Lower Murray Water

Exposure Draft Water Plan

2008-09 to 2012-13

July 2007

Part A

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Executive Summary

Lower Murray Urban and Rural Water Corporation (trading as Lower Murray Water) submits this Water Plan in response to the Essential Services Commission's (ESC's) requirements and in accordance with the Water Industry Regulatory Order (WIRO).

Lower Murray Water (LMW) operates in North-Western Victoria and provides reliable and secure:

- Urban water and wastewater services
- River quality water for irrigation, domestic and stock and
- Disposal of irrigation drainage

The **Water Plan** is in three parts:

Part A, including this Executive Summary, and an introduction to LMW and its functions and operations.

Part B, comprising the **Urban Services** proposal, setting out performance objectives, strategies, operating costs, capital costs, revenue requirements and prices for urban water supply and wastewater services.

Part C, comprising the **Rural Services** proposal, setting out performance objectives, strategies, operating costs, capital costs, revenue requirements and prices for irrigation, diversion, rural water supply and rural drainage services.

Key Issues for Lower Murray Water

Key issues facing LMW over the regulatory period include:

- Managing the impacts of drought, and reduced water allocation and associated implications
- Delivering major projects at Robinvale, Merbein, Red Cliffs and Koorlong
- Delivering benefits and efficiencies resulting from automated operations controls and remote meter reading capability
- Attracting consultants and contractors to deliver capital works in a competitive market
- Attracting/retaining professional staff.

A1. Introduction

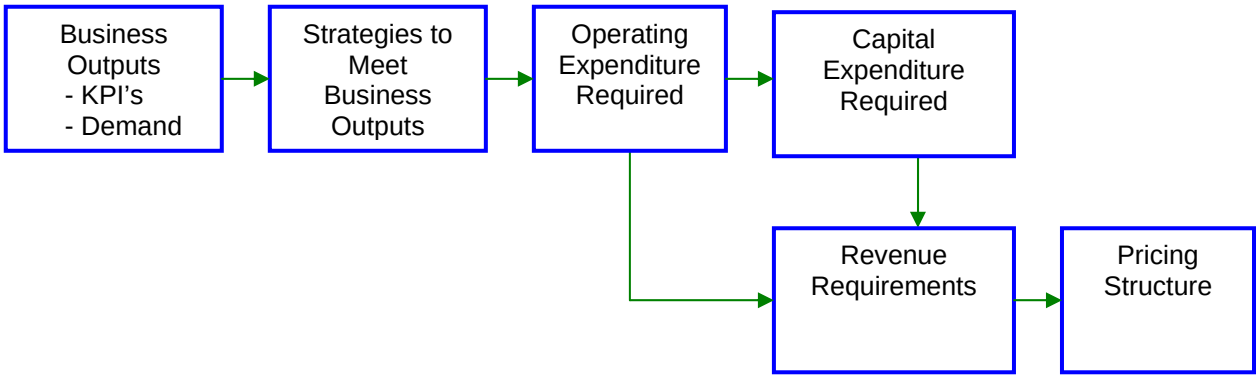
A1.1 Water Plan Purpose

This Water Plan is prepared by LMW, for the ESC as part of the requirements for water industry regulation detailed by the Water Industry Regulatory Order (WIRO). The document details the needs of the business for the regulatory period of 1 July 2008 to 30 June 2013. The ESC will make a pricing determination for this regulatory period based on the data provided in this document.

A1.2 Water Plan Structure

This Water Plan follows the decision making value chain of LMW, as illustrated in Figure 1.

Figure 1 Water Plan Process Structure



The process detailed in Figure 1 has been replicated for Urban and Rural Services.

The Water Plan is presented in three parts:

- Part A - Business Overview and Executive summary for urban and rural services
- Part B - Urban Services
- Part C - Rural Services.

A2. Business Overview and Key Issues

A2.1 Functions and Services

LMW operates across the municipalities of Mildura, Swan Hill and Gannawarra in North-Western Victoria.

A2.1.1 Urban Services

LMW delivers urban services to towns along the Murray River in Victoria, from Kerang to Mildura providing

- Treated water to 14 towns
- Wastewater collection, treatment and effluent disposal to 11 towns

A2.1.2 Rural Water Business

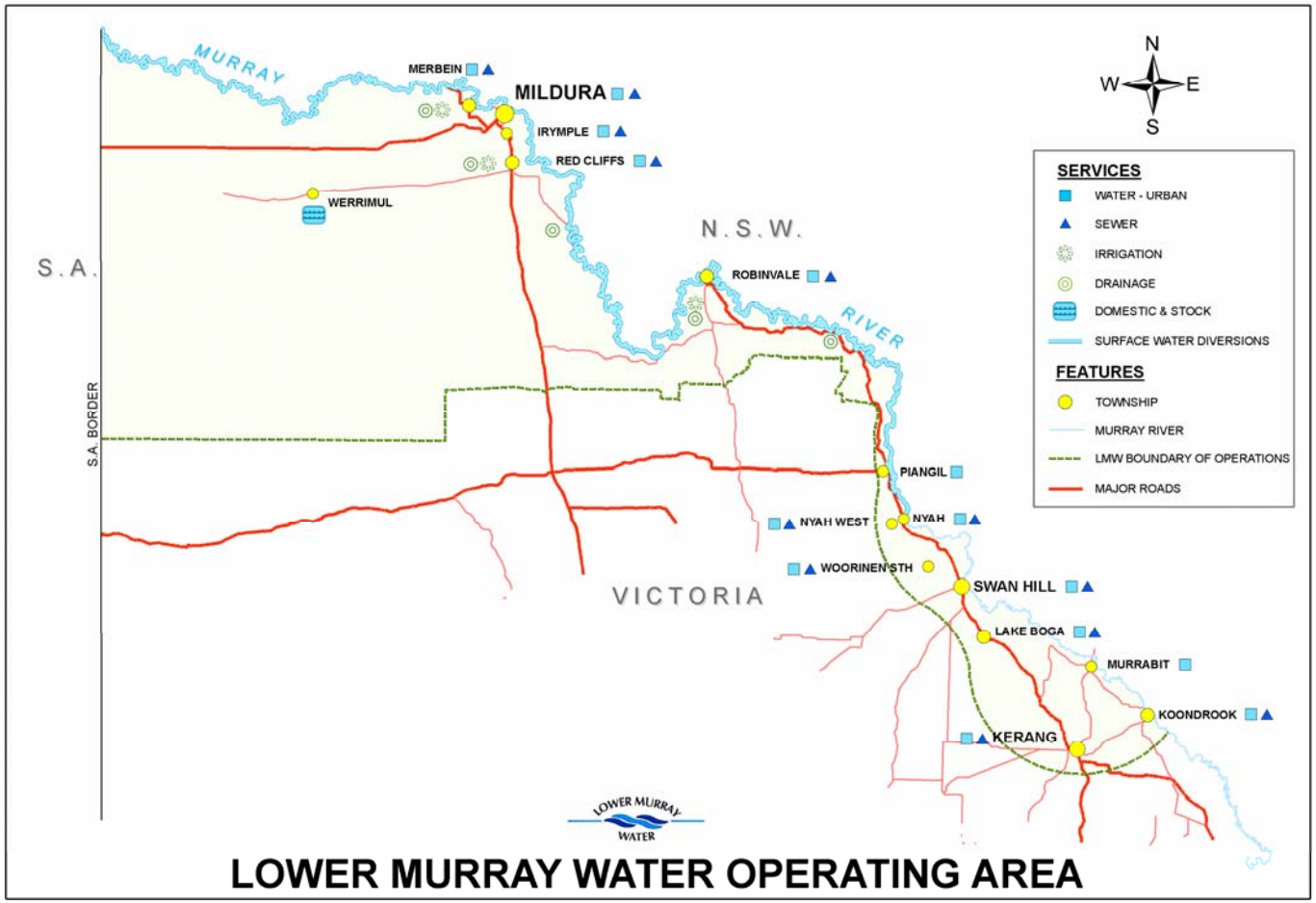
Services provided to the rural sector include:

- Irrigation - districts of Merbein, Red Cliffs and Robinvale
- Domestic and Stock - Merbein, Red Cliffs and Robinvale and Millewa rural district
- Management of the regions rural bulk water entitlement
- Surface water diversion licences of along the Murray River in Victoria between Nyah West and the South Australian border
- Subsurface Drainage – systems of Merbein, Red Cliffs, Robinvale, Nangiloc, Tol Tol, Bumbang and Boundary Bend diverters

LMW recognises the importance of security of supply, public health, water quality and environmental responsibilities as well as the crucial economic role of water in the regional and state context.

Figure 2 provides details of the LMW's operating area in Victoria and key services.

Figure 2 LMW Operating Area



A2.2 Customers and Assets

A2.2.1 Urban Water Supply

LMW pumps and treats raw water from the Murray and Loddon Rivers and from Goulburn Murray Water irrigation channels. It supplies more than 63,160 customers from both residential and commercial/industrial sectors. They collectively utilise an approximate annual average of 18,600 megalitres (ML) of water (based on 2006-07). Table 1 summarises population and customer data for urban water.

Table 1 Urban Water Supply Customers (2006-07)

Permanent Population Served	63,160
Peak Population Served	96,450
Total Equivalent Residential Connections	26,430
Total Equivalent Non-residential Connections	6,905
Total Equivalent Connections	33,335
Consumption:	
Residential	14,013 ML
Non-residential	4,629 ML
Total Volume Supplied	18,642 ML
Maximum Amount under Bulk Entitlement	30,999.86 ML

Table 2 summarises LMW's urban water supply assets. It provides water supply services via eight individual systems:

Table 2 Urban Water Supply Assets

System	
Treatment Plants	9
Pump Stations	32
Water Mains	852 km

A2.2.2 Urban Wastewater Collection and Treatment

LMW collects and treats waste from both residential and trade supplies. LMW services more than 24,900 connections and collects an annual average of approximately 6,227 ML. Table 3 summarises population and customer data for urban wastewater.

Table 3 Urban Wastewater Customers (2006-07)

Permanent Population Served	61,900
Peak Population Served	94,360
Equivalent Residential Connections	22,977
Equivalent Non-residential Connections	4,249
Total Equivalent Connections	27,226
Total Volume of Wastewater (Current Forecast)	6,000 ML

Table 4 summarises LMW's wastewater assets.

Table 4 Urban Wastewater Assets

Asset	
Wastewater Treatment Plants (primary)	1
Wastewater Treatment Plants (secondary)	9
Wastewater Pump Stations	105
Sewer Mains	554 km

A2.2.3 Rural Water Supply

LMW provides untreated river water to customers through three pumped irrigation districts, domestic and stock supply and surface water diverters LMW provides services to the following districts:

- Red Cliffs – pumped irrigation
- Robinvale – pumped irrigation
- Merbein – pumped irrigation
- Millewa – domestic and stock
- Nyah to SA border – private diverters

Table 5 summarises irrigation customer and water volume data.

Table 5 Rural Water Supply Customers and Volumes

Irrigation Customers	1,324
Domestic and Stock Customers	1,270
Private Diverters	1,080
Total Customers	3,674
Irrigation	286,177 ML
Domestic and Stock Customers	7,698 ML
Environmental Flow	1,200 ML
Total Volume	295,075 ML

Table 6 summarises LMW's rural water supply assets.

Table 6 Rural Water Supply Assets

Asset	
Pump Stations	15
Irrigation Channels	30 km
Irrigation Pipelines	302 km
Domestic and Stock	471 km

A2.3 Historic Background and Context

Lower Murray Urban and Rural Water Authority was created under the provisions of the Water Act 1989 via Order in Council effective 1st July 2004. It assumed the water and wastewater responsibilities of the Lower Murray Region Water Authority (LMW - managing urban water supply and wastewater services) and the Sunraysia Rural Water Authority (SRW - managing irrigation and rural (domestic and stock) water supplies).

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 became 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 primary focus of the Board is to meet the Victorian Government's objectives for water, sewerage, irrigation water and drainage services whilst operating as a commercially oriented body with a high

degree of autonomy. LMW provides financial and logistical support to Directors to maintain or update their skills and knowledge base on an annual basis.

A2.3.1 Our Vision

Vital Resource: Vital Service

Managing our water resources responsibly to promote the economic and social advancement of our region, whilst protecting our environment.

A2.3.2 Our Core Business

In the LMW region, we must recognise that our overall well-being and livelihood is directly linked to the agricultural, tourism and support industries which form our economic backbone.

How we manage our water resources must recognise the intrinsic interrelation between this resource and the social and economic fabric of our region.

We have to manage and use water responsibility to ensure that the health and prosperity of our community and environs are protected.

We need to communicate with our community to ensure they appreciate the value of the water resource encouraging them to conserve it.

Our core business is to meet the present and future needs of our customers and community by providing reliable and secure water services.

A2.3.3 Our Values

We will…

- Value the ideas of our customers and facilitate their meaningful input to business processes;
- Demonstrate, through all our actions, integrity and high ethical standards;
- Make decisions honestly, openly and fairly;
- Act in an environmentally responsible manner;
- Offer career paths to our people, reward commitment and recognise loyalty to the organisation;
- Encourage a culture of continual improvement;
- Encourage teamwork and continually invest in the skills and knowledge of our staff;
- Be leaders in the water industry and encourage new ideas and innovation.

A2.3.4 Our Corporate Goals and Objectives

LMW has developed strategies and programs to meet the goals and objectives described in Table 7.

Table 7 Goals and Objectives

Goals	Objectives
Quality Service Delivery	◗ Provide quality potable drinking water in accordance with the Safe Drinking Water Act 2003 to urban customers in

Goals	Objectives
	prescribed areas
	◗ Collect, treat and manage wastewater throughout the region applying appropriate methods of wastewater management which are commensurate with end use
	◗ Seek opportunities to recycle wastewater
	◗ Continuously monitor and review trade waste agreements with industrial users
	◗ Implement White Paper initiatives
	◗ Promote reuse of drainage water
	◗ Upgrade Irrigation Systems in line with Master Plan
Positive Customer, Staff and Stakeholder Relationships	◗ Keep all customers, staff and the community informed about water issues generally and issues which directly affect them.
	◗ Maintain open and constructive relationships with all customer and staff and listen to and respect their ideas and input.
	◗ Maintain customer-representative and advisory structures and processes through which customers can have meaningful input to LMW's planning processes.
	◗ Maintain multi-level communication strategies with our shareholder, regulators, staff and other key stakeholders to ensure LMW's interests and views are effectively communicated.
Building a Prosperous Region	◗ Expand the boundaries of LMW's jurisdiction wherever possible.
	◗ Manage the business of LMW in a manner which recognises our interrelationship with the economic, social and cultural well-being of our region.
	◗ Protect and enhance the security of the bulk water entitlement of our region and ensure that it continues to reflect the economic importance of the region in a National context.
	◗ Seek opportunities to on-sell the services and expertise of LMW.
	◗ Actively promote the economic growth of our region and provide the necessary infrastructure to cater for growth.
Sustainability of Our Environment	◗ Minimise the environmental impact of water usage by all customer groups.
	◗ Implement State Environmental Sustainability Objectives.

Goals	Objectives
Motivated and Empowered People	◗ To develop and maintain a workplace culture focused on efficiency and customer satisfaction. ◗ To have staff retention rates better than industry and regional averages. ◗ To be innovative in recruitment.
Efficient Financial and Asset Management	◗ To align the business Objective with ESC principles ◗ Develop pricing structures/tariffs for urban and rural services that are equitable and reflect the funding needs for long-term infrastructure. ◗ Continue to plan, maintain and improve LMW's asset base to meet the projected long-term needs of the community and customers.
Responsible Corporate Governance	◗ Provide strong leadership for LMW and within the Victorian water sector generally. ◗ Maintain positive Board and staff relationships to underpin a performance-based organisational culture where people strive to improve and innovate in the ways things are done. ◗ Undertake risk management and audit processes, which balance mitigation with contingency planning designed to protect the interests of LMW and its customers. ◗ To have effective planning and decision making processes.

A2.3.5 Recent Achievements

The recent achievements of LMW have been:

- $20M grant fund approval for the Robinvale Irrigation District infrastructure refurbishment program
- Commissioning of Mildura West Water Treatment Plant
- Approval for sewerage scheme for Murrabit and Nichols Point under the Victorian Town and Country Water and Wastewater Scheme
- EPA partnership to minimise trade waste discharges
- Development of hydraulic model for Mildura Sewerage Reticulation System and Millewa Rural Reticulation System
- Co-hosted the Australian National Committee on Irrigation and Drainage (ANCID) Conference in Mildura

A3. LMW Urban Executive Summary

A3.1 Overview of revenue requirement and proposed annual price change

Urban Revenue Requirement

The proposed revenue requirement for the LMW urban business is summarised in Table 8. It is comprised of operating costs, return on existing and new assets and regulatory depreciation on existing and new assets.

The revenue requirement increases by 3.6% over the regulation period. Total operating expenditure remains fairly stable in aggregate as productivity improvements have been offset by increases in labour costs. The increase in revenue requirement is predominantly generated from capital expenditure of $46.04 million over the regulatory period.

LMW has adopted a Weighted Average Cost of Capital (WACC) of 5.1% real as recommended by the ESC. The WACC is applied to the return on the regulatory asset base (RAB) and return on new assets.

Regulatory depreciation on existing and new assets has been calculated in accord with estimated residual asset lives.

Table 8 Basis of Revenue Calculation

$M 1/1/07	2008-09	2009-10	2010-11	2011-12	2012-13
Revenue requirement					
Operating expenditure	17.91	16.99	16.65	16.94	17.32
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	**25.47**	**25.27**	**24.92**	**25.55**	**26.11**

Urban Demand Forecasts

Urban water demand growth is largely driven by growth in the Mildura region with expected population growth of around 1.1% pa, with other major towns (Swan Hill, Kerang and Robinvale) expected to grow more slowly, and small towns experiencing virtually no growth.

LMW's demand management strategy will result in reductions in demand per connection brought about by changes to volumetric pricing, the continuation of three-tiered volumetric tariffs, the permanent water savings plan, and restrictions.

Water

In 2005-06 LMW introduced three tier volumetric tariffs for residential customers (0 -400 kL, 400kL – 800kL and >800 kL). LMW is proposing to lower the threshold for the first tier to 300kL from 2008-09 to improve incentives for demand management for discretionary use.

In July 2006, LMW introduced its Permanent Water Savings Plan, and restrictions have been enforced throughout the 2006-07 year. Stage 4 restrictions commenced on 1 July 2007 and will be managed in accord with the drought management strategy and available water supplies. LMW has assumed restrictions will result in a hardened effect on demand even when restrictions are relaxed. The total water demand used as the basis for revenue forecast is presented in Table 9.

Table 9 Historic and Forecast Water Demand (ML per annum)

	Historic / Current						Forecast				
	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	18,854	15,968	9,768	14,248	16,386	16,486	16,584	16,680
First Tier	8,554	8,384	8,551	9,127	7,248	3,793	5,474	6,516	6,585	6,654	6,722
Second Tier	8,632	7,677	7,707	6,515	6,320	4,840	6,277	6,875	6,913	6,951	6,987
Third Tier	2,216	2,275	2,267	2,873	2,400	1,136	2,497	2,994	2,988	2,980	2,971

Wastewater

Table 10 shows total historic and forecast wastewater flows.

Table 10 Historic and Forecast Wastewater Volume (ML per annum)

	Historic / Current					*Forecast*					
	2002-03	**2003-04**	**2004-05**	**2005-06**	**2006-07**	***2007-08***	***2008-09***	***2009-10***	***2010-11***	***2011-12***	***2012-13***
TOTAL	5838	5856.6	5938	6227	6000	*6105*	6105	6217	6567	*6767*	*6967*

Recycled Water

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

The exception is recycled water supplied by the Koorlong Wastewater Treatment Plant as the water has been sold at commercially to a private third party. Recycled water from this plant is expected to exceed 3,000 ML per annum by 2008-09. This has been classified as a non-prescribed service as it has been negotiated on a commercial basis and is not subsidised by the regulated business.

A3.2 Overview of key outcomes for the period

Urban Service Standards and Obligations

The exposure draft Water Plan has been prepared based on existing service standards.

LMW's service standards and performance targets are set out in:

- Customer Charter (Urban) incorporating the requirements of Customers Code (ESC November 2004)
- ESC Performance Standards
- Statement of Obligations
- Other Obligations

Targets have been set in consultation with Customer Consultative Committees.

New obligations for the regulatory period are:

- Mandatory Water Management Plans
- End Use Demand Modelling

A3.3 Overview of expenditure forecasts

Operating expenditure is expected to remain fairly stable over the regulatory period for the urban business. There are only two new obligations resulting in minor increases in operating expenditure, although capital investments will result in changes within Business as Usual (BAU) operating expenditure.

Capital expenditure is dominated by major projects including the upgrade of the Koorlong Wastewater Treatment Plant, and sewer rehabilitation.

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 business areas, 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.

LMW is forecasting revenue losses in 2007-08 of $2.2M as a result of water restrictions, and proposes to recover the lost revenue over the next regulatory period.

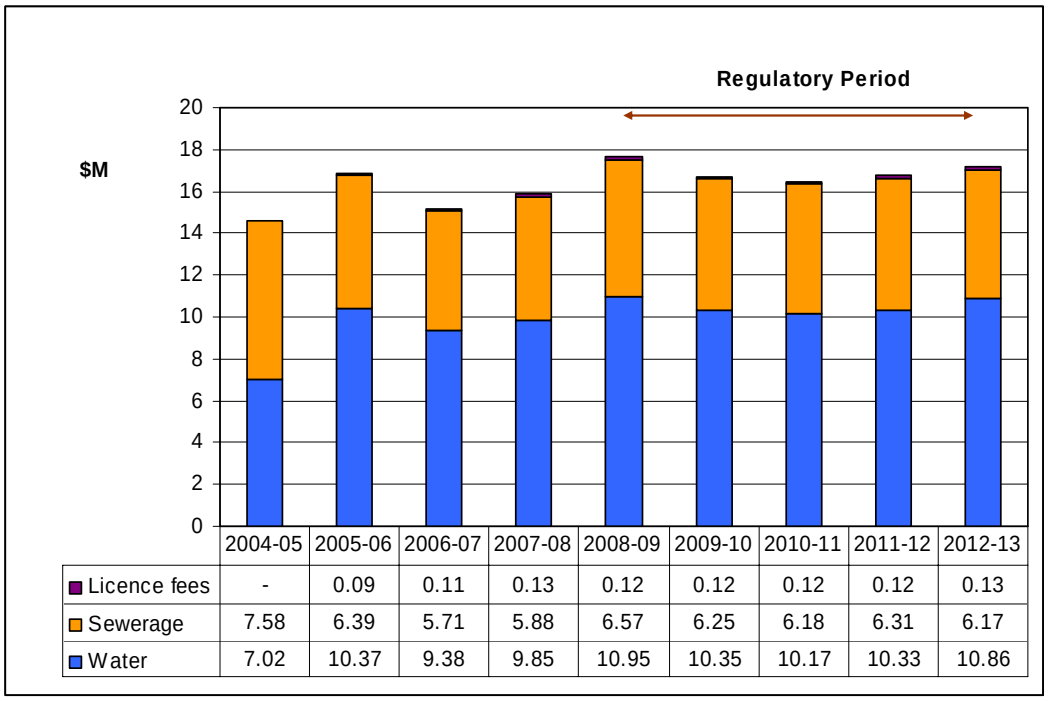
The operating and capital expenditure forecasts and drivers of expenditure for the urban business are summarised below.

A3.3.1 Urban Operating Expenditure

LMW's planned regulatory operating expenditure totals $84.7 million over the regulatory period.

Historic and planned BAU Urban Operating Expenditure is summarised in Figure 3

Figure 3 Urban BAU Operating Expenditure 2004-05 – 2012-13 ($M 1/7/07)



	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	7.58	6.39	5.71	5.88	6.57	6.25	6.18	6.31	6.17
Water	7.02	10.37	9.38	9.85	10.95	10.35	10.17	10.33	10.86

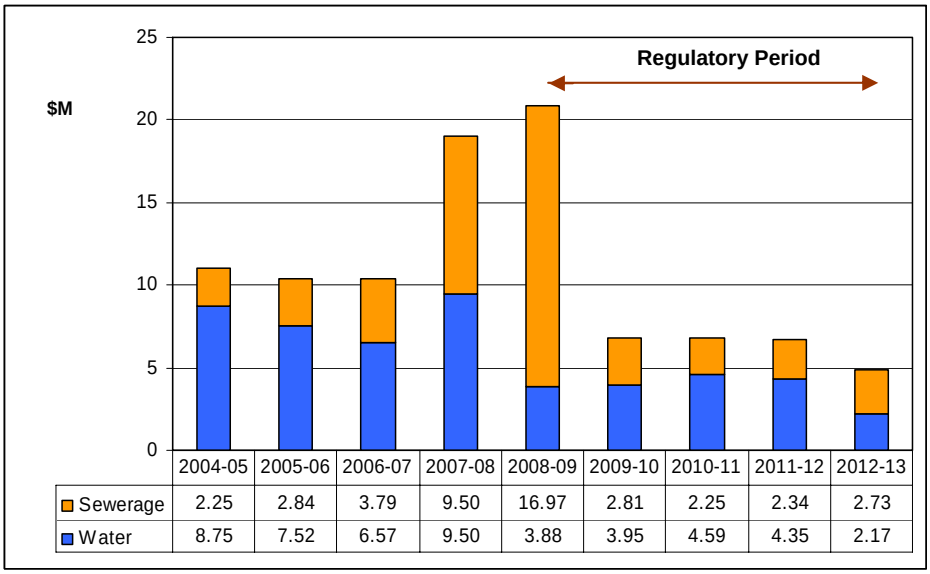
Water services account for 62% of operating costs. The remainder relates to sewerage (37%) with 1% allocated to licence fees. Total operating expenditure remains fairly stable in aggregate over the regulatory period. LMW continues to drive efficiency through various initiatives, however increases in costs related to growth and improved service levels offset these savings.

Variations in expenditure over the regulatory period relate to the recruitment of two engineers and three technical trainees and specific maintenance such as air scouring, de-sludging of lagoons and replacement of air valves.

A3.3.2 Urban Capital Expenditure

LMW is planning to invest $46.04M in capital over the regulatory period. Historic and planned Urban Capital Expenditure is summarised in Figure 4.

Figure 4 Urban Capex 2004-05 – 2012-13 ($M 1/07/07)



	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)
- Koorlong Wastewater Treatment Plant upgrade to supply recycled water ($4.2M) Non Prescribed

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

LMW has budgeted $3.96 million over the regulatory period for renewal of corporate assets including vehicles, hardware, software, equipment and buildings. $2.4 million received from the sale of vehicles will partially offset this investment.

A3.4 Overview of proposed tariff structures

Urban Pricing Proposal Summary

LMW is proposing to phase in the increase in tariffs implied by the proposed revenue requirement over two regulatory periods.

Since 1996 conservation measures implemented by LMW have resulted in a decrease in average household demand of 17.7% during the worst drought on record. The introduction of the Permanent Water Saving Plan in 2006 is expected to increase these savings by a further 5%. LMW is aiming for further consumption savings over time – 10% by 2015 increasing to 15% by 2030. A 37.7% decrease by 2030 will represent savings of over 7,700 ML/year.

LMW is proposing to maintain its existing three-tier tariff structure for residential water supply, as it provides appropriate incentives for sustainable use of water – particularly for the discretionary usage, which is captured in the upper tier volumes. LMW is also proposing reduce the threshold for the first tier from 400kL to 300kL. LMW will continue with a uniform volumetric rate for non-residential customers, as it is not possible to generalise about discretionary use in this sector.

Proposed tariffs for the two regulatory periods are set out in the following table. Tariffs for the regulatory period are proposed to increase by 4.99% per annum plus CPI, and are summarised in Table 11 below.

Table 11 Proposed tariffs

$ 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	169.37
First tier volumetric charge	0.26	0.2575	0.26	0.2694	0.2833	0.2979	0.3132	0.3294	0.3463
Second tier volumetric charge	0.45	0.4634	0.47	0.4901	0.5153	0.5418	0.5697	0.5990	0.6299
Third tier volumetric charge	n/a	0.5973	0.62	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	169.37
First tier volumetric charge	0.26	0.2575	0.47	0.4901	0.5153	0.5418	0.5697	0.5990	0.6299
Second tier volumetric charge	0.45	0.4634	0.47	0.4901	0.5153	0.5418	0.5697	0.5990	0.6299
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

A3.5 Overview of customer consultation

LMW has two area based urban customer consultative committees that meet on as needs basis, typically 2 or 3 times a year.

LMW conducts an annual customer satisfaction survey. Just over 1% of the customer base is randomly selected across our various customer groups in our region. The survey seeks opinions on a range of services offered by LMW. One area of the survey deals specifically with the price paid for these services.

In preparing its Exposure Draft Water Plan, LMW has undertaken a number of meetings with its customer consultation committees.

The meetings started with a refresher on the regulatory pricing structure such as the “building block” and components thereof and demand forecast. The meeting also covered:

- Proposed overall urban operating costs and programs
- Further breakdown of Opex, into Northern and Southern and by function.
- Proposed urban capital expenditure and priorities – summary and detailed.
- Proposed revenues.
- Proposed tariff increases.
- Proposed tariff structures.

LMW utilised a mail out process to canvas committee members on LMW’s aim to reduce greenhouse emissions by changing over to Green Power.

A4. LMW Rural Executive Summary

A4.1 Overview of revenue requirement and proposed annual price change

Rural Revenue Requirement

LMW's proposed revenue requirement for its rural business increases by 9.8% over the regulatory period and is summarised in Table 12. It is comprised of operating costs, return on existing and new assets and regulatory depreciation on existing and new assets.

Total operating expenditure remains fairly stable as productivity savings are offset by increases in bulk water charges for surface water diverters.

The capital program results in a large increase in the asset base, which is reflected in the return on assets and regulatory depreciation. .

LMW has adopted a Weighted Average Cost of Capital (WACC) of 5.1% real as recommended by the ESC. The WACC is applied to the return on the regulatory asset base (RAB) and return on new assets.

Regulatory depreciation on existing and new assets has been calculated in accord with estimated residual asset lives.

The transition from a renewals annuity to a RAB based approach results in the redistribution of surplus and deficit annuity balances. Surplus balances in renewals have reduced the impact of new investment on the revenue requirement and customer prices.

Table 12 Basis of Revenue Calculation

$M 1/1/07	2008-09	2009-10	2010-11	2011-12	2012-13
Revenue requirement					
Operating expenditure	11.95	11.95	11.10	11.27	11.42
Return on assets to 30/6/08	0.94	0.89	0.85	0.81	0.77
Regulatory depreciation of assets to 30/6/08	0.54	0.52	0.52	0.52	0.51
Return on new assets	0.51	1.31	1.70	1.82	1.87
Regulatory depreciation of new assets	0.22	0.58	0.78	0.90	0.99
Renewals annuity	-	-	-	-	-
Adjustments from last period	-	-	-	-	-
Benchmark tax liability	-	-	-	-	-
Total revenue requirement	**14.17**	**15.25**	**14.95**	**15.31**	**15.56**

Rural Demand Forecasts

Demand is expected to remain at current levels in the pumped districts and for domestic and stock. Surface water diversion will increase by approximately 20,000 ML per annum due to transfer of water entitlements.

A4.2 Overview of key outcomes for the period

LMW's service standards and performance targets are set out in:

- Draft Customer Charter (Rural)
- Draft ESC Performance Standards
- Statement of Obligations
- Other Obligations

Targets have been set in consultation with Customer Service Advisory Committees,

LMW's draft Customer Charter is currently with the ESC for review.

A4.3 Overview of expenditure forecasts

Operating expenditure is expected to remain fairly stable over the regulatory period for the rural business. There are no new obligations for the rural business, although capital investments will result in changes within Business as Usual (BAU) operating expenditure.

Capital expenditure is dominated by major projects including improvements to irrigation channels, replacement of pipes and pumps at Robinvale, Merbein and Red Cliffs, which will reduce water losses and improve operating efficiency.

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

The corporate costs allocated to rural are then allocated based on the number of assessments.

A4.3.1 Rural Operating Expenditure

The operating and capital expenditure forecasts and drivers of expenditure for the rural business are summarised below.

LMW's planned regulatory operating expenditure totals $57.69 million over the regulatory period. Historic and planned BAU rural operating expenditure is summarised in Figure 5.

Figure 5 Rural BAU Operating Expenditure 2004-05 – 2012-13 ($M 1/7/07)

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Licence fees	-	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Surface Water Diversions	2.41	2.94	2.76	3.08	3.04	3.17	3.17	3.32	3.43
Domestic & Stock	0.57	0.45	0.50	0.50	0.49	0.51	0.52	0.52	0.52
Drainage	1.30	1.26	1.20	1.16	1.55	1.42	1.50	1.49	1.54
Irrigation	6.45	6.72	6.27	6.26	6.69	6.67	5.73	5.75	5.75

Figure 5 shows total operating expenditure remains fairly stable in aggregate over the regulatory period as a reduction in operations expenses associated with irrigation efficiencies has been offset by increased bulk water charges for surface water diverters.

Red Cliffs, Merbein and Robinvale irrigation and drainage services account for 65% of operating expenditure. Surface water diversions account for 30% of costs with the remaining 5% representing domestic and stock services, predominantly in the Millewa.

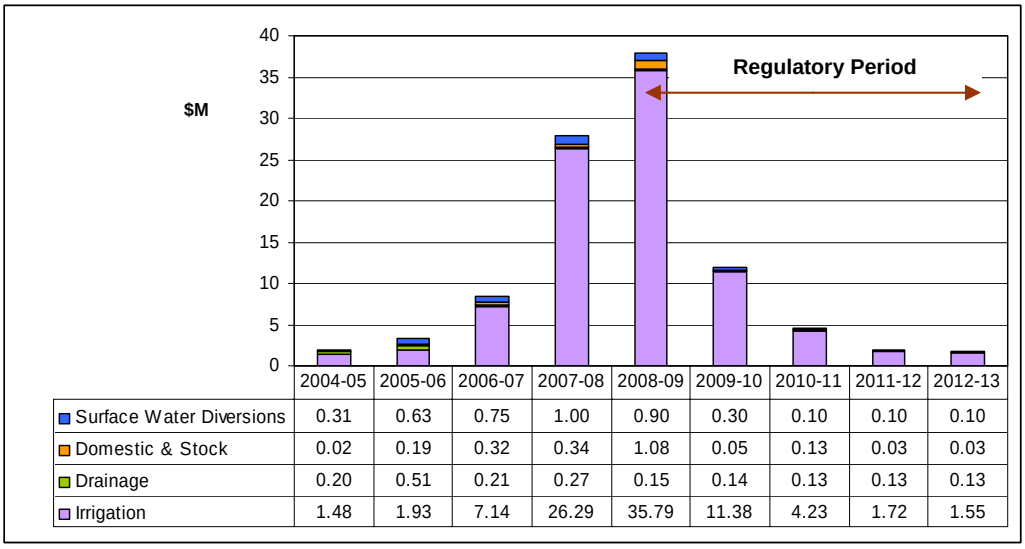
Whilst there are no new obligations in LMW's rural business, new investment at Robinvale, Red Cliffs and Merbein will result in changes in operational practices and reductions in people required to operate irrigation systems.

Operating expenditure declines over the regulatory period, following the replacement of low pressure irrigation channels with a high pressure system at Robinvale, a medium pressure system at Merbein and the upgrade of pumps and automatic controls at Red Cliffs. Surface water diverter bulk water charges are forecast to increase based on an assumption of continued growth of 20,000ML pa. Operating expenditure for domestic and stock remains stable over the regulatory period.

A4.3.2 Rural Capital Expenditure

LMW is planning to invest $58.1 million in capital over the regulatory period. Historic and planned Rural Capital Expenditure is summarised in Figure 6.

Figure 6 Rural Capex 2004-05 – 2012-13 ($M 1/07/07)



	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Surface Water Diversions	0.31	0.63	0.75	1.00	0.90	0.30	0.10	0.10	0.10
Domestic & Stock	0.02	0.19	0.32	0.34	1.08	0.05	0.13	0.03	0.03
Drainage	0.20	0.51	0.21	0.27	0.15	0.14	0.13	0.13	0.13
Irrigation	1.48	1.93	7.14	26.29	35.79	11.38	4.23	1.72	1.55

The investment profile is quite variable due to the renewal and upgrade of significant irrigation assets during the regulatory period. Significant projects include:

- Robinvale high pressure system - $14.8 M ($40.5 M total project value)
- Merbein pipeline and pump station - $22 M
- Red Cliffs pump station replacement - $6 M
- Meter and waterwheel replacement - $7.05 M

The remaining profile includes minor renewals based on known condition assessment eg meter replacement program. LMW's condition monitoring program is ongoing and may result in renewal requirements, which have not been specified in the Capital Plan.

A4.4 Overview of proposed tariff structures

Rural Pricing Proposal Summary

LMW is proposing to phase in increased charges associated with the increase in the revenue requirement over two regulatory periods.

Prices are calculated for each district based on planned operating and capital expenditure. The impact on prices has been partially offset by a change in approach to renewals funding resulting in the redistribution of annuity surplus and deficits. Surplus balances reserved for future renewal expenditure will be refunded to customers through customer contributions in the Regulatory Asset Base. Conversely, the deficit balances will need to be recovered through prices over time.

Whilst price changes will vary between service areas, overall the average price will increase by 1.81% plus CPI.

The majority of rural revenue is derived from volumetric charges according to the delivery share of water or the volume of water delivered. Volumetric charges provide a strong price signal reflecting the cost of services and provide incentives for sustainable use of resources.

LMW has successfully implemented and introduced a revised tariff structure in accordance with the unbundling provisions of the White Paper.

Table 13 summarised proposed tariffs.

Table 13 Proposed tariffs

$ 1/1/07	Units	2006	2007	2008	2009	2010	2011	2012	2013
Merbein - Irrigation									
Access	$ per ML WR	33.36							
Delivery Share	$ per DS		236.02	215.04	238.00	250.00	279.00	309.00	329.00
Usage fee	$ per ML usage	45.09	37.23	33.92	40.00	40.00	35.05	35.05	35.05
Water Share	$ per ML WR		6.06	5.59	5.73	5.73	5.73	5.73	5.73
Service Charge	$ per Assessment		100.00	97.62	95.19	92.83	90.52	88.27	86.07
D&S - unmetered	$ per property	365.59	365.50	365.99	365.50	365.50	365.50	365.50	365.50
D&S - metered	$ per DS		236.02	215.04	238.00	250.00	279.00	309.00	329.00
Merbein - Drainage									
Region	$ per ML WR total	0.33	0.27	0.25	0.23	0.22	0.20	0.19	0.18
District	$ per ML WR total	1.32	1.60	1.18	1.79	1.61	1.73	1.69	1.77
Drainage div 1	$ per WR/DS	16.17	143.62	130.86	125.55	115.20	123.46	120.82	126.90
Drainage div 2	$ per WR/DS	12.13	107.72	98.14	94.16	86.40	92.60	90.62	95.18
Drainage div 3	$ per WR/DS	8.08	71.81	65.43	62.78	57.60	61.73	60.41	63.45
Drainage div 4	$ per WR/DS	4.05	35.91	32.71	31.39	28.80	30.87	30.21	31.73
Red Cliffs - Irrigation									
Access	$ per ML WR	45.32							
Delivery Share	$ per DS		338.29	308.28	278.15	319.17	359.69	380.15	390.60
Usage fee	$ per ML usage	55.51	44.29	40.35	45.47	46.83	36.95	36.95	36.95
Water Share	$ per ML WR		6.06	5.59	5.73	5.73	5.73	5.73	5.73
Service Charge	$ per Assessment		100.00	97.62	95.19	92.83	90.52	88.27	86.07
D&S - unmetered	$ per property	365.59	365.50	365.99	365.50	365.50	365.50	365.50	365.50
D&S - metered	$ per DS		338.29	308.28	278.15	319.17	359.69	380.15	390.60
Red Cliffs - Drainage									
Region	$ per ML WR total	0.33	0.27	0.25	0.23	0.22	0.20	0.19	0.18
District	$ per ML WR total	2.07	2.45	1.89	2.67	2.51	2.64	2.64	2.70
Drainage div 1	$ per WR/DS	20.36	167.20	152.33	121.18	110.93	116.31	115.85	118.82

$ 1/1/07	Units	2006	2007	2008	2009	2010	2011	2012	2013
Drainage div 2	$ per WR/DS	15.27	125.40	114.25	90.89	83.20	87.23	86.88	89.11
Drainage div 3	$ per WR/DS	10.19	83.60	76.16	60.59	55.46	58.16	57.92	59.41
Drainage div 4	$ per WR/DS	5.09	41.80	38.08	30.30	27.73	29.08	28.96	29.70
Robinvale - Irrigation									
Access	$ per ML WR	56.30							
Delivery Share	$ per DS		407.25	464.98	449.98	539.85	548.13	540.87	535.46
Usage fee	$ per ML usage	47.51	41.53	37.83	44.82	59.79	48.73	49.62	49.20
Water Share	$ per ML WR		6.06	5.59	5.73	5.73	5.73	5.73	5.73
Service Charge	$ per Assessment		100.00	97.62	95.19	92.83	90.52	88.27	86.07
D&S - unmetered	$ per property	365.59	365.50	365.99	365.50	365.50	365.50	365.50	365.50
D&S - metered	$ per ML WR		407.25	464.98	449.98	539.85	548.13	540.87	535.46
Robinvale - Drainage									
Region	$ per ML WR total	0.33	0.27	0.25	0.23	0.22	0.20	0.19	0.18
District	$ per ML WR total	1.51	1.64	1.25	1.92	1.54	1.68	1.61	1.72
Drainage div 1	$ per WR/DS	12.57	99.76	83.90	76.83	61.93	67.06	64.12	68.15
Drainage div 2	$ per WR/DS	9.43	74.82	62.93	57.62	46.44	50.30	48.09	51.11
Drainage div 3	$ per WR/DS	6.29	49.88	41.95	38.41	30.96	33.53	32.06	34.07
Drainage div 4	$ per WR/DS	3.14	24.94	20.98	19.21	15.48	16.77	16.03	17.04
WWD									
Ist div	$/Ha	8.24	8.67	7.91	6.67	7.82	7.21	7.54	7.47
2nd div	$/Ha	4.12	4.33	3.94	3.33	3.91	3.61	3.77	3.73
3rd div	$/Ha	2.06	2.17	1.98	1.67	1.95	1.80	1.88	1.87
Service Charge	$ per Assessment		100.00	97.62	95.19	92.83	90.52	88.27	86.07
Millewa									
Rural access – house	$ per connection	440.77	383.37	349.28	398.94	423.06	425.65	447.50	439.49
Rural access - scrub	$/Ha	0.3941	0.3427	0.3124	0.3481	0.3777	0.3940	0.3844	0.951
Rural access - stocked	$/Ha	1.5793	1.3709	1.2496	1.3924	1.5078	1.5760	1.5375	1.5804
Delivery - rural	$ per kl	0.1391	0.1215	0.1074	0.1265	0.1342	0.1350	0.1419	0.1394
Urban access – offtake	$ per connection	440.77	383.37	349.28	398.94	423.06	425.65	447.50	439.49
Urban access - no offtake	$ per connection	221.10	191.68	174.65	199.47	211.53	212.83	227.75	219.74
Delivery - urban	$ per kl	0.4174	0.3646	0.3319	0.3794	0.4024	0.4048	0.4256	0.4180
Service Charge	$ per Assessment		100.00	97.62	95.19	92.83	90.52	88.27	86.07
Diverters									
Licenced Volume	$ per ML	12.25	4.24	4.00	3.26	3.27	2.81	2.78	2.63

$ 1/1/07	Units	2006	2007	2008	2009	2010	2011	2012	2013
Water Share	$ per ML		6.06	5.59	5.73	5.73	5.73	5.73	5.73
Regional Drainage	$ per ML	0.33	0.27	0.25	0.23	0.22	0.20	0.19	0.18
Licenced Volume Dartmouth	$ per ML	22.45	4.24	4.00	3.26	3.27	2.81	2.78	2.63
Water Share	$ per ML		14.10	16.56	14.10	14.10	14.10	14.10	14.10
Annual Permit	$ per customer	110.19	110.00	110.31	107.00	107.00	107.00	107.00	107.00
Service Charge	$ per Assessment		100.00	97.62	95.19	92.83	90.52	88.27	86.07

A4.5 Overview of customer consultation

There were no new obligations raised for the rural business. Consultation with customer consultative committees relevant to the Water Plan has included proposed investments, impact on prices and changes to renewal funding options.

At the last meeting, LMW Officers met each committee to go over the various financial components.

The meetings started with a refresher on the regulatory pricing structure such as the “building block” and components thereof and demand forecast. Following on, the meeting covered:

- Proposed overall rural operating costs and programs
- Further breakdown of Opex, into each district and by function.
- Proposed rural capital expenditure and priorities – summary and detailed.
- Proposed revenues.
- Proposed tariff increases.

In responding to LMW’s last Water Plan, the ESC raised a number of concerns about the basis for renewals funding using an annuity approach. LMW subsequently engaged consultants to review the impact of alternate renewal funding methods (RAB approach vs renewals annuity). The alternate methods and impact on prices were presented to the Customer Service Advisory Committees, who endorsed the proposed transition to a RAB approach.