First Tier	103.6	97.6	96.6	99.7
Second Tier	603	534.7	521.5	537.9

Table 29 summarises the total historic and forecast volumes for non-residential customers, based on the forecast growth of non-residential connections and forecast demand per connection.

Table 29 Non residential Water Demand Forecast - ML pa

	Historic / Current				Projected for 1st Review Period		2nd Review Period				
	2002-03	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Total	4,676	4,230	4,194	4,364	4,085	4,105	4,137	4,170	4,203	4,236	4,268
First tier	686	653	656	682	636	642	647	652	657	662	667
Second tier	3,990	3,577	3,538	3,682	3,449	3,463	3,490	3,518	3,546	3,574	3,601

B5.6.4 Total Water Demand

The total water demand for residential and non-residential volumetric water demand used as the basis for revenue projections is presented in Table 30.

Table 30 Total Demand Basis for Revenue Projection (ML per annum)

	Historic / Current				Projected for 1st Review Period		2nd Review Period				
	2002-03	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Total	19,402	18,336	18,525	18,584	16,229	10,031	14,514	16,762	16,960	17,157	17,354
First Tier	8,554	8,384	8,551	9,197	7,489	4,036	6,352	7,593	7,691	7,788	7,885
Second Tier	8,632	7,677	7,707	6,515	6,339	4,859	6,117	6,680	6,747	6,815	6,883
Third Tier	2,216	2,275	2,267	2,873	2,401	1,136	2,045	2,490	2,522	2,554	2,586

B5.7 Wastewater Flows

The overall demand forecasts for LMW's wastewater growth projects are derived from the 1996 Master Plan for Wastewater Infrastructure. Past records of average and peak monthly demands were used to prepare the Master Plan, which is appropriate based on expected growth. Changes in annual growth forecasts can impact timing but are not expected to influence the need for projects. During the regulatory period, LMW will continue to update its Master Plan to reflect changing growth conditions.

Wastewater flows by system are shown in Table 31.

Table 31 Wastewater Volume Forecast by System (Average Annual Flow ML)

	Historic Current						Projected			
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Mildura	2136	2164	2157	2065	2150	2150	1250	1250	1250	1250
Merbein	156	158	159	150	155	155	0	0	0	0
Koorlong	1148	1163	1180	1175	1175	1175	2550	2900	3100	3300
Red Cliffs	219	222	207	196	220	220	0	0	0	0
Robinvale	246	248	226	216	225	225	230	230	230	230
Swan Hill	1306	1311	1520	1448	1450	1450	1455	1455	1455	1455
Kerang	520	521	574	544	530	530	530	530	530	530
Koondrook	76	75.9	99	111.8	105	105	105	105	105	105
Lake Boga	N/A	25	42	41	40	40	42	42	42	42
Nyah, Nyah West	50	50.1	64	54	55	55	55	55	55	55
TOTAL	5857	5938	6227	6000	6105	6105	6217	6567	6767	6967

The upgrade of the Koorlong Wastewater Treatment Plant will allow for the decommissioning of the Red Cliffs Wastewater Treatment Plant, which was due for renewal. Flows from Merbein are to be diverted to Koorlong in 2009-10.

B5.8 Recycled Water

Koorlong is the main WWTP where recycled water is to be supplied externally under commercial contracts. This is programmed to commence in 2008 and is reflected in the flow diversion from Mildura to Koorlong in Table 31 . Red Cliffs currently supplies to a golf course, but this will cease on decommissioning of the Red Cliffs WWTP in 2008.

For the WWTPs at Mildura, Robinvale, and Koondrook, onsite reuse on tree lots and/or pasture is practiced. Evaporation is the major method of disposal of wastewater at Merbein, Swan Hill, Nyah/Nyah West, Lake Boga and Kerang.

B5.9 Issues for specific forecasting parameters

B5.9.1 Miscellaneous services

Miscellaneous charges represent approximately 3% on total income.

The ESC has encouraged the industry to standardise charges where possible. Recently six Authorities (including LMW) compared charges with each other. It proved to be a difficult exercise to match "apples with apples". Even something as simple as an information statement fee is not as comparable as first thought, as each business includes different aspects that can make up an information statement. LMW had this issue when it first merged. It is proposed to continue with the current structure of miscellaneous charges with opportunities to standardise being further explored.

LMW's proposed miscellaneous charges are listed in Appendix C.

B5.9.2 Developer Charges

Developer charges are based on previous year's growth and discussions with local developers and their forecasts. **Error! Reference source not found.** shows the last three years of lots paid for by developers. The spike in 2006-07 is due to developers delaying development until the new customer contributions charge was introduced.

LMW has forecast lot numbers to align with connection growth based on discussions with developers. The recent history is expected to continue at the same trend.

Table 32 Number of Lots paid as Developer Charges

	2004-05	2005-06	2006-07
Water Lots	387	425	658
Sewerage Lots	381	415	561

B5.9.3 Trade waste forecasts

Refer to B6.3.1.4 Negotiated Trade Waste.

B6. Prices

B6.1 Introduction

The WIRO specifies that prices must:

- Provide incentives for the sustainable use of Victoria's water resources by providing appropriate signals to water users about the costs of providing services (including costs associated with future supplies and periods of peak demand and/or restricted supply) and choices regarding alternative supplies for different purposes.
- Take into account the interest of customers of the regulated entity, including low income and vulnerable customers.
- Provide the regulated entity with incentives to pursue efficiency improvements and to promote the sustainable use of Victoria's water resources, and
- Enable customers to readily understand the prices charged.

The following sections describe the tariffs proposed by LMW and how they conform to the WIRO.

B6.2 Tariff Structures

B6.2.1 Water and Sewerage tariffs

Current tariffs

Table 33 details LMW's charges for the five years up to and including the current year 2007-08, and forecasts for the second regulatory period. The charges are expressed in real terms and apply to all districts within the LMW urban area. The environment levy is identified separately.

Table 33 Water and Sewerage Tariffs – $M 1/1/07

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	200-/10	2010-11	2011-12	2012-13
Water Service Charges (20 mm connection)											
Residential	100.28	102.99	121.44	128.48	128.99	132.33	139.03	145.60	152.51	159.77	169.37
Non residential	76.62	102.99	121.44	128.48	128.99	132.33	139.03	145.60	152.51	159.77	167.39
Commercial	119.72	102.99	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sewerage Service Charges (base charge)											
Residential	256.00	261.87	285.88	307.67	311.15	319.59	335.95	352.64	370.20	388.67	408.08
Non residential	232.14	253.62	285.88	307.67	311.15	319.59	335.95	352.64	370.20	388.67	408.08
Commercial	362.7	367.74	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Water usage charges											
1st Tier	0.24	0.24	0.26	0.2575	0.26	0.2694	0.2833	0.2979	0.3132	0.3294	0.3463
2nd Tier	0.41	0.42	0.45	0.4634	0.47	0.4901	0.5153	0.5418	0.5697	0.5990	0.6299
3rd tier				0.5973	0.62	0.6297	0.6621	0.6962	0.7320	0.7697	0.8093

Table 34 shows the change in proposed thresholds for residential consumption charges.

Table 34 Tiers for residential volumetric water consumption

	200-03 – 2007-08	2008-09 and beyond
Tier One	0 – 400kL	0-300kL
Tier Two	400-800kL	300-600kL
Tier Three	> 800 kL	> 600kL

Prior to 2005-06 there were two tiers for non-residential consumption above and below 400kL. From 2006-07 a uniform non- residential charge was set, equivalent to the second tier residential charge.

Water and Sewerage Service Charges

The service charges listed in Table 33 are for a 20mm connection. The size of the water service charge increases for non-residential properties in proportion with the size of the connection. Table 35 shows the variation in service charge by meter size. The structure of the service charges reflects the fact that maximum flow rates (and hence potential peak volumes supplied) increase quadratically with the size of the pipe.

Table 35 Water Service Charge by Meter Size - 2007-08 charges

Meter Size (mm)	per quarter	Per annum	Equivalence Factor
20	30.31	121.24	1.00
25	47.35	189.40	1.5625
32	77.59	310.36	2.56
40	121.24	484.96	4.00
50	189.43	757.72	6.25
65	320.14	1,280.56	10.56
80	484.96	1,939.84	16.00
100	757.75	3,031.00	25.00
150	1,704.93	6,819.72	56.25

Note that the water service charge listed in the ESC template is the charge for a 20 mm connection. Accordingly, the quantity supplied information in the template has been adjusted to a “20 mm connection equivalent” basis, to ensure that price time’s quantity yields the correct revenue outcome.

Likewise the sewerage service charges listed in Table 33 refers to the “base charge”. This base charge is subject to specific formulae to derive the service charge applicable to particular property classifications (related to the potential discharge load of each property type). The quantities in the template have been converted into an “equivalent” basis, so that equivalent demand times price equals actual revenue.

Water Volumetric Charges

In 2005-06 LMW introduced a third tier into its volumetric tariff structure for residential customers, with the third tier rate applying to volumes above 800kL. The 400kL threshold has applied since LMW reformed its tariffs in 1995.

Customers were billed on a quarterly basis, with a seasonal split applied to the 400kL threshold. In the warmer quarters (October to December and January to March) the quarterly threshold is 150kL. In the cooler quarters (April to June and July to September) the quarterly threshold is 50kL. Thus the quarterly threshold, which is non-cumulative, accommodated a modest level of garden water, while ensuring that large discretionary water users pay for additional volumes at the higher tier rate.

Moving to the 300kL threshold, the warmer quarters (October to December and January to March) the quarterly threshold decreases to 100kL. The winter quarters, the threshold remains at 50kL.

Structure of residential water tariffs

In the first regulatory period, LMW proposed a three tier tariff for residential volumetric usage. It proposes to continue with the three tiers, but alter the steps when each charge is applied.

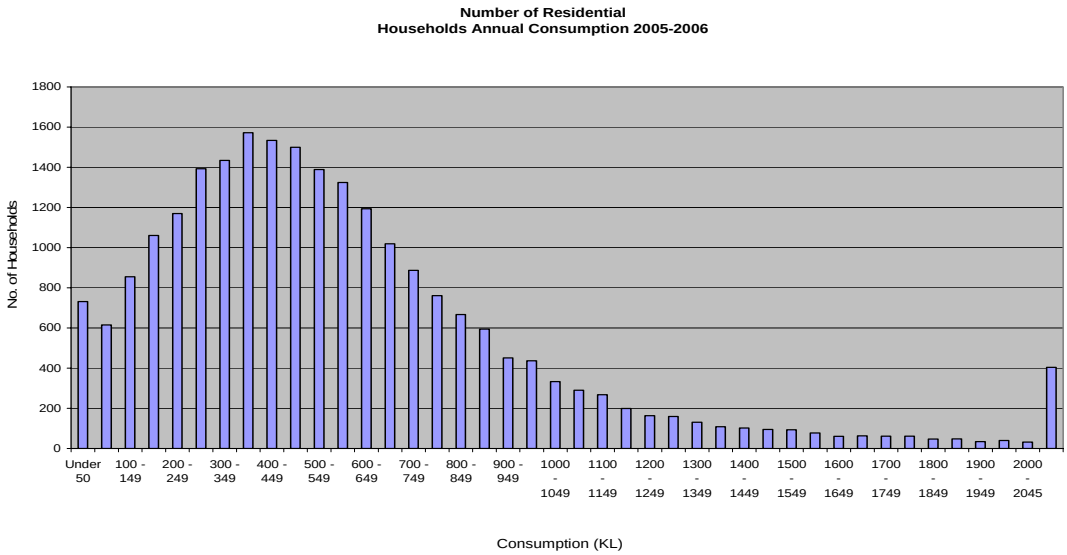
The three tier tariff provides a number of benefits, namely:

- encouraging water conservation and assisting LMW in its demand management
- being consistent with the requirements of the WIRO and the White Paper for tariffs which encourage the sustainable use of water
- assisting with affordability concerns, as it enables the charges to be focused on high water users, with the tariffs for average and low user customers lower than they otherwise would be

The size of the volume threshold and the levels of the tariffs have been set to balance a number of considerations. The change to 300kL reflected a balance between affordability and incentives for sustainable water use. An annual volume of 300kL allows household use and some basic garden watering to be undertaken at the first two tiers. Large residential users, and especially large garden water users, pay for their additional volumes at the higher tier. The introduction of the top tier coupled with the change in steps to 300kL for residential customers provides further incentives for the sustainable use of water.

Current average residential consumption lies well within the second consumption tier, where customers face a marginal price equal to the middle or highest tier prices. Figure 23 shows the distribution of consumption by residential customers for 2006-07.

Figure 23 Distribution of residential water consumption



The two-tier tariff structure prompted relatively little customer demand response. Price is expected to have a stronger influence with the introduction of lower thresholds, increased real prices, following restrictions.

The LMW believes that its three tier price structure is appropriately priced per unit being cognizant of:

a) The base level demand for persons living in a small dwelling whose prime use is associated with essential consumptive needs, e.g. drinking, washing, cooking and evaporative cooling. Note evaporative cooling is a significant summer demand in Mildura's hot arid climate.

b) The fact that Mildura is rated as No 11 in the most socially disadvantaged towns in Victoria. This ranking emerges from a study* undertaken in 1999 by the Jesuit Social Services and is based on the following criteria: - unemployment, low income (below $26,000), low birth weight, child abuse, school leaver below 15 years old, emergency assistance, psychiatric hospital admissions, court convictions, child injuries, unskilled workers and court defendants. *Note: * "Unequal in Life" by Tony Vision for the Jesuit Social Services*

With the lower price first step up to 300 kL LMW still believes it has catered for the above two factors to meet basic needs and social equity expectations.

With average residential consumption of 552 kL (2005-2006 ESC Performance Report) the mid step, 300kL – 600kL, provides a price signal for discretionary use whilst still acknowledging the value people place on their gardens.

The third step above 600 kL includes a penalty charge for excessive water use on expansive private lawns and gardens.

LMW estimates that the reduction in the threshold for the first tier will contribute to a 10% reduction in water usage, consistent with the Water Supply Demand Strategy. The WSDS states that pricing is a contributing factor to gaining that reduction moving the step to 300kL. Customers will need to review with their usage ongoing.

The balance between fixed and volume charges in the average bill was influenced by affordability concerns. LMW aims for a ratio of 40% fixed charges to 60% volume charges, which is intended to provide households with quite a degree of control over their water bills. A high percentage of fixed charges would provide low-income households with little ability to influence the size of the bill by economising on water use.

On the other hand, some element of fixed charge is appropriate given that over the medium to long term, many of the costs of water supply (and particularly sewerage) are invariant to the amount of water supplied. Currently fixed charges recover just under 35% of water revenues.

Non residential water tariffs

LMW will continue its uniform volumetric rate for non residential customers, with the rate consistent with the second tier of the residential rate structure.

Sewerage service tariffs

It is proposed to continue with a fixed sewerage charge. No volumetric charges are proposed.

This reflects the high fixed costs in providing sewerage services, although the cost of pumping and treatment will vary with volume. Changes in volume are related to infiltration, not customer usage.

The ESC was critical of LMW's Sewerage Service charge stating it was complicated and not easy to understand. The ESC felt use of Cisterns, Room numbers and medical beds is not related to discharge and costs and therefore do not provide appropriate signals to users. Officers have reviewed the Sewerage Service charge and the way it is calculated. Included in the calculation specifically for Holiday Flats, Hotels, Caravan Parks are an Occupancy Rate and Load Factor.

The proposal is to merge these two rates into one. This affects Hotels and Caravan Parks calculation - . Holiday Flats are to move to cistern factor and not have occupancy rate and load factor taken into account. The affect on tariffs for the group of Holiday Flats is a decrease of approximately $4,600, based on current tariffs. This difference will be borne by the remaining customer base.

Environmental Contribution

The environmental contribution reflects the environmental impacts of providing water and the "scarcity" value of water, and enables water businesses (and their customers) to contribute to funding initiatives that promote the sustainable use of water. The contribution identified separately on customer bills.

For turban water services the contribution is calculated as 5% of 2002/03 revenue for customer charges, including trade waste services and excluding developers' charges. DSE has advised LMW that from July 2008, the environmental contribution will increase by CPI each year, which remains constant in real terms.

In addition, LMW expects to over-recover the amount of the contribution during the first regulatory period, and is proposing to adjust the contribution downwards for the second regulatory period to compensate for this.

The amount of the contribution has been included as an expenditure item in the Water Plan.

B6.2.2 Customer impact issues

Table 36 indicates the impact on residential customers' total water and sewerage bills, according to their level of water usage. Increases in the level of the bill are greater for larger users of water.

Table 36 Water and Sewerage Bill Increases for Residential Customers - $ 1/1/07

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
	Total Bill	Increase from previous year				
400 kL	559.70	51.78	30.31	31.86	33.49	35.21
540 kL	628.31	55.31	34.02	35.77	37.40	39.53
1,200 kL	1007.59	104.70	56.06	58.94	61.97	65.15

LMW's hardship policy and assessment of capacity to pay will assist customers suffering financial stress. Assessments of the capacity of customers to pay are made through evaluation of a range of inputs from customer consultation, reference to pricing of comparable services provided elsewhere in Australia and pricing of complimentary services provided by other agencies in the Sunraysia region.

It is anticipated that during the regulatory period there will be an increasingly more systematic approach to assessment of capacity to pay through activities such as reference of pricing changes to the consultative committees, referral to government assistance programs and continuing work on low income and vulnerable customers with community-based agencies such as Mallee Family Care.

Table 37 provides similar information for a range of non-residential customer bills, again according to their level of consumption.

Table 37 Water and Sewerage Bill Increases for Non-Residential Customers – $ 1/1/07

	bill in 2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
		Increase from previous year				
400 kl	648	33	34	36	37	39
3,000 kl	1922	99	103	108	114	120
30,000 kl	15154	780	819	861	905	952
220,000 kl	108265	5573	5859	6161	6478	6811

B6.3 Proposed Tariffs

B6.3.1.1 Retail Water and Sewerage Tariffs

LMW's proposed retail water and sewerage tariffs over the regulatory period increase by just over 4% pa in real terms. This applies to residential and non-residential charges. Tariffs are set out in Table 38.

Table 38 Proposed tariffs – $M 1/1/07

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Residential water charges									
Service charge	121.44	128.48	128.99	132.33	139.03	145.60	152.51	159.77	167.39
First tier volumetric charge	0.2600	0.2575	0.2600	0.2694	0.2833	0.2979	0.3132	0.3294	0.3463
Second tier volumetric charge	0.4500	0.4634	0.4700	0.4901	0.5153	0.5418	0.5697	0.5990	0.6299
Third tier volumetric charge	n/a	0.5973	0.6200	0.6297	0.6621	0.6962	0.7320	0.7697	0.8093
Non residential water charges									
Service charge	121.44	128.48	128.99	132.33	139.03	145.60	152.51	159.77	167.39
Volumetric charge	0.2600	0.2600	0.4700	0.4902	0.5100	0.5306	0.5521	0.5744	0.5976
Volumetric charge	0.4500	0.4600	0.4700	0.4902	0.5100	0.5306	0.5521	0.5744	0.5976
Residential sewerage charges									
Service charge	285.88	307.67	311.15	319.59	335.95	352.64	370.20	388.67	408.08
Non residential sewerage charges									
Service charge	285.88	307.67	311.15	319.59	335.95	352.64	370.20	388.67	408.08
Minor trade waste									
Charge	45.50	44.28	45.52	46.79	49.20	51.73	54.39	57.20	60.14

B6.3.1.2 Customer Contributions

LMW expects customer contributions to come from the Nichols Point and Murrabit Sewerage Schemes. The amount is set at $800 as determined by the small town sewerage scheme principles.

B6.3.1.3 New Customer Contributions (NCC)

LMW proposes new customer contributions as per VicWater's industry proposal May 2007. The current change is based per lot, no matter the size or individual requirements of the development.

The proposal states the following:

a) Where a NCC is to be applied, a charge of $550.00 per lot per new service for water, sewerage and dual pipe water (total for the three services is $1,650.00 per lot) for developments which are

designed in a manner that will have minimal impact on future water resource demands, and can be catered for without additional investment within the medium-term distribution capacity.

These developments are typically:

- A lot with an area no greater than 450 square meters (sqm) per lot with a small demand on the system.
- Unit development, even where there are no separate titles – ie. $550.00 per unit.
- Apartment lots with separate titles – ie $515.91 per apartment.
- 2 lot sub-divisions with each lot not exceeding 450sqm.
- The charge is for each new lot created of a sub-division (ie a two lot subdivision only creates one new lot).

b) A charge of $1,100.00 per lot per service for water and sewerage and dual pipe (total $3,300.00 per lot) applies to urban developments which will require further investment in infrastructure to serve these developments.

These developments are typically:

- Traditional Greenfield urban developments with lot sizes between 450sqm and 1350sqm.

c) A charge of $2.200.00 per lot per service for water, sewerage and dual pipe (total $6,600.00 per lot) for developments designed in such a way that properties will create demand for water resources over and above high-density developments.

These developments are typically:

- Greenfield developments with lots sizes exceeding 1,350sqm eg lots with potentially large outside water-use, no recycled water and which will influence near term investment in infrastructure decisions.

B6.3.1.4 Negotiated Trade Waste

The ESC has indicated that trade waste charges should be cost reflective, in order to conform to the WIRO requirements. LMW believes that its charges are cost reflective, being based on an explicit cost model, as follows:

Trade Waste Pricing Principles

Trade waste charges are designed to recover the costs of transport, treatment and disposal. These costs include operating and maintenance costs, depreciation (based on estimated replacement cost of the infrastructure) and a return on the replacement value of the infrastructure.

Costs are classified as direct, operational or maintenance, and a small allocation of overheads. For example, costs related to system improvements are excluded, such as pilot programs or trials.

Maintenance costs can fluctuate significantly between years in line with maintenance cycles. In order to smooth out annual fluctuations in the cost of delivering services, cost inputs are averaged over the previous three years before being input into the trade waste pricing model. Similarly loadings from trade waste customers can vary year to year due to seasonal variations in fruit/vegetable availability. The loadings are therefore averaged over the previous three years for input into the trade waste model.

Replacement costs are estimated by applying the relevant CPI index to the original purchase cost of the assets. LMW considers that the simplicity and clarity of an indexed historic cost approach is to be preferred to the more complex modern equivalent asset approach, which is much more expensive to implement and can be controversial.

Components of the Charge

An Activity Based Costing approach (ABC) is used to determine trade waste charges, by allocating trade waste costs between particular trade waste customers according to the key drivers. These drivers are the flow component, the organic load and the amount of suspended solids. Charges are intended to be consistent and equitable among all trade waste customers, and from period to period. Variations in charges for the most part arise from changes in trade waste flows and composition.

Annual direct charge

The annual direct charge recognises that there is a base level of cost that is incurred on behalf of each customer, which is independent of the level of waste produced by the customer. These costs include:

- Direct technical costs such as meter reading and testing trade waste outputs. Labour on-costs and motor vehicle allocations are also included.
- Administrative costs such as trade waste billing and general program administration.
- A small allocation of LMW overheads, including an allowance for senior management time, finance, payroll and personnel.

The annual direct cost is levied as a fixed service fee.

Flow Component

The volume of trade waste flows, particularly in regard to transportation, treatment and disposal, drives a substantial element of trade waste cost. The trade waste model identifies those costs, which are driven by volumes as:

- Operating and maintenance costs of the reticulation system;
- Depreciation and a rate of return relating to the reticulation system;
- The component of waste water treatment plant operating costs that are driven by volume; and
- Depreciation and a rate of return relating to that portion of the waste treatment plants that deal with the treatment of bulk flow.

Organic Load

In addition, specific costs can be identified which relate to the treatment of organic loads. The models identify the costs of treatment, plus depreciation and a capital charge relating to infrastructure and equipment used principally for the treatment of organic load – such as an aerator and clarifier.

Suspended Solids

Similarly, the specific costs related to the treatment of suspended solids are identified. Thus the suspended solids component of the charge seeks to recover:

- Operating costs associated with treating suspended solids;
- Depreciation; and

- A rate of return on the infrastructure and equipment used principally for treating suspended solids, namely sludge digesters and sludge lagoons.

The revenue requirement outlined in the previous Chapter indicates that LMW needs to increase its tariffs substantially over the regulatory period. However, LMW is concerned about the impact on customers, including low income and vulnerable customers, and is proposing to phase in the required price rises over a longer period in order to take account of customers' interests.

B6.4 Miscellaneous Charges

LMW has a number for miscellaneous to cover a range of services. The total revenue represents about 3% of total income.

Appendix C lists all of the miscellaneous charges levied by LMW and the charges levied for the last three years. The Appendix also sets out the increases in charges proposed for the five years of the regulatory period.

Table 39 sets out the revenue forecast from miscellaneous charges.

Table 39 Revenue from Miscellaneous Charges – $M 1/1/07

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Misc charge revenue	1.82	1.10	0.68	0.68	0.68	0.68	0.68	0.68

B6.5 Form of price control

LMW proposes to implement a tariff basket control to set prices in future years. LMW customers will face significant prices rises over the price review period, and given the uncertainty which surrounds customers' responses to the introduction of a three tiered tariff, LMW wishes to retain the flexibility of being able to re-balance tariffs within the review period.

Thus LMW proposes to increase tariffs by no more than an average 6.0% real in 2007-08.

LMW also proposes to impose a constraint of CPI + 11% on the maximum increase in any individual tariff. This provides a further measure of protection to individual customers.

LMW introduced a three tiered tariff in 2005-06. As yet it has been difficult to determine the extent of the impact it has had on customers for two reasons.

As it was the first year in 2005-06, customers appeared to not change their habits overly much, although there had been communication regarding the change to three tiers. Demand usage was similar to previous years. This is put down to people using the water per normal behaviour and not changing until receiving LMW's summer accounts, as these did generate a lot of calls regarding usage. With the lag from pricing signals 2006-07 was seen to be the time the effect of the three tiers would be better able to be gauged.

Due to restrictions, LMW has not seen a normal year in 2006-07. Therefore it is difficult to compare the first two years of three tiered tariffs.

As previously stated LMW will introduce a change in the step for the three tiers from 400kL to 300kL. Although as part of the demand forecasting, elasticities are uncertain until customers begin to use the new steps. Until this occurs a tariff basket would give LMW the flexibility in getting its fixed and volumetric revenue balance appropriate, and the ability to move the three step charges if required. This ability to re-balance the step charges would allow LMW to get the best mix to allow sustainable water use.

LMW introduced restrictions in 2006-07. In its demand forecasting LMW stated that permanent savings would eventuate from the restrictions, and has forecast the savings. Once again it is difficult to predict and by having a tariff basket, any variations from the forecasts enables LMW to move its tariffs to appropriate oucomes if required.

Finally in June 2007, LMW released its Water Supply Demand Strategy (WSDS). As part of this strategy LMW has proposed to decrease demand by 10% by 2015 by using a number of measures including pricing signals. By having flexibility in pricing, specifically the usage charges, LMW can re-balance its charges to better achieve its goal in the WSDS.

B6.6 Adjusting prices

Proposal to Recover Lost Revenue in Regulatory Period 2008-2013

Rainfall patterns and associated catchment yields in south-east Australia have been demonstrably below long-term averages since 1994. The yield in the collective Murray-Darling catchments in 2006-07 has been the lowest ever recorded in the 110 years of record keeping in this system. Occurring at the most recent year of a 10 year drought this record low yield has seen supplies fully exhausted to all Murray-Darling water users. At the end of May 2007 there was only sufficient supplies for critical human needs in all cities, towns and rural residential supplies within the Murray Darling Basin including all systems in New South Wales, South Australia and Victoria.

Stage 4 Water Restrictions in Victoria and equivalent in the other two states, which permits in-house use only, will be mandated by all jurisdictions by agreement of the Prime Minister and first Ministers in each of the Basin States on 1 July 2007.

LMW estimates a significant loss in urban revenue associated with this externality to be $2.2 million for the 2007-08 financial year. This estimate is based on progressive recovery from Stage 4 restrictions back through Stage 3 and Stage 2 during the 2007-08 fiscal year. This recovery is based on seasonal outlook forecasts as provided by the Victorian Resource Manager, Goulburn Murray Water, as released mid April 2007.

LMW requests that the ESC admit the estimated lost revenue of $2.2 million for recovery during regulatory period 2008–2013.

Further, LMW proposes to adjust this estimate in its final Water Plan submission based on best estimates of resource availability at that time.

Further consultation with the committees will be undertaken during the review periods. In addition, the Exposure draft Water Plan will be posted to LMW's web site.

B7. Non-Prescribed Services

B7.1 Classification of services as non-prescribed

Non-prescribed activities comprise:

- Leasing of surplus bulk water entitlements
- Property services
- Sheep and Plantation Activities
- Mildura WWTP reuse
- Plumbing services
- Construction Services
- Recycled Water

The water leasing is undertaken at a profit, however the property services and farm activities make a loss.

The development and sale of 14th Street involves capital costs and revenues, which are expected to arise in 2007/8.

B7.2 Expenditure and revenue associated with non-prescribed services

Non-prescribed revenue also comprises investment income. The large capital expenditure program, coupled with increased operating expenses for 2007-08 place pressure on the cash flow of the business over review period. As a consequence, monies currently invested in income-bearing investments have to be withdrawn and debt raised to finance the capital expenditure. Table 40 summarises the non-prescribed revenues and costs involved.

Table 40 Non- Prescribed Revenues

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Property Services	0.11	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Water Lease	0.39	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Investment Income	0.56	0.36	0.36	0.24	0.14	0.14	0.14	0.14
14th St Subdivision	0.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00
Wastewater Reuse/Disposal	0.11	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Table 41 Non Prescribed Expenditure

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Property Services	0.28	0.29	0.37	0.39	0.40	0.40	0.41	0.41

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Water Lease	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14th St Subdivision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wastewater Reuse/Disposal	0.10	0.16	0.11	0.11	0.07	0.07	0.07	0.07

Appendix A

Service Standards and other Outcomes

Progress in First Regulatory Period

Statement of Obligations

Outcome	Progress	Comment
Corporate Governance	Meeting obligation	Audit Committee has a strong focus on corporate governance. Members attend specific training to strengthen existing skills. The committee has sourced an external member to strengthen the committee's skills and knowledge base.
Risk	Meeting obligation	All risk registers have been reviewed, training has occurred by all staff, and a Risk Advisory Group has been established to assist in the flow of information to Management and the Board.
Emergency Management Plan	Meeting obligation	Plan has been updated and is now managed using a document control system.
Water Conservation	Meeting obligation	Released Permanent Water Savings Plan in July 2006. Since release, LMW has gone up to stage 3 restrictions.
Bulk Entitlement	Meeting obligation	LMW has continued its policy of purchasing adequate permanent bulk water entitlements for urban purposes on the market to meet immediate meeds plus a contingency.
Reuse and Recycling	Meeting obligation	LMW has commissioned a recycling project to provide MRCC with water from its Mildura WTP sludge lagoons for irrigation of a large recreation reserve. Augmentation of the Koorlong WWTP is progressing pass the concept designs stage. This project will result in full 3rd party recycling.
Customer Response/Service	Meeting obligation	LMW continues to improve customer response and service. This has been achieved by implementing call tracking software to enable monitoring of response time and customer issues
Catchment Management Authorities and Local Government	Meeting obligation	LMW continues to comply with planning and coordination requirements and joint programs with these Authorities

Outcome	Progress	Comment
Affordability Financial Hardship and Vulnerable Customers	Meeting obligation	LMW continues to work with community agencies such as Mallee Family Care in providing assistance to necessitous cases identified whether by LMW or the agency.
Asset Management	Meeting obligation	External Consultant has reviewed LMW progress since 2000. LMW has purchased additional software comprising risk management, replacement profile and optimised decision making modules

Service Standards

				First Regulatory Period			
	Actuals			Approved		Actuals	
Water	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2006-07**	**2007-08**
Unplanned water supply interruptions (per 100km)	46.04	46.52	49.10	44.16	42.21	44.16	42.21
Average time taken to attend bursts and leaks (priority 1)		14.00	15.00	15.00	15.00	15.00	15.00
Average time taken to attend bursts and leaks (priority 2)		19.00	17.00	20.00	20.00	20.00	20.00
Unplanned water supply interruptions restored within 5 hours (per cent)	99.20	72.00	100.00	99.50	99.50	99.50	99.50
Planned water supply interruptions restored within 5 hours (per cent)	100.00	99.00	100.00	100.00	95.00	100.00	95.00
Average unplanned customer minutes off water supply	11.26	10.54	8.35	8.48	8.48	8.48	8.48
Average planned customer minutes off water supply	5.50	194.06	6.03	7.53	94.77	7.53	94.77
Average unplanned frequency of water supply interruptions	0.20	0.22	0.18	0.16	0.16	0.16	0.16
Average planned frequency of water supply interruptions	0.10	0.73	0.11	0.12	0.44	0.12	0.44
Average duration of unplanned water supply interruptions (minutes)	56.77	47.15	46.39	52.97	52.97	52.97	52.97
Average duration of planned water supply interruptions (minutes)	55.19	265.71	54.85	61.45	214.75	61.45	214.75
Number of customers experiencing more than 5 unplanned water supply interruptions in the year	4580.00	4868.00	4304.00	4855.00	4855.00	4855.00	4855.00
Unaccounted for water	9.72	7.53	12.00	9.00	9.00	9.00	9.00
Sewerage							
Sewerage blockages (per 100km)	34.38	30.11	27.98	29.19	29.19	29.19	29.19
Average time to attend sewer spills and blockages (minutes)			18.00	20.00	20.00	20.00	20.00
Average time to rectify a sewer blockage (minutes)			96.00	75.00	75.00	75.00	75.00
Spills contained within 5 hours (per cent)	94.00	100.00	100.00	100.00	100.00	100.00	100.00
Customers receiving more than 3 sewer blockages in the year	187.00	168.00	148.00	157.00	157.00	157.00	157.00
Customer Service							
Complaints to EWOV	1.00	2.00	3	3.00	3.00	3.00	3.00
Telephone calls answered within 30 seconds		99.52	88.93	99.00	99.00	99.00	99.00
Additional Service Standards							
Average time taken to attend bursts and leaks (priority 3)		24	23.37	25.00	25.00	25.00	25.00

Environment Obligations

Environmental obligation topic area	Key activities directly relevant to 2005-06–2007-08 price path from LMW Water Plan 2006	LMW Progress
1.0 Water Conservation	Water conservation program focuses on community education and demand management. There are two existing By-Laws and recently revised Water Conservation Strategy.	Average household use continues to decrease with an average of 17.2% drop over the last 10 years. Introduction of Permanent Water Saving Plan is expected to increase these savings by a further 5%. New targets in WSDS.
	Watermain leak detection program. Scaled back due to low NRW of 7.63%. Small investigation program initially.	Efforts are being concentrated on meter replacement program.
2.1 Waste Hierarchy (Trade Waste Management)	There is an existing by-law and pricing model, which are to be reviewed especially with regard to penalties for discharge of high EC and pH wastes. Sodium charge has recently been introduced.	Waste minimisation project with ICP, Salisbury Winery.
2.2 Sewerage Planning	Program completed in 2003-04.	Program completed in 2003-04.
2.3 Management of Sewerage System Wet Weather Capacity	Review of all sewerage systems to determine priorities and costs for meeting SEPP requirements – remediation to continue in the 3-year period.	Sewer model being developed for Mildura. Stormwater detection program ongoing.
2.4 Management of Sewerage System Dry Weather Spills	Undertake sewer root foaming to limit tree root growth, which lead to sewer blockages.	Ongoing.
2.5 Wastewater Treatment	Review in 2005-06 of Kerang WWTP operations to determine any requirements to meet SEPP	Review is underway.
2.6 Water recycling	Augment the Koorlong WWTP to raise capacity from 4.5 ML/day to 8.5 ML/day to allow for growth, diversion from Mildura WWTP catchments and allow third party reuse.	Underway.
2.7 Biosolids Management	Participation in the National Biosolids Research Program will continue with application on test site in Mildura area. Biosolids handling upgrade at the Mildura WWTP.	Ongoing. Biosolids handling underway.
2.8 Odour – STPs	Nil	Nil
2.9 Odour – Collection System	Nil	Nil.
2.10 Green house gas emissions	Nil.	Nil.
2.11 Licence compliance	Reuse from Red Cliffs WWTP at Red Cliffs Golf Club does not meet EPA guidelines for Class C. Site control at Golf Club very expensive.	Diversion of flows to Koorlong WWTP in 2009.

Environmental obligation topic area	Key activities directly relevant to 2005-06–2007-08 price path from LMW Water Plan 2006	LMW Progress
	Reuse at Mildura WWTP is not sustainable.	Flows from Mildura to be diverted to Koorlong in 2009.
	Detention time in wet weather storage at Mildura WWTP does not always meet 25-day requirement.	Wet weather storage project is underway to address the issue.
3.3 Waterway management	Nil	Nil.
3.4 Releases from storages	Nil	Nil.
3.5 Groundwater management	Nil	Nil.
4.0 Monitoring, auditing and risk assessment	Nil	Nil.
5.0 Approximate Customer Price Implications of New Expenditure to meet Environmental Obligations	$5.00 annual increases for residential customer on an average household basis. Variable for major industrial customers	

Water Quality

Obligation Topic and Drivers	Key Activities and Status	LMW Progress
1.0 Risk Management Plan Audits Regulatory: SDWA Cl. 10, 11.	LMW will have its RMP audited when required.	Comply with DHS as required.
6.0 Publish Water Quality Information Regulatory: SDWA Cl. 23.	LMW will compile water quality information on each of its systems and publish these quarterly. The information will be available from LMW's website and on request from LMW's offices.	Published on LMW website. Ongoing.
7.0 Annual Report to DHS Regulatory: SDWA Cl. 25.	LMW will supply, by 31 October each year, a report on water quality and any related issues, for the previous financial year. The report will include other requirements of regulations, which are yet to be developed.	Complies as required.
8.0 Administration Levy Regulatory SDWA Cl.51.	LMW must pay levy to assist in defraying the cost of administering the Act.	Levy is paid annually.
9.0 Regulations Regulatory SDWA Cl.56.	LMW will comply with the additional frequency and locations of collecting and analysing water samples.	This has occurred with additional frequency in this regulatory period.

Other Obligations & Initiatives

Outcome	Progress	Comment
Growth	Development trends indicate a slowing in growth in 2006-07 compared to 2005-06.	Population growth and changes in average household size are not known at this stage.
Main to Meter	LMW is meeting its obligation	Costs underestimated due to greater than expected demand
Pressure Enhancement Koondrook	Partially meeting obligation	Contract has been awarded for supply & commissioning of pressure boosting pump station which is due for completion in July 2007.
Leak Detection Program	Partially meeting obligation	LMW has concentrated its efforts in meter replacement & reduction in WTP losses in 2006-07.

Appendix B

Service Standards

Second Regulatory Period

Service Standards

	Approved				
Water	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Unplanned water supply interruptions (per 100km)	43.37	42.21	41.08	40.10	39.15
Average time taken to attend bursts and leaks (priority 1)	15.00	15.00	15.00	15.00	15.00
Average time taken to attend bursts and leaks (priority 2)	20.00	20.00	20.00	20.00	20.00
Unplanned water supply interruptions restored within 5 hours (per cent)	99.40	99.40	99.40	99.40	99.40
Planned water supply interruptions restored within 5 hours (per cent)	95.00	100.00	100.00	95.00	95.00
Average unplanned customer minutes off water supply	9.00	8.60	8.24	7.90	7.59
Average planned customer minutes off water supply	205.06	4.91	4.81	92.66	204.68
Average unplanned frequency of water supply interruptions	0.19	0.18	0.17	0.17	0.16
Average planned frequency of water supply interruptions	0.76	0.07	0.07	0.37	0.76
Average duration of unplanned water supply interruptions (minutes)	48.25	47.76	47.30	46.87	46.46
Average duration of planned water supply interruptions (minutes)	268.43	72.22	72.22	250.00	269.79
Number of customers experiencing more than 5 unplanned water supply interruptions in the year	4495.00	4455.00	4420.00	4387.00	4358.00
Unaccounted for water	9.00	9.00	9.00	9.00	9.00
Sewerage					
Sewerage blockages (per 100km)	24.37	23.53	22.69	21.90	21.29
Average time to attend sewer spills and blockages (minutes)	20.00	20.00	20.00	20.00	20.00
Average time to rectify a sewer blockage (minutes)	105.00	105.00	105.00	105.00	105.00
Spills contained within 5 hours (per cent)	100.00	100.00	100.00	100.00	100.00
Customers receiving more than 3 sewer blockages in the year	135.00	132.00	130.00	127.00	125.00
Customer Service					
Complaints to EWOV	3.00	3.00	3.00	3.00	3.00
Telephone calls answered within 30 seconds	99.00	99.00	99.00	99.00	99.00
Additional Service Standards					
Average time taken to attend bursts and leaks (priority 3)	25.00	25.00	25.00	25.00	25.00

Appendix C

Miscellaneous Charges

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Trade Waste						
Miscellaneous Minor Trade Waste Flow Charge	kL	0.72	0.72	0.72	0.72	0.72
Septic Tank Effluent Disposal	Load	6.53	6.53	6.53	6.53	6.53
Wimmera Mallee Pipeline (Back wash water discharging)	kL	0.5153	0.5418	0.5697	0.5990	0.6299
Trade Waste Establishment Fees	ML	3,561.64	3,561.64	3,561.64	3,561.64	3,561.64
Provision of Services						
Subdivision Processing Fee - Water/Sewerage	Lot	14.28	14.85	15.39	15.89	16.35
Subdivision Processing Fee – Overall	Lot	30.00	30.00	30.00	30.00	30.00
Day Labour Construction – Water						
Design & Supervision Lodgement Fee	ha	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Design & Supervision Fee	Cust	10% of Cost	10% of Cost	10% of Cost	10% of Cost	10% of Cost
Security Amount (Refundable if criteria meet)	Cust	10% of Estimated Cost	10% of Estimated Cost	10% of Estimated Cost	10% of Estimated Cost	10% of Estimated Cost
Day Labour Construction – Wastewater						
Design & Supervision Lodgement Fee (adjusted to 10% of final cost of works - non refundable if works do not proceed)	ha	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Design & Supervision Lodgement Fee (adjusted to 10% of final cost of works - non refundable if works do not proceed)	ha	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
Design & Supervision Fee	Cust	10% of actual cost	10% of actual cost	10% of actual cost	10% of actual cost	10% of actual cost
Security Amount (Refundable if criteria meet)	Cust	10% of Estimated actual cost	10% of Estimated actual cost	10% of Estimated actual cost	10% of Estimated actual cost	10% of Estimated actual cost

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Works by Contract Construction - Water						
Design & Supervision Lodgement Fee	ha	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Design & Supervision Fee	Cust	10% of actual cost	10% of actual cost	10% of actual cost	10% of actual cost	10% of actual cost
Contract Administration Lodgement Fee	ha	500.00	500.00	500.00	500.00	500.00
Contract Administration Fee	Cust	3.5% of actual cost	3.5% of actual cost	3.5% of actual cost	3.5% of actual cost	3.5% of actual cost
Detailed Supervision Lodgement Fee	ha	400.00	400.00	400.00	400.00	400.00
Detailed Supervision Fee	Cust	2.5% of actual cost	2.5% of actual cost	2.5% of actual cost	2.5% of actual cost	2.5% of actual cost
Works by Contract Construction - Wastewater						
Design & Supervision Lodgement Fee	ha	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Design & Supervision Lodgement Fee	ha	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
Design & Supervision Fee	Cust	10% of actual cost	10% of actual cost	10% of actual cost	10% of actual cost	10% of actual cost
Contract Administration Lodgement Fee	ha	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
Contract Administration Fee	Cust	3.5% of actual cost	3.5% of actual cost	3.5% of actual cost	3.5% of actual cost	3.5% of actual cost
Detailed Supervision Lodgement Fee	ha	750.00	750.00	750.00	750.00	750.00
Detailed Supervision Fee	Cust	2.5% of actual cost	2.5% of actual cost	2.5% of actual cost	2.5% of actual cost	2.5% of actual cost
Developer Design & Construct - Water						
Initial Fee	Cust	2% of Estimated actual cost	2% of Estimated actual cost	2% of Estimated actual cost	2% of Estimated actual cost	2% of Estimated actual cost
Administrative/Review Charge	Cust	4% of Estimated actual cost	4% of Estimated actual cost	4% of Estimated actual cost	4% of Estimated actual cost	4% of Estimated actual cost
Maintenance Security (Refundable if criteria meet)	Cust	5% of Estimated actual cost	5% of Estimated actual cost	5% of Estimated actual cost	5% of Estimated actual cost	5% of Estimated actual cost

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Developer Design & Construct - Wastewater						
Initial Fee*	Cust	2% of Estimated actual cost	2% of Estimated actual cost	2% of Estimated actual cost	2% of Estimated actual cost	2% of Estimated actual cost
Administrative/Review Charge	Cust	4% of Estimated actual cost	4% of Estimated actual cost	4% of Estimated actual cost	4% of Estimated actual cost	4% of Estimated actual cost
Maintenance Security (Refundable if criteria meet)	Cust	5% of Estimated actual cost	5% of Estimated actual cost	5% of Estimated actual cost	5% of Estimated actual cost	5% of Estimated actual cost
Property Services						
By Law Base Charge		10.20	10.21	10.86	11.47	12.05
Sanitary Drainage Plans and/or Block Plans						
Supplied to Plumber		No Charges				
Supplied to someone other than a Plumber	Plan	30.60	30.63	32.59	34.42	36.15
Shut Off Fee	Cust	81.60	81.68	86.90	91.80	96.40
Plug Off	Cust	153.00	153.15	162.93	172.12	180.75
Tappings 20 mm Meter	Tapping	307.00	307.00	307.00	307.00	307.00
Tappings 25 mm Meter	Tapping	448.00	448.00	448.00	448.00	448.00
Tappings 32 mm Meter	Tapping	819.00	819.00	819.00	819.00	819.00
Tappings 40 mm Meter	Tapping	921.00	921.00	921.00	921.00	921.00
Tappings 50 mm Meter	Tapping	1,178.00	1,178.00	1,178.00	1,178.00	1,178.00
Inspection Fee (additional to tapping fee)	Inspection	51.00	51.00	51.00	51.00	51.00
Tappings over 50 mm	Tapping	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Relocation Fee 20 mm Service	Relocation	307.00	307.00	307.00	307.00	307.00
Restrictors	Restrictor	17.00	17.00	17.00	17.00	17.00
Meter Price 20 mm	Meter	67.00	67.00	67.00	67.00	67.00
Meter Price 25 mm	Meter	143.00	143.00	143.00	143.00	143.00
Meter Price 32 mm	Meter	302.00	302.00	302.00	302.00	302.00
Meter Price 40 mm	Meter	402.00	402.00	402.00	402.00	402.00
Meter Price 50 mm	Meter	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Meter Price 80 mm	Meter	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Meter Price 100 mm	Meter	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Cost of 20 mm Meter for tenement	Meter	67.00	67.00	67.00	67.00	67.00
Test Fee	Test	20.40	20.42	21.72	22.95	24.10
Special Meter Read	Read	30.60	30.63	32.59	34.42	36.15
New Connection Standard Residential	Connection	112.20	112.31	119.49	126.22	132.55
New Connection Non Standard Residential	Connection	153.00	153.15	162.93	172.12	180.75
New Connection Small Industrial/Commercial	Connection	153.00	153.15	162.93	172.12	180.75
New Connection Large Industrial/Commercial	Connection	306.00	306.30	325.87	344.25	361.51
As Constructed lodged by Plumber	Cust	30.60	30.63	32.59	34.42	36.15
Alteration to as constructed plan	Cust	30.60	30.63	32.59	34.42	36.15
Multi-Tenement Development - First Unit	Unit	61.20	61.26	65.17	68.85	72.30
Multi-Tenement Development - Subsequent Units	Unit	51.00	51.05	54.31	57.37	60.25
Septic Tank Inside Sewerage District	Cust	102.00	102.10	108.62	114.75	120.50
Alteration or Extension to Domestic/Com/Ind	Cust	102.00	102.10	108.62	114.75	120.50
Backflow Prevention Annual Fee for Agreement Renewal	pa	40.80	40.84	43.45	45.90	48.20
Backflow Prevention Device - Application Assessment Fee	App	122.50	122.50	122.50	122.50	122.50
Building Over Agreement	Cust	142.80	142.80	142.80	142.80	142.80
Fire Services						
Fire Service Tapping 25 mm 100 Dia AC Pipe	Cust	240.00	240.00	240.00	240.00	240.00
Fire Service Tapping 32 mm 100 Dia AC Pipe	Cust	314.00	314.00	314.00	314.00	314.00
Fire Service Tapping 40 mm 100 Dia AC Pipe	Cust	361.00	361.00	361.00	361.00	361.00
Fire Service Tapping 50 mm 100 Dia AC Pipe	Cust	440.00	440.00	440.00	440.00	440.00
Fire Service Tapping 80 mm 100 Dia AC Pipe	Cust	1102.00	1102.00	1102.00	1102.00	1102.00
Fire Service Tapping 100 mm 100 Dia AC Pipe	Cust	1149.00	1149.00	1149.00	1149.00	1149.00
Fire Service Tapping 25 mm 150 Dia AC Pipe	Cust	245.00	245.00	245.00	245.00	245.00
Fire Service Tapping 32 mm 150 Dia AC Pipe	Cust	324.00	324.00	324.00	324.00	324.00
Fire Service Tapping 40 mm 150 Dia AC Pipe	Cust	365.00	365.00	365.00	365.00	365.00
Fire Service Tapping 50 mm 150 Dia AC Pipe	Cust	450.00	450.00	450.00	450.00	450.00

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Fire Service Tapping 80 mm 150 Dia AC Pipe	Cust	1206.00	1206.00	1206.00	1206.00	1206.00
Fire Service Tapping 100 mm 150 Dia AC Pipe	Cust	1248.00	1248.00	1248.00	1248.00	1248.00
Fire Service Tapping 25 mm 100 Dia UPVC Pipe	Cust	240.00	240.00	240.00	240.00	240.00
Fire Service Tapping 32 mm 100 Dia UPVC Pipe	Cust	314.00	314.00	314.00	314.00	314.00
Fire Service Tapping 40 mm 100 Dia UPVC Pipe	Cust	361.00	361.00	361.00	361.00	361.00
Fire Service Tapping 50 mm 100 Dia UPVC Pipe	Cust	440.00	440.00	440.00	440.00	440.00
Fire Service Tapping 80 mm 100 Dia UPVC Pipe	Cust	1201.00	1201.00	1201.00	1201.00	1201.00
Fire Service Tapping 100 mm 100 Dia UPVC Pipe	Cust	1248.00	1248.00	1248.00	1248.00	1248.00
Fire Service Tapping 25 mm 150 Dia UPVC Pipe	Cust	245.00	245.00	245.00	245.00	245.00
Fire Service Tapping 32 mm 150 Dia UPVC Pipe	Cust	324.00	324.00	324.00	324.00	324.00
Fire Service Tapping 40 mm 150 Dia UPVC Pipe	Cust	366.00	366.00	366.00	366.00	366.00
Fire Service Tapping 50 mm 150 Dia UPVC Pipe	Cust	455.00	455.00	455.00	455.00	455.00
Fire Service Tapping 80 mm 150 Dia UPVC Pipe	Cust	1248.00	1248.00	1248.00	1248.00	1248.00
Fire Service Tapping 100 mm 150 Dia UPVC Pipe	Cust	1295.00	1295.00	1295.00	1295.00	1295.00
Fire Service Tapping Inspection Fee	Cust	51.00	51.00	51.00	51.00	51.00
Fire Service Information Fee	Cust	204.00	204.00	204.00	204.00	204.00
Fire Service Illegal Use Re-Sealing Fee 1st Reseal	Cust	100.00	100.00	100.00	100.00	100.00
Fire Service Illegal Use Re-Sealing Fee 2nd Reseal	Cust	150.00	150.00	150.00	150.00	150.00
Fire Service Illegal Use Re-Sealing Fee 3rd Reseal	Cust	200.00	200.00	200.00	200.00	200.00
Fire Service Illegal Use Re-Sealing Fee 4th Reseal	Cust	300.00	300.00	300.00	300.00	300.00
Fire Service Illegal Use Re-Sealing Fee 5th & Sub Reseal*	Cust	500.00	500.00	500.00	500.00	500.00
Portable Metered Hydrants						
Casual Use 25 mm Hydrant Administration Charge	Cust	50.00	50.00	50.00	50.00	50.00
Casual Use 25 mm Hydrant Deposit	Cust	50.00	50.00	50.00	50.00	50.00
Casual Use 25 mm Hydrant Daily Charge	Per day	5.00	5.00	5.00	5.00	5.00
Casual Use 25 mm Hydrant Volume Charge	kl	0.5153	0.5418	0.5697	0.5990	0.6299
Casual Use 50 mm Hydrant Administration Charge	Cust	50.00	50.00	50.00	50.00	50.00
Casual Use 50 mm Hydrant Deposit	Cust	100.00	100.00	100.00	100.00	100.00
Casual Use 50 mm Hydrant Daily Charge	Per day	6.00	6.00	6.00	6.00	6.00

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Casual Use 50 mm Hydrant Volume Charge	kl	0.5153	0.5418	0.5697	0.5990	0.6299
Permanent Use 25 mm Hydrant Establishment Charge	Cust	454.00	454.00	454.00	454.00	454.00
Permanent Use 25 mm Hydrant Yearly Charge	Per year	171.88	171.88	171.88	171.88	171.88
Permanent Use 25 mm Hydrant Volume Charge	kl	0.5153	0.5418	0.5697	0.5990	0.6299
Permanent Use 50 mm Hydrant Establishment Charge	Cust	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
Permanent Use 50 mm Hydrant Yearly Charge	Per year	687.52	687.52	687.52	687.52	687.52
Permanent Use 50 mm Hydrant Volume Charge	kl	0.5153	0.5418	0.5697	0.5990	0.6299
Standpipe Charges						
Truck Tanker Load	Load	10.00	10.00	10.00	10.00	10.00
Spray Vat or Equivalent	Load	5.00	5.00	5.00	5.00	5.00
Service Availability Charges						
Unmetered Property Charge	Property	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Fire Service Availability Charge	Cust	160.00	160.00	160.00	160.00	160.00
Information Statement Fee						
Information Statement Fee (Includes one (1) meter reading)	Statement	66.50	66.50	66.50	66.50	66.50
New Customer Contributions						
Water - All Districts - Lot < 450 sqm	Lot	550.00	550.00	550.00	550.00	550.00
Water - All Districts - Lot 450 sqm - 1300 sqm	Lot	1,100.00	1,100.00	1,100.00	1,100.00	1,100.00
Water - All Districts - Lot > 1300 sqm	Lot	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00
Sewer - All Districts - Lot < 450 sqm	Lot	550.00	550.00	550.00	550.00	550.00
Sewer - All Districts- Lot 450 sqm - 1300 sqm	Lot	1,100.00	1,100.00	1,100.00	1,100.00	1,100.00
Sewer - All Districts - Lot > 1300 sqm	Lot	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00
Other Charges						
Final Notice Fee	Notice	5.00	5.00	5.00	5.00	5.00

		SECOND REGULATORY PERIOD				
Tariff and Price Component 1/1/07	*Unit*	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
Administration Charge		tba	tba	tba	tba	tba
Merchant Fee (for payments over $1,000)	Cust	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Hireworks	Cust	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Tender Document Charge	Tender	104.00	104.00	104.00	104.00	104.00
Debt collection fees passed on to customers	Cust	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Dishonoured Cheque Fees	Cust	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Vacant Untapped Land	Cust	54.29	54.29	54.29	54.29	54.29
Fire Plug Maintenance	Cust	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Water taken through a check meter	kl	1.00	1.00	1.00	1.00	1.00

Appendix D

Capital Expenditure

WATER CAPITAL EXPENDITURE	'000	'000	'000	'000	'000
Price 1/1/07	2009	2010	2011	2012	2013
All Towns Main Replacement	600	700	800	800	800
All Towns Minor Capital Works - Replacement	250	250	250	250	250
All Towns Minor Capital Works - New	100	110	120	140	150
All Towns Land Development	120	120	120	120	120
Gifted Assets	200	200	200	200	200
Mildura WTP Clarifier - Install Roof	-	100	-	-	-
Mildura WTP Chem Dosing - Replace Chlorinators	-	-	-	50	-
Mildura TWPS Upgrade to VSD all pumps	-	100	-	-	-
Mildura RWPS Install Third VSD P4	-	-	-	50	-
Mildura Relocate 14th St Tower/GLS/PS	-	-	2,000	-	-
Mildura Trunk Mains - Ext	770	1,100	-	1,500	-
Red Cliffs TWPS - Replace Switchboard	-	-	-	90	-
Red Cliffs Trfr - By pass CWS (more investigation)	75	-	-	-	-
Red Cliffs RWPS - Replace Switchboard	-	80	-	-	-
Robinvale RWTP - Install Ladders and walkway	-	-	35	-	-
Swan Hill WTP Clarifier - Replace Pipework	-	50	-	-	-
Swan Hill SHWTP Clarifier Rehabilitation	-	-	-	150	-
Swan Hill SHWTP Clarifier Paint externally	60	-	-	-	-
Swan Hill SHWTP Clarifier Install Tube Settlers/Cover	-	-	-	75	-
Swan Hill Additional Storages	-	-	350	150	-
Swan Hill Land Purchase for New WTP	300	-	-	-	-
Murrabit Raw Water Pump Station located on river	-	300	-	-	-
Kerang R/TPS - VSD Soft Starters x 3	-	62	-	-	-
Kerang R/TPS - Replace Switchboard	-	100	-	-	-
Kerang R/TPS - Replace Raw Water Pump	-	45	-	-	-
Kerang WTP Filter Refurbishment	200	-	-	-	-
	2,675	**3,317**	**3,875**	**3,575**	**1,520**

SEWERAGE CAPITAL EXPENDITURE	'000	'000	'000	'000	'000
Price 1/1/07	2009	2010	2011	2012	2013
All Towns Rehabilitation of Sewers	700	700	800	800	800
All Towns Minor Capital Works - Replacement	469	207	228	190	200
All Towns Minor Capital Works - New	85	90	95	100	100
All Towns Land Development	200	200	200	200	200
Gifted Assets	600	600	600	600	600
Koorlong - WWTP Augmentation	8,500	-	-	-	-
Koorlong - WWTP Augmentation - Recycled	4,200	-	-	-	-
Mildura Catchment Augmentation	-	200	200	-	-
Mildura Catchment Development	-	300	-	300	-
Mildura SPS15 Modify overflow dams and well (deeper)	100	-	-	-	-
Mildura WWR New machinery shed	-	40	-	-	-
Mildura WWTP New main Switchboard	-	-	-	80	-
Mildura WWTP Replace Step Screen	-	-	-	-	80
Mildura WWTPReplace Aerators	200	-	-	-	-
Mildura Cowra Ave Catchment Development	900	-	-	-	-
Merbein WWTP Divert to Koorlong	100	-	-	-	-
Red Cliffs WWTP Decommission	1,800	420	-	-	-
Robinvale WWTP - Upgrade	-	45	45	70	-
Swan Hill WWTP Augmentation	-	-	-	-	750
Swan Hill SPS21 Replace Switchboard	-	-	75	-	-
Kerang WWTP - Refurbishment or Replacement	3,300	-	-	-	-
	21,154	**2,802**	**2,243**	**2,340**	**2,730**

CORPORATE CAPITAL EXPENDITURE	'000	'000	'000	'000	'000
Price 1/1/07	2009	2010	2011	2012	2013
Motor Vehicles	350	362	380	350	350
Computer Hardware	335	250	225	345	223
Computer Software	207	41	161	110	110
Water Ordering Software	250	-	-	-	-
General Equipment	85	85	98	105	90
Communications	34	25	25	25	25
Workshop Tools	98	124	90	100	100
Safety Equipment	10	10	10	10	10
Lab Equipment	5	5	5	5	5
14th St Depot - Replace Skylight Sheeting	400	-	-	-	-
14th St Office - Replace Carpet	200	-	-	-	-
Sewer cleaning trailer for Kerang	-	5	-	-	-
Lake Cullulleraine Levee	250	-	-	-	-
	2,224	**907**	**994**	**1,050**	**913**