



LOWER MURRAY
WATER

Corporate Plan

2019 - 2020



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1 Acknowledgement of Traditional Owners

Lower Murray Water operates within the traditional lands of First Nations People; these groups are, starting from the furthest upstream group along the Murray (Mil) and moving downstream through to the Western edge of our area at the Victorian South Australian Border:

The Barapa Barapa Peoples, the Wamba Wemba Peoples, the Wadi Wadi Peoples, the Tatti Tatti Peoples, the Latji Latji Peoples, the Nyeri Nyeri Peoples and the Werigia Peoples.

Lower Murray Water proudly acknowledge the traditional owners and custodians and respect their connection to both their land and waterways.

Importantly, we at Lower Murray Water also acknowledge that the land and water in which we operate, is still the life blood of the traditional owners of this land. The stories that connected the ancestors to their world still connect the First Nations Peoples of this area today.

The land and water are to be respected and nurtured, to be in keeping with these First Nations Peoples.



2 Executive Summary

This Corporate Plan reports on the second year of Water Plan 4 (“WP4”) for the twelve months to the end of June 2020. The Corporate Plan is structured around our vision, mission and our objectives.

Our future, through on-going reform and cultural change will be built around three pillars:

- Water Plan 4;
- Water for Victoria; and the
- Letter of Expectations (“LOE”).

Lower Murray Water (“LMW”) is one of the few hybrid water utilities in Victoria. It is the most remote water corporation from Melbourne and combines an urban water business with an irrigation water business, plus other functions delivered for private diverters and the Mallee Catchment Management Authority (“MCMA”). As such, our business is inextricably linked to the regional economy with its exposure to agricultural commodity price fluctuations and to the risks associated with a single water source, the River Murray. We work very closely with the MCMA and regional councils, and have strong relationships with health, education, police and aged care.

We have 201 FTE staff (including all positions and vacancies) to deliver a reliable supply of drinking water to around 74,000 urban customers, and irrigation water to 4,762 irrigation water customers. We also provide compliance and regulatory services to 1,165 private diverters on the Murray River. We are a resilient essential services provider.

The first year of WP4 has been a successful year for LMW. Our achievements over the year include:

- Working with LMW’s Strategic Advisory Committee, Customers, DELWP, MDBA and interstate agencies to develop and test protocols to manage “shortfall” deliverability events;
- Commencement of Sunraysia Modernisation Program Stage 2 construction;
- Formation of LMW’s first Reconciliation Action Plan “Reflect” and enhancing LMW’s relationship with local traditional owner groups;
- Commencement of the installation of UV disinfection as secondary barriers at four Water Treatment Plants to improve the quality of our drinking water;
- Continued development of “customer engagement” and improving customer and stakeholder relationships;
- Management of energy price risk through the implementation of our progressive procurement strategy and installation of over 700 kilowatts of solar panels;

- Continued development of our Safety management system to improve safety performance in a systematic way;
- Establishment of the LMW Diversity working group;
- Appointed lead agency for the Victorian Murray Floodplain Restoration Project (“VMFRP”) partnership;
- Contributing to the use of LMW controlled waterways for recreation through the provision of public infrastructure; and
- Shared the environmental and cost benefit from being a member of the Intelligent Water Network (“IWN”) and large-scale renewable project, Zero Emissions Water (“ZEW”).

LMW enters 2019-20 with a new Managing Director, Mr Anthony Couroupis and a clear plan to deliver the commitments made in WP4, including our obligations under Water for Victoria and LOE. Our rural customers are benefiting from strong horticultural markets with profitable returns from almonds, table grapes and citrus driving investment and growth in our region. This has flow on effects into the broader local economy ultimately driving growth in LMW’s urban business.

Low water allocation in 2019-20 due to an ongoing drought is a key risk for LMW’s rural customers. Although strong horticulture prices and margins will allow most horticultural commodity types to compete in the water market to secure supply, there is some risk that in a very low allocation year, less profitable commodities such as wine grapes may come under financial stress due to high water prices. Conversely a constrained water allocation position in 2019-20 may partially mitigate the water deliverability risk due to reduced demand.

Similarly, low allocations are a risk to LMW’s urban business. Our general strategy is to continue to hold a buffer of permanent water entitlement of 50% above our forecast urban usage. This reserve plus the prudent use of water restrictions will enable LMW to ensure continued supply of water to our urban customers.

These key risks of drought and deliverability and how LMW mitigates these risks will continue to be a focus for our strategic planning.

Over the next year we will progress:

- Development of business cases for investment in water efficiency infrastructure for our irrigation districts;
- Continued improvements on customer engagement and services and how we integrate this engagement into our business wide strategic planning;
- Implement our capital works plan to deliver the agreed outcomes for our customers;
- Continuing our progress in safety as we deliver a safety system which is compliant with AS4801;

- SMP2 to completion to deliver additional water to rural customers west of Merbein and south of Red Cliffs. We will also consult with the ESC regarding the additional revenue into our rural revenue cap;
- Providing healthy water services for the urban customer, maintaining services with continuous improvement while containing costs¹;
- Key water savings and environmental outcomes through our role as lead agency of the partnership for the Victorian Murray Floodplain Restoration Project;
- Continuing to provide regional leadership through our Northern Mallee Integrated Water Management Forum (“NMIWM”) which brings together LMW, MCMA, Mildura Rural City Council;
- Working with aboriginal and community representatives as part of Shared Services in Sunraysia (“SSiS”) for a coordinated approach across eight local agencies in health, education, aged care and water;
- Our diversity working group to encourage awareness, acceptance, support and recruitment across gender, disability, age and cultural background;
- Efficiencies in the use of electricity and development of organisational capability while continuing to take steps towards meeting our pledge for emissions reductions;
- Being a selective adopter of technologies, both in our core business and in Information & Communication Technology; and
- Responsible financial management to enable us to deliver the planned services while providing price certainty and service reliability, strengthening our internal processes for compliance with the Standing Directions, Asset Management Accountability Framework and the Victorian Government Risk Management Framework.

Our Board and Executive are excited by the challenge of contributing to the strength and sustainability of this region.

¹ Our bills are amongst the lowest in Victoria and we will maintain downward pressure on prices for our customers.

3 Statement of Corporate Intent

3.1 Our Vision

Our Board's vision is that by 2023 LMW will be a leading regional water corporation in Victoria by:

- Close engagement with our community and customers
- Being resilient in times of adversity and change
- Being a regional leader.

We will deliver outcomes to our communities by:

- Catering for sustained growth in our urban business.
- Promoting sustainable growth in our rural business.
- Being sustainable, measured by finance, a productive culture and a lighter environmental footprint.

We are aware of the challenges LMW faces over the coming years. Working closely with our customers, local government, developers and other utility providers will play a part in leading transformation and delivering a strengthened community.

3.2 Our Mission

Our mission² is to:

- Provide water services in a sustainable, reliable and timely manner
- Maintain positive and transparent relationships with our customers and other stakeholders
- Contribute to the economic, social and cultural development of our region.

3.3 Our Objectives

- Customer focused - right service, right time.
- Maintaining compliant performance while improving cost effectiveness of operations and assets.
- Increasing use of modernised infrastructure across the Corporation.
- Increasing the resilience of services to changing and extreme weather.
- Managing the Corporation in accordance with expected standards of corporate behaviour.
- Managing the Corporation's assets and finances responsibly and sustainably.
- Providing an engaged, skilled and diverse workforce to deliver our vision and mission.
- Providing our services equitably to respect our diverse community.

² LMW Strategic Plan 2015-18.



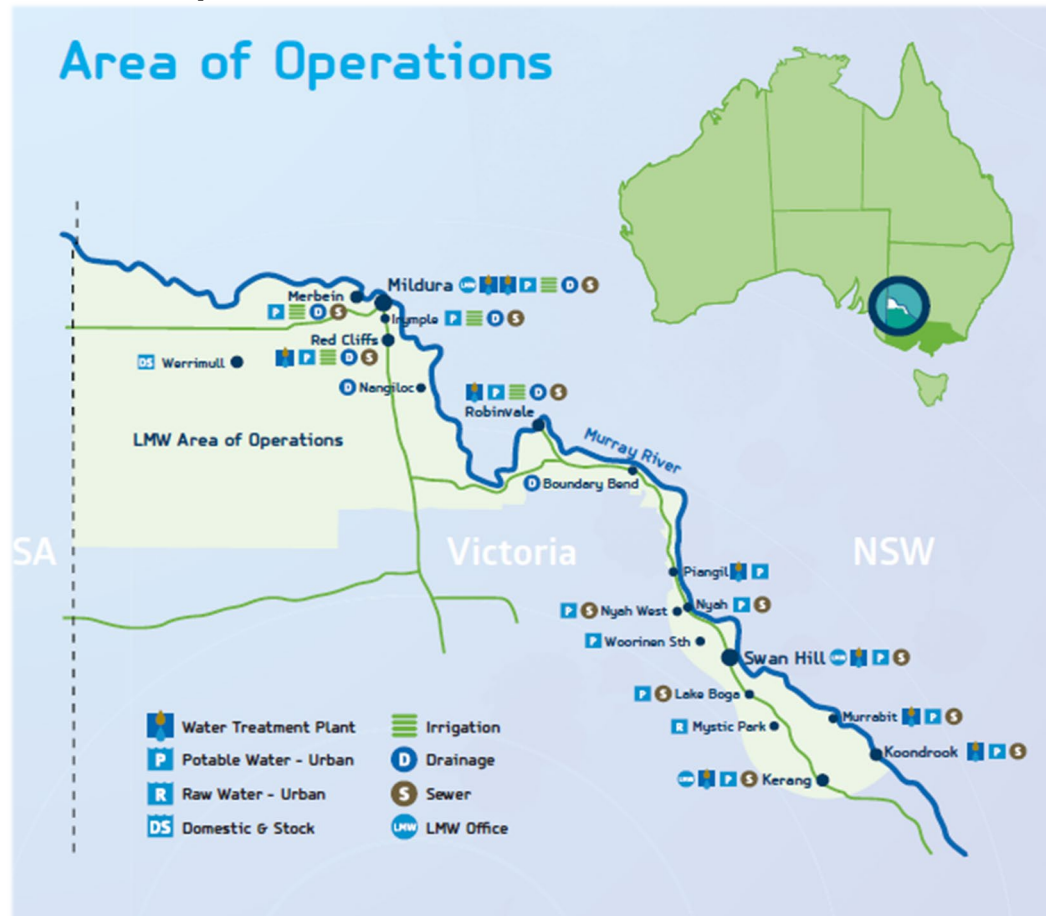
3.4 Our Services

LMW provides:

- Urban water services to 14 townships via 9 treatment plants to over 74,000 people along the Murray River from Koondrook to Merbein;
- Wastewater collection, treatment and effluent re-use and disposal services to 11 towns via 9 treatment plants;
- Irrigation - river quality water services to 2616 irrigation and 1856 stock and domestic customers in the four pumped irrigation districts of Mildura, Merbein, Red Cliffs and Robinvale, to 290 Millewa rural district customers and areas of the waterworks district of Yelta;
- Management of the region's urban & rural bulk water entitlements;
- The collection and disposal of subsurface drainage water from the four pumped irrigation districts, as well as from private diverters in Nangiloc, Robinvale and Boundary Bend;
- Oversight of irrigation and drainage design in new agricultural developments ensuring conformity with salinity management plan development guidelines;
- Management of the private diversion licences of 1,165 water users along the Murray River in Victoria between Nyah and the South Australian border;
- The assessment and approval of licensing, water share and allocation trade applications;
- Reclaimed water for third party use; and
- Water supply delivery to important environmental and recreational sites.

In addition to security of supply, public health, water quality and environmental responsibilities, LMW recognises the crucial economic role of water from a regional and state context.

Area of Operations



3.5 Our Region

LMW's area of operation extends from Kerang to the South Australian border spanning the municipalities of Mildura, Swan Hill and Gannawarra.

Our regions incorporate many key industries such as dryland farming, irrigated horticulture (table grapes, wine grapes, dried grapes, citrus, vegetables and nuts), tourism, food and beverage manufacturing, transport and logistics, retail, health and community services.

The gross regional product per annum* is in excess of \$2.8 Billion and includes:

- The region produces a significant amount of Australia's fruit, vegetables and nuts, including 98% of all dried fruit, 75% of table grapes and 24% of all citrus;
- The Murray Darling and Swan Hill region produces 15% of Australia's red wine grape crush and 24% of Australia's white wine grape crush;
- Agriculture, forestry and fishing represents 17% of the region's Gross

Regional Product (the highest of all sectors);

- The Mildura and Swan Hill regions are nationally significant nut growing regions, specifically for almonds (68% of Australian production) and pistachios (48% of Australian production). Almond trees were the dominant crop in the Mallee catchment in 2018;
- Agriculture, forestry and fishing employs 12% of the region's labour force (the second highest sector behind retail);
- Tourism generates \$260M per annum in expenditure in the Mildura Region.

LMW recognises 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 recognises the intrinsic interrelation between this resource and the social and economic fabric of our region.

* Information obtained from Mildura Development Corporation website:
www.milduraregion.com.au/region



3.6 Our Past Performance

LMW delivered on service outcomes of Water Plan 3 (WP3) and is currently in the first year of WP4 which covers the regulatory period 2019-23.

The 2018-19 Corporate Plan operating result is forecast to be a statutory net loss of \$2.039m and is a \$4.259m improvement on the original budgeted net result loss of \$6.298m.

There are three main variances between the forecast and original operating result; recognition of additional \$2.7m revenue from SMP2 investor contracts and the Commonwealth Government; \$960k reduction of finance expenses due to borrowing \$10m less than the original 2018-19 Corporate Plan budget and a reduction in expected income tax expense.

The LMW 2018-19 Capital Works Program actual expenditure is forecast to be \$30.283m against the Corporate Plan 2018-19 budget of \$34.694m due to deferred timing of works and utilisation of the winter period for construction. During the year the SMP2 project progressed to construction stage which will complement the SMP1 project and provide greater utilisation of existing irrigation infrastructure.

The rural business has seen some rejuvenation in our irrigation districts and the urban business has seen continued growth. LMW's region experienced hot and dry weather conditions and water deliveries for the 2018-19 season is forecast to exceed the Corporate Plan rural demand by 6.9GL (6.5%). In these periods of high demand, LMW has also supplied reliable safe drinking water quality to the urban customers whose 2018-19 forecast water deliveries are also exceeding Corporate Plan.

Recent Highlights for LMW

LMW is proud to report having placed among the highest performing Victorian Water Corporations for the following metrics in 2017-18³:

- Typical household bills (regional owner occupiers)
Third lowest bills in our category at \$970 for a typical annual bill, the regional average was \$1221.00.
- Typical household bills (tenants)
Fifth lowest bills in our category at \$287 for a typical annual bill.
- Number of complaints to Energy and Water Ombudsman (Victoria) relative to sector share
Lowest number of complaints relative to sector share at 3% of complaints, while servicing 5% of the regional customers.
- Average minutes off water supply in the event of an interruption
Second lowest average of 9.6 minutes off, an improvement of 2.8 minutes from 12.4 minutes last year, the regional average was 24 minutes.
- Spills per 100 kilometres of sewer main (Priority one)
Fourth lowest result in the State with two (2) spills, the regional average was eight (8).
- Spills to customer properties per 100 properties
Fifth lowest result in the State of 0.02, overall the regional average was 0.08 a decrease of 25 percent from prior year.
- Complaints made to water businesses
Lowest total complaints per 100 customers of 0.2, the average was 0.52.

³ ESC Water Performance Report 2017-18.

- Water supply restrictions and legal action for non-payment of bills
Fourth lowest rate of water supply restrictions placed on customers for non-payment of bills whilst we recorded the highest rate for legal action taken ensuring we collect our debts without depriving customers of their important water supply.

4 Delivering Expectations

4.1 Climate Change

We have provided our Emissions Reduction Pledge to state how the business aims to reduce the amount of greenhouse gases released into the atmosphere from the growing energy needs. Our target plan is to reduce emissions by 40% or 16,576t CO₂e by 2024-25.

LMW contributes to Scope 1, 2 and 3 emissions. Scope 1 emissions are those produced directly by LMW (e.g. burning of petrol, diesel, natural gas-Methane, Carbon dioxide etc.) and include fugitive emissions from sewage treatment (Nitrous Oxide). Scope 2 emissions are associated with the organisation's consumption of electricity which itself has been generated mainly from the burning of fossil fuels (e.g. coal, natural gas); Scope 3 emissions includes all other indirect emissions by third parties (not electricity) because of the organisation's activities (e.g. business travel, waste disposal).

The business has progressive development in relation to achieving emissions reduction within our Pledge which include:

- Refinement of Energy Strategy and Implementation Plans that will be delivered over a six -year timeline for both current and new assets.
- Ongoing audits to be undertaken to support the Energy Strategy to better understand energy usage and identify energy reduction opportunities.
- An Energy Management system (EnMs) will be established for contestable sites to measure, monitor and analyse the energy performance.
- Continued implementation of Solar Base projects.
- Ongoing participation in the VicWater IWN Large Scale Renewable project.
- Assess the feasibility of Micro Grid Project-Installation of Solar and diesel generators at the remote sites.
- Audit the efficiency of aeration at LMW's wastewater treatment sites.
- Develop internal energy awareness and build the capability of our people.

Climate change will also have an increasing impact on the availability of water from the Murray River. We recognise the importance of adapting to these impacts and in 2019-20 we will improve our resilience by:

- Continue to explore future practices for recycled water and how LMW can responsibly and effectively expand this source of water.
- Lead the Mallee's multiagency school program which has a strong focus on climate change and climate change adaptability - such as LMWs permanent water savings initiative.
- Continue to work with Department of Agriculture Drought steering Committee and DELWP's working group on policies and projects including Urban Strategies guidelines and Water resources management.
- Leadership of project delivery for regional NMIWM forum.

Key activities for 2019-20:

- Finalise the Energy Management Strategy for Implementation
- Complete energy audits with large electrical loads
- Complete the installation of over 1MW of rooftop solar on selected sites
- Complete installation of aeration at wastewater treatment sites
- Continue to explore future practices for recycled water
- Build the Greensense tool for measuring Energy sources (Fuel, Power)
- Complete design for Power factor corrections
- Reductions in Energy and network cost by Demand Alert program.
- Business case analysis for Energy Upgrades and Micro Grid
- Continue with the progressive procurement of electricity from the wholesale market.
- Leadership of the Sunraysia Regional Water Balance project for the regional NMIWM forum.

4.2 Customer and Community Outcomes

Over the past 2 years LMW embarked on a journey to engage customers more deeply, broadly and earlier through the process to create the WP4. This collaborative approach will be integrated with the review of the LMW Customer Engagement Strategy⁴ to be finalised by early 2019-20.

The Strategy incorporates the values, ethics and processes of public participation as established by the International Association of Public Participation (IAP2). This Strategy has been updated to reflect the learnings

¹ LMW Customer Engagement Strategy for 2016-18

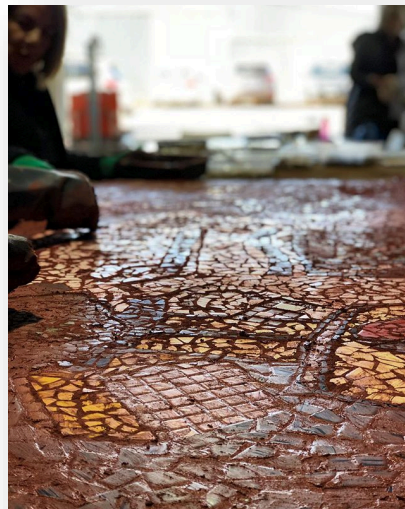
from 2017-18 to ensure our customers remain central in our decision making.

In 2019-20, we will continue to build on the positive relationships with our six rural Customer Services Advisory Committees, the overarching rural Strategic Advisory Committee, Focus Groups, Urban Customer Consultative Committee and the wider community. We will also review our customer base with the intention of identifying additional customer forums for key customer segments such as Stock and Domestic customers.

In October 2018 we coordinated the first ‘Growers Conference’ which was open to all rural customers to attend. The conference showcased speakers from LMW, DELWP and the MDBA and provided a forum for a panel discussion on matters of most interest to our rural customers. Following the success of this initiative, our customers wish to make this an annual event.

As part of our ongoing commitment to engage with our whole community we have developed our Reflect Reconciliation Action Plan (“RAP”). The LMW RAP will enable our organisation to better understand our communities’ needs and ensure we can create an environment that is welcoming and inclusive.

Our work to engage our customer and community groups aligns with our Customer at the Centre strategy to provide a better customer experience while reducing our cost-to-serve.



Key activities for 2019-20:

- Review and update LMW Customer Engagement Strategy
- Increased engagement with our customer committees and focus groups to enhance our service delivery to customers through collaboration on key matters that affect their business
- Continued support of our community through education programs and engagement art projects
- Extend IAP2 training more broadly across LMW

- Continue to develop end-to-end customer processes that enhance customer experience
- Extend our understanding of our customer's through enhanced survey techniques including net promoter score
- Increase customer's awareness of developments in water markets including risks of lower water allocations
- Facilitate the second Growers' Conference



4.3 Water for Aboriginal Cultural, Spiritual and Economic Values

We acknowledge the traditional owners of the lands within the region and the significance of water within their culture. We have prepared a Reconciliation Action Plan ("RAP") to enable us to have a greater level of understanding of the community's values. The RAP will form part of the organisation's strategy moving forward and will be implemented over the next 12 months.

LMW's First Nations engagement and consultation to date includes:

- Development of the 'Reflect' Reconciliation Action Plan
- Discussions with Traditional Owners to identify important values in water resource management and establish ties to the development of the RAP

- Development of Acknowledgement of Country and protocols for its use for LMW
- Cultural Awareness training for RAP Working Group, executive and board
- Opportunities for employment and training programs for indigenous community members
- Culturally inclusive recruitment practices for our employment opportunities

As part of implementation of the RAP we will strive to have a deeper level of involvement with traditional owner groups.



Key activities for 2019-20:

- Implementation of our Reflect RAP
- Increase collaboration with aligned and support organisations
- Assessment of tailored cultural awareness training for employees
- Undertake an Aboriginal Water Assessment and Cultural Heritage Management Plan to obtain information about areas of cultural significance

4.4 Resilient and Liveable Cities and Towns

We continue to be an active, inclusive and well-recognised community participant.

We have signed purpose statement with the Mildura Rural City Council, health, education, development and indigenous organisations to encourage

the sharing of resources. This is to foster better outcomes for the region in service provision at an affordable price. We look to progress these types of sharing arrangements across our customer regions by facilitating strong joint involvement with local government, regional development and water service provision.

Together with the Mildura Rural City Council we continue to undertake joint Strategic Planning sessions with agendas aimed to cater for the overarching goals of integrated water management and a Water Sensitive City. NMIWM has been formed with local organisations responsible for management of components of the water cycle. Four forum meetings have been held to date with participants being Mildura Rural City Council, MCMA, LMW, a local Aboriginal representative and an independent Chair.

Two DELWP-facilitated NMIWM workshops to develop a Vision and Strategic Directions Statement for the NMIWM and to identify projects that provide benefits and contribute to the resilience of the region.

We are continuing to implement the state-wide *Target Your Water Use* water efficiency program in our region. Our Schools Education Program continues with reinvigorated content. The message of Choose Tap will run through the program and be supported by the continued sponsorship of Community Water Refill Stations to eligible community groups. LMW participates in the Schools Water Efficiency Program and promotes its uptake to schools in our region. We also deliver the Community Water Rebates Program and the Community Housing Retrofit Program to our customer base.

2018 saw the sponsoring of the biennial Rural Water Awards to celebrate innovations in water savings in our service region. In 2019 we will facilitate a National Water Week event to build community awareness and understanding of water-related issues. A recent initiative, the Sunray Warriors environmental adventure program, attracted 700 students in 2018, with a goal of 1,000 for 2019.

We continue to provide opportunities for our community to be involved in our engagement art projects, with ongoing works on the Swan Hill and Mildura riverfront and Cluster Boxes in Merbein Irrigation District.

Key activities for 2019-20:

- Drought preparedness planning (urban and rural)
- Contribute to the identification and delivery of integrated water management projects in our region
- Investigate shared service arrangements with other agencies
- Continue to educate our student population through the Schools Education Program, National Water Week and Sunray Warriors
- Continue to support the community through engagement art projects



4.5 Recognising recreational values

Water is a vital feature of the region's landscape and the Murray River system. LMW endeavours to contribute to and support the community's recreational and environmental values for water.

We provide operational assistance for the Victorian environmental watering program, delivered by the MCMA. This involves delivering an allocated volume of environmental water to both Koorlong Lake and Lake Hawthorn that provides many environmental benefits.

LMW forms part of the land manager's network for the Mallee and Swan Hill regions. We support partnering land managers to investigate opportunities to improve community values, including recreational and visitor facilities in significant environmental systems. We continue to aid partnering land managers in addressing key environmental threats in our region, including pest, plant and animal control. In 2018-19, to follow up previous work with DELWP, LMW supported the MCMA to manage rabbits, boxthorn and other pest plant species at Cardross Lakes and surrounding reserves.

LMW will be supporting the expansion of key environmental monitoring partnerships, with a focus on drainage and salinity.

We are responsible for Blue Green Algae monitoring and for announcements about the effect on water quality within our region and participate in the tristate Sunraysia Regional Algal Coordination Committee.

Key activities for 2019-20:

- Support initiatives to improve recreational facilities in our region
- Participate in environmental watering programs
- Participate in key land manager partnerships
- Expansion of key environmental monitoring partnerships
- Continue to contribute to the responsible monitoring and management of Blue Green Algae events



4.6 Leadership and Culture

LMW has recruited three trainees in 2018-19; two within the Customer Experience team and one within the Asset Systems team. In addition to new trainee commencements, two of our trainees successfully completed their traineeships and moved into permanent employment within LMW in areas relevant to their completed qualification.

In response and recognition of the changing needs of our customer LMW has worked with the ESC and other participating water authorities to provide formal training and support to our employees around family violence. This training was delivered in two phases initially provided to all staff to raising awareness to help employee recognise when customer and colleagues may be affected by family violence and how to handle these situations and secondly People Management sessions providing managers with tools and strategies to support their staff who may be affected by family violence directly or indirectly through their dealings with LMW customers.



LMW has implemented a revised Occupational Health and Safety Policy and Public Statement, which is a key foundation of our OHS Management System. The public statement has undergone significant change to go beyond the current format of obligations and responsibilities, to describe LMW's commitment, approach and safety principles. It is anticipated that these changes will allow the public statement to be utilised actively within the business to drive OH&S improvements.

Key activities for 2019-20:

- Continue implementing our OHSMS Alignment to AS/NZS 4801:2001 Project Business Plan
- Approval of a revised OHS Policy and Public Statement document
- Executive Safety Committee to support resourcing decisions
- Focus on development of safe behaviours by recognising when things go right

4.7 Financial Sustainability

Financial sustainability is a critical objective for LMW and we will continue to provide all current services whilst striving for greater cost efficiencies to improve the value provided to the customer.

LMW will continue the organisation-wide review of procurement which commenced in 2018-19 to assist in identifying efficiencies and improvements

for customer value. This will be accompanied by a review of the key principles of financial sustainability and articulated in a policy for greater clarity and transparency

LMW's financial performance on the eight key financial indicators, as supplied in Appendix A - Corporate Plan Template (Key performance Indicators) and Appendix B - Performance Report, indicate that LMW remains in a sound financial position in 2019-20 and over the whole planning period by continual surpassing 6 the key indicators industry reference benchmarks.

LMW forecasts financial indicators F5 - Return on Assets and F6 - Return on Equity will not meet the industry benchmarks. This has been discussed previously between water agencies, Victorian Auditor-General's Office and DELWP. LMW record statutory financial losses due to revaluation of assets and related depreciation expenses, which in turn affect these financial indicators.

The impact on performance of high and low scenarios for key planning variables is detailed in the Sensitivity Analysis in section 11.1.

Key activities for 2019-20:

- Financial sustainability policy
- Procurement review
- Debt recovery management
- Ongoing monitoring of financial impact of drought conditions

5 Our Whole of Business Strategies

LMW's central focus for the coming year and the regulatory period continues to be to deliver the Customer Outcomes identified through our customer engagement process. We will achieve this by implementing our business strategies:

- Customer at the Centre
- Business Transformation
- Asset Optimisation
- Culture Change
- Electricity, Emissions Reduction and Reliability

These strategies run across all areas of our business and we believe they will create significant value for our customers and our people by generating efficiencies and by better using our existing resources. The more important aspects of each of the corporation-wide strategic themes are summarised below.

5.1 Customer at the Centre

LMW's strategic theme of Customer at the Centre involves:

- Engaging with customers more deeply and more broadly with a Customer Engagement Strategy designed to build strong relationships with customers, communities and partners
- Embedding customer engagement methods in our normal operations
- Delivering faster turnaround times for response to customer service requirements
- Building a strong and resilient community in our region

Our new website has now been launched with additional functionality to be included through the development of our customer portal. The portal will improve accessibility and capacity for customers to pay bills, view meter readings, view and update information and give our customers a greater access to their information and important service details such as water outages in their area, upcoming works, opportunities to give a greater level of feedback on services and future planning. The portal once developed will also improve services to developers, builders and plumbers.

In 2018-19 we reviewed and revised our customer charters for both the urban and rural businesses. These revised charters were approved by the ESC and were implemented in early 2019.

Over the past year we have also continued to build resilience and customer service skills within our customer facing employees to ensure they have a consistent and empathic approach to interacting with our customers who may be experiencing hardship or family violence.

Key activities for 2019-20:

- Expand opportunities for community involvement through our Engagement Strategy
- Development of the customer portal
- Resilience, domestic violence and customer service training for customer-facing employees



5.2 Business Transformation

Business transformation is being led through the Transform project, with the goals of streamlining customer service delivery, creating operational efficiency and reducing costs. This will enable us to serve our customers with greater flexibility and agility.

In 2018-19, Transform rolled out a new mobile friendly LMW website to serve customers better and make water ordering easier, implemented video conferencing for internal meetings and launched Employee Self Service to automate leave and payroll processes.

In this coming financial year, we will implement a Customer Portal to enable customer self-service, uplift Cyber Security and implement a business intelligence platform to automate business reporting.

Key activities for 2019-20:

- Development of the Customer Portal
- Uplift Cyber Security
- Implement business analytics

5.3 Culture Change

Between May and July 2018 Executive managers and managers conducted a series of workshops with their teams to discuss the 2018 Organisational Culture Index results focusing on collecting detailed feedback from staff on

three main areas;

- What we do well?
- What needs to improve?
- What actions do we need to take?

This feedback was then utilized in the development of team and individual performance plans for the 2018-19 performance period within LMW's Planning and Performance Framework.

Leadership Development

LMW partnered with Proteus Leadership to deliver a "Leadership by Design" program to people managers and a half day Positive Culture session to staff to provide staff at all levels of the organisation with tools and strategies to take ownership over improving and maintaining a constructive and inclusive culture.

The LMW Human Resources team is working with the Executive team, managers and staff to implement initiatives that will support the achievement of goals including attracting, retaining and developing local staff, providing exceptional leadership and investing in development of our people.

Key activities for 2019-20:

- Develop and commence implementation of a knowledge management framework
- Improve on-boarding of new employees
- Completion of the 'Leadership by Design' program

5.4 Asset Optimisation

LMW is committed to optimisation of our assets through developing and establishing fully functional and effective asset management systems and processes aligning the life cycle of asset management, from planning, asset acquisition, operations and maintenance, asset renewal and disposal, supported by information technology (systems, data) and capability (resources, skills and tools).

As LMW matures its strategic decision making around asset optimisation, protocols will be governed and decision making improved by utilisation of key asset management documentation such as:

- Asset Management Policy
- Asset Management Framework (AMF)
- Strategic Asset Management Plan (SAMP)

In 2019-20, we aim to scope the classification of our entire asset base which includes structures and equipment in the urban and rural water system, waste water systems and other assets including land, property, buildings, and vehicles. LMW will develop individual asset class plans for these assets aligning with our asset management framework and life cycle approach.

Together, these initiatives will:

- Progressively build our capacity, capability and improve our practices within asset management and optimisation, and overall maturity
- Manage risks associated with aging infrastructure
- Reduce increasing asset life cycle costs
- Achieve compliance with the mandatory regulatory requirements
- Provide improved customer service and reliability of assets

Key activities for 2019-20:

- Development and implementation of Asset Class Plans
- Development and implementation key asset management improvement projects

5.5 Electricity, Emissions Reduction and Reliability

Electricity and emissions costs comprise of over 30% of rural operating costs and around 10% of urban operating costs. The energy strategy being developed aims to drive reduction of electrical costs to the business. The factors which contribute to electricity cost for Lower Murray include;

- Energy charge - the actual electricity consumed by the site during the billing period
- Metering charge which covers the retailer's costs including managing the account and producing the bill
- Network Demand charge which reflects the costs associated with maintenance of the distribution and transmission infrastructure
Demand charges are based on peak demands (highest usage over a 15-minute interval) in any given month
- Environmental charges associated with schemes designed to encourage uptake of renewable energy and energy efficiency, including:
 - Large-scale Renewable Energy Target (LREC)
 - Small-scale Renewable Energy Scheme (SREC)
 - State Schemes (VEEC)

In 2018-19 we participated in the wholesale electricity market for large sites through a progressive procurement approach. This initiative leads to optimisation of energy and environmental costs. Over 2019-20 we aim to further refine the progressive procurement model and continue to improve

the capability of the organisation.

Key activities for 2019-20:

- Refine the wholesale electricity progressive procurement approach for large sites
- Select a demonstration site to progress integrated energy and emissions optimisation initiatives
- Explore a model for joint electricity purchasing with customers and progress as required by our customers

6 Our Rural Business

6.1 Our Customers

LMW provides untreated river water to customers through four pumped irrigation districts, domestic and stock supply and surface water diverters. A summary of customers and assets is provided in Table 1.

Table 1 Rural Customers and Assets (2017-18)

Rural customers and volumes	Statistic
Irrigation Customers	4,472
Domestic and Stock Customers	290
Private Diverters	1,165
Total Customers	5,927
Irrigation Usage	103,987 ⁵
Domestic and Stock Customers Usage	920ML
Diverters Annual Usage Limit	600,977 ML
Assets	
Pump Stations	15
Irrigation Channels	35.6 km
Irrigation Pipelines	628.8 km
Domestic and Stock	469.6 km

6.2 Rural Customer Outcomes and Strategies

From the collaboration with customers undertaken as part of WP4, LMW adopted the following four customer outcomes:

1. Supply me with water when I need it
2. Keep my costs to a minimum
3. Be easy to contact and quick to respond
4. Comply with other government obligations

⁵ Usage for 2016-17 was lower than average as a result of above average rainfall.

LMW is currently compiling data to measure performance against targets identified for completion in 2018-19 and will continue to implement action to deliver performance against these identified targets for the life of WP4.



To achieve these outcomes, our plan is to:

1. Implement Water Plan 4

WP4 is specifically based on delivering outcomes for our customers within our existing range of services so achieving these outcomes is the foundation of our strategy.

WP4 asset plans were developed within the context of a 20-year Master Plan. The Master Plan defines the optimal mix of capital expenditure and operational expenditure to ensure that the assets are renewed and maintained to deliver water when customers need it over a 20-year horizon.

The 5-year price path provides stability for customers while ensuring an appropriate allocation of risk and, particularly, electricity price risk. Customer surveys conducted as part of the consultation process show that there is an opportunity to improve customer satisfaction with the level of service being provided by LMW. Customer expectations will be met, provided LMW achieves the price path outlined in the plan and maintains the current level of water delivery reliability. However, it will be important to continue to improve engagement with customers to ensure that these expectations are managed and opportunities for improvement identified.

In the coming year we will be re-engaging our focus groups that were established for the development of the Pricing Submission. These focus

groups along with other customer engagement activities will ensure we maintain our core values of *Customer at the Centre*.

2. Strengthen Sunraysia and LMW by optimising the net economic value of the irrigation districts

We will achieve this by promoting agriculture that maximises net economic value and reduces concentration risk. Approximately 4,375Ha⁶ of agricultural land is not currently being utilised in the Sunraysia irrigation districts. Over the past few years it is estimated that about 250-300Ha per annum has been brought back into production.

Analysis undertaken by Marsden Jacobs⁷ indicates that there is potential for in excess of \$200m of net economic benefit to Victoria from bringing the remaining 4,000Ha back into production.

Similar analysis concluded that irrigation of an additional 2,000Ha on the margins of the irrigation districts, facilitated by the Sunraysia Modernisation Project 2 (SMP2), would add an additional \$40m of net economic benefit.

The base plans for Strengthening Sunraysia are:

- Commission SMP2 in November 2019. The increase in net revenue to the business is expected to be a minimum of \$800k per annum or an increase of between 30% and 50% on-going.
- Complete a business case of increasing the capacity of the in-district system to meet customer requirements with funding sourced from water loss savings. This may require upgrades to the spurs and pump station capacity that are not included in PS4. In principle funding support for the business case development has been secured from the State, subject to this business case.
- Utilise off-peak capacity. This will be confined to areas which are not suitable for table grapes and other peak season crops.

In 2018-19, LMW held 10 individual Customer Service Advisory Committee (CSAC) or Strategic Advisory Committee (SAC) meetings and six combined CSAC/SAC meetings, with a total of 165 members attending. These meetings involved key speakers from relevant organisations such as DELWP, the Victorian Resource Manager and the MDBA. Key discussion items and projects progressed through this engagement included:

- Delivery Share Review
- Capacity Sharing Project
- Deliverability risks and shortfall planning

⁶ 2018 Mallee Horticulture Crop Report, 2018 (SunRISE Mapping and Research for Mallee CMA)

⁷ Initial analysis of economic value from rejuvenation and identification of options to fast track (March 2018): Marsden Jacobs report prepared for the Sunraysia Rejuvenation Projects.

- Plumatella Management Plan
- Blue-green algae management
- Compliance
- Water availability and planning
- Water market trends
- Capital expenditure program
- Annual forward budgets per district
- A '101' educational series of popular rural water topics

The SAC also met with the Victorian Minister for Water on 1st October 2018 to highlight priorities and opportunities for improvements in the region. This meeting received positive feedback from the Minister and resulted in tangible outcomes for this region.

The inaugural Growers' Conference was held in October 2018 bringing state and federal policy makers, water managers and researchers to interact with growers. Approximately 125 irrigation customers attended, with an overwhelming positive response and request for this to be an annual occurrence. Planning is underway for the 2019 Growers' Conference.

Key activities for 2019-20:

- Complete works associated with SMP2 ready for delivery of water to new customers in 2019-20
- Complete a business case for water loss savings through upgrades to the in-district delivery system
- Design and implement an agreed management tool for sharing the capacity of the irrigation infrastructure within districts
- Implementation of Plumatella control strategies

3. Develop new value adding services and projects identified with our customers

The opportunities that are emerging are:

- Assisting irrigators to manage their watering programs through digital interfaces.
- Customers have become concerned about the sharp increases in electricity costs and have requested that LMW develop options for reducing electricity costs on an aggregate basis.
- Accessing State and Federal Government funding for upgrades and introduction of new technologies.

Key activities for 2018-19:

- Develop a river-to-crop system blueprint that maps out how we will optimise the delivery and use of water in our Rural business
- Progress Electricity, Emissions Reduction and Reliability strategy

Other opportunities will emerge and it is critical that we build constructive relationships with our customer base to understand when opportunities and risks arise.

The emerging trend towards use of Artificial Intelligence and Machine Learning may also provide future opportunities. Our ability to capture these future opportunities will depend upon building the following key capabilities:

- Digitisation of the water infrastructure and ability to undertake real time, dynamic analysis of delivery rates.
- SCADA system that enables real time analysis and feedback to customers.
- Analytical skills to understand the business in a manner that facilitates AI and machine learning.
- Commercial, business and economic analysis skills to facilitate successful funding applications.

6.3 Rural Capital Expenditure

LMW's proposed prudent and efficient capital expenditure for each year of the Corporate Plan period, across each major service category are set out in Table 2 below. The total proposed capital expenditure for the Corporate Plan period is \$35.10m and is up \$1.2m from pricing submission 4 due to the SMP2 works exceeding original estimates.

Table 2 Forecast Capital Expenditure by Service Category

	Current period	Corporate Plan Period					
Rural Service	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total CP
Irrigation	8.55	8.53	5.02	4.23	4.95	5.36	28.09
Drainage	0.22	0.60	0.23	0.30	0.31	0.34	1.78
Domestic and stock	0.37	0.06	0.06	0.06	0.07	0.08	0.34
Surface water diversions	0.17	0.17	0.13	0.13	0.13	0.13	0.69
Sunraysia Modernisation Project (SMP2)	3.10	4.20	-	-	-		4.20
Total Rural Capex	12.41	13.56	5.44	4.72	5.46	5.92	35.10

*Figures have been rounded.

LMW had forecast \$13.92m to be spent on rural infrastructure in 2018-19 with lower actual spend of \$12.41m which includes \$1.4m of corporate capital expenditure allocated to rural services. The lower spend is due to a number of construction projects being delayed to winter to align with the reduction in irrigation activity.

LMW's solar program has installed 700kW of panels across 8 sites that will contribute to reduced energy usage for the business.

Sunraysia Modernisation Program 2 (SMP2)

The Commonwealth has approved the joint funding for the SMP2 project under the National Water Infrastructure Development Fund. Private investors will also contribute over 50% of the funding. SMP2 will upgrade LMW's rural water supply network to service new irrigation developments located south of Red Cliffs Irrigation district and west of Merbein Irrigation Districts.

Projects requiring a business case submission for the Corporate Plan are defined as those over \$20m. There are no projects over this threshold but key projects for LMW for 2019-20 are summarised in per Table 3 below over the Corporate Plan period.

Table 3 Proposed Major Capital Projects and Programs

Major Rural Capital Project	Details	Service	2019-20 (\$)	Total Project Cost (\$M)	ESC Cost Driver
Irrigation Pipeline Renewals	Irrigation Mains Replacement (Mildura, Merbein, Red Cliffs)	Rural Irrigation	2.22	9.31	Renewal
Sunraysia Modernisation Project-2 (SMP-2)	Additional Channel Supply to Investors in Red Cliffs and Merbein	Rural Irrigation	4.2	7.30	Growth
Central Rising Main Replacement	Mildura Central Pump Station Replacement / Rising Main	Rural Irrigation	1.4	4.00	Renewal
TOTALS			7.82	20.61	

Most significantly, this rural capital expenditure program introduces a large investment in the renewals of irrigation infrastructure that will provide a high level of resilience in maintaining supply under all conditions. The Central Rising Main replacement is an example of ageing irrigation infrastructure being replaced that is critical to supplying customers with reliable supply. As part of the irrigation renewals the size of several pipelines have been increased to improve hydraulic constraints on the delivery system. We are also piloting devices to monitor pressure and flow through the irrigation network that will inform about potential leakage and opportunity for water loss savings. This will also enable better targeting of replacement pipe and early intervention.

Procurement efficiency has been achieved through a program approach to our contracts which has enabled purchase of bulk supplies and installations. Examples of these are electrical switchboards, pipeline materials and valves for multiple irrigation districts installation over several projects.

Future rural infrastructure delivery will seek to build opportunity and better price outcomes through further combining procurement across functional service areas, e.g. rural and urban pipelines together.

6.4 Rural Operating Expenditure

LMW's planned operating expenditure reflects initiatives expected to yield efficiency savings including improved work practices, automation of pipeline delivery systems and installation of 'live' meter reading surge.

The use of this technology will lead not only to efficiencies for LMW, but also increase customer service levels with these customers. Customers are able to access the LMW web site to view up to date water consumption, Allocation Bank Account balances, and irrigation trends along with 'live' flow rates. However, demand growth, improved service levels and increases in electricity costs offset these efficiency savings.

Table 4 sets out our proposed operating expenditure for each year of the Corporate Plan period, across each major service category. The total operating expenditure for the period is \$174.96m.

Table 4 Actual and Planned Operating Expenditure

Cost Category	Current Period	Corporate Plan Period					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total Corporate Plan
Irrigation	27.02	22.91	24.26	24.59	24.93	25.30	121.99
Drainage	0.94	1.00	0.98	1.00	1.02	1.03	5.03
Domestic and stock	1.84	1.85	1.83	1.86	1.87	1.91	9.32
Surface water diversions	1.57	1.41	1.47	1.52	1.55	1.59	7.54
Non controllable costs	6.05	6.13	6.20	6.23	6.25	6.27	31.08
Total prescribed opex	37.42	33.30	34.74	35.20	35.62	36.10	174.96

*Figures have been rounded.

The table separates out the costs that are not controllable by LMW which relate to Goulburn-Murray Water bulk water costs, the environmental levy contribution.

Controllable operating expenditures are expected remain fairly steady over the planning period with small increases on average per annum over the period based on 1.33% CPI for 2019-20 and 2.3% onwards. Material expenditure impacts are described below.

Electricity

The primary increase in controllable operating expenditure is due to the forecast increase of electricity prices. In year 2018-19, electricity costs equate to approximately 30% of LMW's overall controllable costs. Forecast power costs based on LMW's already contracted energy requirements for 2019-20 and thereafter a forecast price path provided by power pricing experts, Ernst & Young. Their price forecast was modelled on LMW's power consumption, energy demand profile, energy tariffs and water usage/delivery forecast.

Labour

Labour costs are forecast to increase by 3.25% annually with the successful completion of the Enterprise Bargaining Agreement (EBA) 2019 after the previous EBA expired on 30 June 2018. To offset these labour increases, efficiency measures will be implemented through the business transformation.

6.5 Rural Pricing

The tariff structures of all rural districts remain unchanged for the Corporate Plan period 2018-19 to 2022-23.

LMW uses the locational pricing method to set prices for rural services and each district has its own tariffs. The existing structure is based on unbundling principles to provide the customer with transparency on what they pay for within their account. Prices are calculated for each district based on forecast demand of volumetric water delivery, growth and planned operating and capital expenditure investment.

In determining the tariff price requirements, costs that are incurred by an individual district directly are attributed to that service area. Indirect costs, such as corporate overheads are allocated in proportion to the number of assessments of each district.

The form of price control remains as a revenue cap. The revenue the rural business can raise for regulated services is capped as approved by the Essential Service Commission. LMW has a price adjustment mechanism for electricity developed due to the volatility and uncertainty surrounding the electricity market. The electricity price adjustment has not been triggered for 2019-20.

The revenue cap is forecast to be exceeded in 2018-19 due to the additional water demand due to the dry and hot conditions throughout the irrigation season. With the reduced water demand forecast for 2019-20 (see section 10.2) the revenue is expected to return back within the approved revenue cap with prices following the price path from the pricing submission indexed for CPI.

The prices set for the rural districts contain small decreases and small increases in real terms however after indexing using the March 2019 CPI of 1.33%, all districts will see an increase in 2019-20.

The pass-through fees for Goulburn Murray Water's Entitlement Storage Fees and are unknown at this time but have been increased with CPI. The DELWP Water Share Fees have been indexed in line with the Victorian Treasurer's indexation rate of 2.5%.

Refer to Appendix C - Tariff Schedule Summary for the forecast price paths of rural services.

The annual bill impact of a rural reference customer by district is:

Rural District	2018-19	2019-20	\$ Impact	% Impact
Mildura	\$14,139.25	\$14,384.77	\$245.52	1.7%
Mildura HP	\$20,056.77	\$20,809.57	\$752.80	3.8%
Merbein	\$11,425.85	\$11,617.69	\$191.84	1.7%
Red Cliffs	\$12,193.25	\$12,467.69	\$274.44	2.3%
Robinvale	\$21,632.13	\$21,767.25	\$135.12	0.6%
Private Diverters	\$11,652.89	\$11,803.21	\$150.32	1.3%
Millewa - Rural	\$8,301.67	\$8,320.33	(73.49)	-0.9%
Millewa - Urban	\$896.05	\$900.46	\$4.41	0.5%
Yelta Water Works	\$1,652.28	\$1,656.59	\$4.31	0.3%

Reference customers usage is based on 100ML/annum usage for irrigation customers, 400kL for Millewa Urban, 4300kL for Millewa Rural, 3ML for Yelta Water Works, and 1000ML for diversions customers.

Refer to Appendix C - Tariff Schedule Summary for the forecast price paths of the rural services.



7 Our Urban Business

7.1 Our Customers

LMW pumps and treats raw water from the Murray and Loddon Rivers and from Goulburn-Murray Water irrigation channels and supplies both residential and commercial/industrial sectors. LMW also collects and treats wastewater from these customers. Table 5 below summarises customer and asset data for urban water and sewerage.

Table 5 Urban Water Supply and Sewerage Customers and Assets (2017-18)

Urban customers and volumes	Water supply	Sewerage
Permanent Population Served	72,597	62,781
Equivalent Residential Connections	30,367	26,544
Equivalent Non-residential Connections	6,934	10,047
Total Equivalent Connections	37,301	36,592
Water Consumption or Wastewater Collected: Residential	14,700 ML	
Water Consumption or Wastewater Collected: Non-residential	4,523 ML	
Total Volume Water Supplied / Wastewater Collected (ML)	19,224 ML	5,980 ML
Assets	Water supply	Sewerage
Treatment plants (No.)	9	10
Pumping stations (No.)	38	113
Water mains / sewers (km)	964 km	652 km

7.2 Urban Customer Outcomes and Strategies

The Urban Customer outcomes developed during the consultation process for WP4 still resonate with our customer base. Delivery of the actions and outputs associated with these outcomes will help us achieve our vision of becoming a leading regional water utility.

The following seven urban customer outcomes:

1. Keep my costs to a minimum
2. Be easy to contact and quick to respond
3. Provide me with consistent, safe, clean drinking water
4. Provide me with reliable sewerage services
5. Be present and active in the community
6. Be mindful of our environment
7. Comply with other government obligations

To achieve these outcomes our plan is to:

1. Implement Water Plan 4

The five key strategic themes which shape our five-year plan are:

- Customer at the Centre
- Business Transformation
- Asset Optimisation
- Culture Change
- Electricity, Renewables and Emissions.

The strategic themes are strongly aligned and are integral to delivering the agreed customer outcomes as shown below in Table 6.

Table 6 LMW Strategy Area Alignment to Customer Outcomes

Customer Outcome	Strategic Theme				
	Customer at the Centre	Business Transformation	Asset Optimisation	Culture Change	Electricity
Keep my costs to a minimum	✓	✓	✓	✓	✓
Be easy to contact and quick to respond	✓	✓		✓	
Provide me with consistent, safe drinking water	✓	✓	✓	✓	
Provide me with reliable sewerage services	✓	✓	✓	✓	
Be present and active in the community	✓	✓		✓	
Be mindful of our environment			✓	✓	✓
Comply with other government obligations		✓	✓		✓

While implementing WP4 and applying the key strategic themes which underpin it, we also plan to improve our urban business and prepare for the future through the following activities.

2. Leverage our investment in operational technology

We have made considerable investment in upgrading the electrical and controls systems of our water treatment plants and reticulation systems over the past years. The additional data and control functionality that is now available through ClearScada will enable us to optimise our processes. This, combined with planned investment in UV systems as secondary barriers, will make our water treatment processes more robust and capable of providing

safe drinking water during poor raw water quality events such as floods, Blue Green Algae events and black water events.

The enhanced control functionality will enable automated responses to issues that currently require manual intervention. It is planned that eventually artificial intelligence and machine learning will build on the foundational steps we have taken. Investment of resources in this area will ultimately deliver highly robust processes which produce water consistently at reduced costs.

During 2018-19:

- Conducted trials on predictive coagulation software. The initial results are favourable indicating that better process control and chemical savings are achievable.
- Conducted trial of PI software as a data analytics tool through IWN
- Encouraged WTP operator led innovations such as different coagulant trials, process changes to instigate biologically active filters
- Commenced UV installation at four Water Treatment Plants

Key activities for 2019-20:

- Finalise business case for Coagulant dose prediction software
- Continue optimisation of reporting and predictive analytics
- Finalise telemetry and metering upgrades for key operational data collection
- Apply lessons learnt from initial UV installations across remaining sites
- Investigate pilot projects for innovation and optimisation

3. Be an early adopter of technology

Being a relatively small water utility, we will continue to adopt proven technologies that allow us to deliver our customers' desired outcomes more efficiently. Being aware of emerging technologies and having business processes which allow efficient implementation will allow us to prepare for future challenges. We will maintain our links with the technical community through water industry contacts and continue to engage with the broader water community through key events such as Ozwater and through representative bodies such as VicWater. Advances in digital metering and the Internet of Things that are being trialled by the broader industry are expected to bring benefit to our business. Although LMW has limited budget to fund research and development, by adopting proven technology we can efficiently capture savings for our customers.

Key activities for 2019-20:

- Maintain linkages with broader industry
- Implement Customer Portal for sub division applications
- Improve Cyber Security to increase the resilience of our services

7.3 Urban Capital Expenditure

Total proposed urban capital expenditure for the Corporate Plan period across each urban service category is \$79.76m and is set out in Table 7 below.

Table 7 Forecast Capital Expenditure by Service Category

	Current Period	Corporate Plan Period					
Service Category	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	TOTAL CP
Water	9.54	10.83	11.74	8.84	10.04	14.07	55.52
Sewerage	8.85	7.92	3.98	3.89	3.51	4.94	24.24
Total capital expenditure	18.39	18.75	15.72	12.73	13.55	19.01	79.76

*Figures have been rounded.

LMW had forecast \$21.18m to be spent on urban infrastructure in 2018-19, with an actual spend of \$18.39m which includes \$1.7m of corporate capital expenditure allocated to urban services. This lower than forecast spend is the result of a number of large urban projects being delayed due to higher than estimated market costs and the need to challenge these price outcomes for our customers.

A summary of the major urban capital projects for 2019-20 is provided in Table 8 below.

Table 8 Major Urban Capital Projects

Major Urban Capital Project	Details	Service	2019-20 (\$)	Total CP Project Cost (\$M)	ESC Cost Driver
Koorlong Wet Weather Storage	KLG - WWTP Construct 400 ML Wet Weather Storage No 1	Urban Sewer	3.75	4.50	Improvements
UV Treatment	Installation of UV at all Urban Water Treatment Plants	Urban Water	3.00	11.40	Improvements
Pipeline Renewals	Replace Trunk Mains for Piangil and Lake Boga	Urban Water	1.12	5.00	Renewals
Swan Hill North WTP	6ML Ground Level Storage and Pump Station	Urban Water	0	4.70	Growth
Purchase of Water	Purchase of Water to maintain Urban water entitlements	Urban Water	1.12	5.82	Growth

Major Urban Capital Project	Details	Service	2019-20 (\$)	Total CP Project Cost (\$M)	ESC Cost Driver
Rehabilitation of Sewers	Sewer Rehabilitation Program including access chambers and house service lines	Urban Sewer	0.50	5.25	Renewals
WTP SCADA and Control Upgrades	Upgrade Control and SCADA at Various Water Treatment Plants	Urban Water	0.96	3.10	Improvements
Mildura Pipelines	New Trunk Mains - Mildura and Merbein	Urban Water	0.20	1.40	Growth
TOTALS			10.65	41.17	

The urban capital expenditure investment in both renewals and improvement projects, creates a balance between keeping LMW's asset base maintained and developing innovative solutions for the future. The installation of ultra-violet light to all of LMW's water treatment processes is a key project and will create a secondary disinfection barrier to chlorine resulting in quality improvements across the urban water supply for LMW customers.

Essential upgrades to our waste water treatment network will be delivered including a winter storage at Koorlong waste water treatment plant that will support the growing population and environmental sustainability. The urban pipe replacement program will continue to change-over old pipework and reduce the incidence of pipe burst around the network and enhance resilience of treatment plants to weather extremes with installation of back-up power supply and standby plant.

Procurement efficiency has also been achieved through a program approach to contracts which has enabled purchase of bulk supplies and installations. Examples of these are electrical switchboards, pumps, generators and other materials. LMW has now also established a sewer subdivision contractor panel to be utilised over the duration of Corporate Plan period.

Future urban infrastructure delivery will seek to build opportunity and better price outcomes through further innovative procurement, including establishing other contracting panels, such as water mains construction and control system integration.

7.4 Urban Operating Expenditure

In general terms, LMW's proposed services represent an incremental improvement on current service levels. Customers have advised they are highly satisfied with LMW service level and that they wish to keep costs to a minimum.

LMW's planned operating expenditure reflects business transform initiatives with improved work practices that are expected to yield efficiency savings. However, increases in costs related to electricity, demand growth and improved service levels offset these savings.

Table 9 sets out our proposed operating expenditure for each year of the fourth regulatory period, across each major service category. The total forecast operating expenditure for the Corporate Plan period is \$211.5m.

Table 9 Actual Forecast and Planned Operating Expenditure

	Current Period	Corporate Plan Period					
Cost Category	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total Corporate Plan
Water	22.40	21.89	22.03	22.83	23.50	24.03	114.28
Sewerage	17.09	16.75	16.42	16.87	17.17	17.43	84.64
GMW bulk water charges	0.66	0.66	0.73	0.76	0.78	0.80	3.73
Environmental Contribution	1.77	1.77	1.77	1.77	1.77	1.77	8.85
Total Expenditure	41.92	41.07	40.95	42.23	43.22	44.03	211.5

*Figures have been rounded.

Table 9 above separates out the costs that are not controllable by LMW (GMW bulk water charges and environmental levy contribution). Controllable operating expenditures are expected to remain reasonably steady over the Corporate Plan period.

Labour

Labour costs are forecast to increase by 3.25% annually with the negotiation of an Enterprise Bargaining Agreement (EBA) after the previous EBA expired on 30 June 2018. To offset these labour increases, efficiency measures will be implemented through business transformation projects.

Electricity

The primary increase in controllable operating expenditure is due to the forecast increase of electricity prices. In year 2018-19, electricity costs are approximately 30% of LMW's overall controllable costs. LMW forecast electricity costs based on LMW's already contracted energy requirements for 2019-20 and thereafter a forecast price path provided by power pricing experts, Ernst & Young. The forecast price path was modelled on LMW's power consumption, energy demand profile, energy tariffs and water usage/delivery forecast.

A power engineer has been recruited for energy operational savings and for LMW to respond to its greenhouse gas emission pledge. LMW is acting on its customer feedback to support and approve of LMW being mindful of the environment whilst operating and doing business.

LMW will progressively implemented UV treatment over the planning period, adds further to energy and maintenance costs. Customers have confirmed that they want consistent, safe and clean drink water.

Chemical costs

To minimise chemical costs and the effect of customer growth, we have entered into a purchasing partnership contract and will implement the Asset Optimisation strategy.

LMW will install UV treatment at all water treatment plants as a secondary barrier to ensure safe drinking water. The UV treatment process and additional maintenance of the UV system have been included in the years following construction and commissioning.

Environmental Levy

LMW's environmental levy contribution, has been increased from \$1m in 2017-18 to \$1.765m per annum - totalling an estimated \$2.8m over the Corporate Plan period.

7.5 Urban Pricing

The urban pricing is regulated by the Essential Services Commission (ESC) who completed their review of LMW's urban pricing submission for 2018-19 to 2022-23 and released their final determination on the 19 June 2018.

The tariff structures for the urban customers remain unchanged for the Corporate Plan period 2019-20 to 2023-24. LMW uses the postage stamp pricing method to set prices for urban services and all urban townships have common pricing for tariffs.

The urban's form of price control remains as a price cap. The ESC's final determination sets the maximum prices LMW can charge for services with price adjustments mechanisms for the cost of debt and CPI. LMW included a price adjustment mechanism for electricity developed due to the volatility and uncertainty surrounding the electricity market. The electricity price adjustment has not been triggered for 2019-20.

In determining the tariff price requirements, costs that are incurred by an individual service directly are attributed to that service. Indirect costs, such as corporate overheads are allocated in proportion to the number of customers of each service within the urban business.

The prices set for the urban services contained small decreases of -0.35% in real terms in line with the final determination price path however after indexing for March 2019 CPI of 1.33% and cost of debt adjustment -0.23%, services will see a small increase in 2019-20.

Refer to Appendix C - Tariff Schedule Summary for the forecast price paths of the urban services.

The annual bill impact of an urban reference customer⁸:

Urban Service	2018-19	2019-20	\$ Impact	% Impact
Water Service Charge	\$206.32	\$207.04	\$0.72	
Water Usage	\$278.82	\$279.77	\$0.95	
Sewerage Service Charge	\$487.04	\$488.76	\$1.72	
Total Reference Customer Bill	\$972.18	\$975.57	\$3.39	0.35%

8 Victorian Murray Floodplain Restoration Project

LMW has been nominated by the Minister for Water to be the lead agency for the Victorian Murray Floodplain Restoration Project (“VMFRP”).

The VMFRP consists of nine environmental works projects that aim to return a more natural inundation regime across approximately 14,000ha of high ecological value Murray River floodplain in Victoria through the construction of new infrastructure and the modification of existing infrastructure.

Delivery of the VMFRP is to be undertaken under a two-stage process:

- Stage 1: Preparation of detailed works designs and statutory approval applications, developing operating strategies, stakeholder consultation and refining cost of any risks and impediments to the implementation of the program will also be carried out.
- Stage 2: Construction and commissioning. Funding for Stage 2 is subject to the outcome of a go/no go Gateway process that will involve an assessment by the Commonwealth and the agreement to a National Partnership Agreement for the implementation of SDL adjustment measures.

Stage 1 activities and timeframes are stipulated in the Victorian Supply Measures Environmental Works Program between the Commonwealth and the State. These activities include approvals and designs for each of the 9 projects and are to be completed by March 2021 with a budget of \$29M.

The milestones and timeframes within the Commonwealth/State agreement will be reflected in a funding agreement between the State and LMW and service level agreements between LMW and the partners involved to deliver the nine projects.

The project will be ring-fenced from the existing LMW urban and rural businesses and is fully funded under the funding agreement.

The project scope involves the detailed work designs and statutory approval applications for the construction and installation of regulators, pump stations and culverts, as well as improvements to existing levees and tracks

⁸ Reference customer: water and sewerage charge using 477kl of water.

to guide flows and retain water on the floodplain.

This project is important for LMW and its customers as it will:

- Protect and restore the health of Murray River floodplain ecosystem by increasing the frequency and duration of watering events at nine sites of high ecological value. Specific ecological objectives have been determined for each of the nine VMFRP projects and timeframes have been established for achieving these targets;
- Contribute, under the Basin Plan, to the 605 GL of consumptive water use offsets under the Sustainable Diversion Limit (SDL) Adjustment Mechanism which in turn will reduce the socio-economic impact of SDL water recovery on irrigation communities. The package of supply measures, including the nine Victorian VMFRP projects, were confirmed in May 2018⁹.

9 Our Corporate Services

9.1 Capital Expenditure

The “corporate” indirect capital expenditure for WP4 is a total of \$14.4m (real 1/1/2018 dollars), with \$3.0m budgeted for 2018-19.

A total of \$2.5m was spent on “corporate” capital across 2018-19 and has enabled LMW to invest in building operational efficiency, improvements and resilience.

Expenditures include:

- Transform Project by the Business Technology Services group, which has seen workforce mobility and access to information technology, such as on-line timesheets and access to other web-based platforms.
- Investment in new generator and solar PV system at the Fourteenth St office which will lower operating costs, provide resilience to any power network outages and assist in delivering on the greenhouse gas emission reduction pledge.
- Office renovations and carpark improvements at the Fourteenth St office to enable improved utilisation of internal office and external spaces.
- Updating of fleet, machinery and equipment to enable LMW staff to work safely, efficiently and effectively.

⁹ Basin Plan was amended in December 2017 to reflect supply measures but was subject to a disallowance that was resolved in May 2018

9.2 Operating Expenditure

Operating, Maintenance and Administration Expenses

A new Enterprise Bargaining Agreement was successfully negotiated between staff and management with the agreement coming into effect in 2018-19. The agreement runs for three years with salary increases of 3.25% per year for the agreement's duration.

LMW continue to review positions made vacant by employee departures, by assessing the need to refill the position given new business processes and succession planning. This maintains downward pressure on labour costs.

LMW plans to maintain the current level of annual ICT expenditure throughout the Corporate Plan period 2019-24. Business Transformation activities are primarily performed by two dedicated staff whose wages constitute the only additional costs.

The successful implementation of electronic timesheets throughout 2018-19 saves duplication of paper and entering timesheets into the payroll system and allows managers to approve staff timesheets anytime, anyplace using any device.

The Business Transformation's major task throughout 2019-20 will be a web-based portal to enable customer, developers and plumbers to engage with LMW in a more efficient manner.

10 Planning assumptions

We assess and manage the material risks and opportunities that may affect the achievement of our objectives. Our approach to risk management is aligned with the Australian and international standard AS/NZS ISO 31000:2009 *Risk Management - Principles and guidelines*.

We monitor water quality in the River Murray and water allocations as they are released by the Resource Manager. In the event of an extreme dry period or a water quality event that is sufficient to render water acutely toxic or unusable for established local uses, our Drought Preparedness Plan is enacted.

Our broad objectives for risk management are to assist achievement of corporate objectives and to continually improve corporate governance and management.

10.1 Key rural risks and mitigations

- Non-compliance by customers erodes confidence in the water markets and erodes LMW's ability to manage deliverability shortfall events:
 - Implement the LMW Compliance Strategy.
 - Continue to educate customers on the importance of compliance and on how to use the Water Register.

- Implement the updated Customer Charter.
- Reduced water allocations result in higher prices and financial distress to customers:
 - Continue engagement with customers on the likelihood and impact of lower allocations.
 - Improve communication with customers of forecast allocations.
- Water delivery from the Murray river is constrained leading to rationing of LMW customers, loss of production and financial distress:
 - Deliver SMP2 to increase the resilience of the irrigation districts to low water allocations.
 - Work closely with DELWP and MDBA to develop delivery shortfall policy and management protocols.
 - Continue to improve reporting of developments and water usage in the LMW region.
 - Continue to work with DELWP to assess the impact of continued developments.
 - Participate in the development of the new Land and Water Management Plan.
 - Continue engagement with customers on the likelihood and impact of lower allocations.
 - Improve communication with customers of forecast allocations.
- Electricity costs increase above the forecast leading to price increases and reputational damage:
 - Review and amend price forecast to ESC on annual tariff approval.
 - Manage electricity costs through the Electricity, Renewables & Emissions Project Control Group (ERE PCG).
- Pledge obligations result in increased cost of electricity and renewables:
 - Ensure all projects are completed on a commercial basis with clear hurdle requirements.
- Operational efficiencies are not achieved or delayed leading to higher costs and upwards pressure on prices:
 - Implement the Transform project for key rural business processes.
 - Establish comparative operating efficiency benchmarks and targets.

10.2 Rural demand

For WP4, the University of Melbourne conducted an analysis of the linkage between evapotranspiration rates and average daily temperatures.

Combined with the long-term warming trend of the Sunraysia climate this report gave confidence to LMW that its demand forecast showing increases in demand for the irrigation districts in the coming years of the pricing submission was realistic.

Since the formation of the WP4 demand forecast, new information has come to light and has been used in conjunction with previously held assumptions to re-assess the 2019-20 demand forecast.

The MCMA has published the 2018 Mallee Horticulture Crop Report which contains updated statistical information on the irrigation district's crop produce types, on-farm irrigation methods and size of irrigated land currently in production.

The Northern Victoria Resource Manager released its 1 April 2019 outlook for the 2019-20 irrigation season whereby the Murray System outlook for seasonal determination of high-reliability water shares on dry inflow conditions is 53%.

Murray System Outlook for Seasonal Determination of High-Reliability Water Shares

Inflow Conditions	1 July 2019	15 August 2019	15 October 2019	17 February 2020
Wet	32%	62%	100%	100%
Average	12%	37%	74%	100%
Dry	0%	24%	40%	53%
Extreme Dry	0%	14%	18%	21%

The Bureau of Meteorology released its 26 April 2019 climate outlook whereby the Bureau's climate model suggests a short-lived El Nino may develop in the coming months. If El Nino does develop, it would increase the chances of drier conditions in the east of Australia.

The previously held assumptions are still valid where re-development within the irrigation districts was forecast however have been adjusted for the 2019-20 irrigation season due to the risk of an allocation determination of approximately 60%.

WP4 assumed growth of plantings within some districts and it is considered that this will continue as the growth is in the table grapes, almonds and citrus categories. The irrigators re-developing have already invested in the plants and in some cases have had supply waits of up to 2 years. The water requirements for the new plantings are also relatively low compared to mature plants.

It is considered that allocation water will be available in the open market when irrigators need to purchase allocation to top up their water available for use.

It has been assumed that the irrigators in the table grape, almonds and citrus commodity categories will purchase allocation water even if the market is expensive. The white wine and dried fruit due to commodity prices are assumed to reduce water usage even though they will purchase small

volumes of allocation to crop or moth ball variety sections that are less profitable. These irrigators are assumed to use 25% less water.

The red wine irrigators are seeing improved prices for their commodity with up to \$700 per ton being offered, it has been assumed that they will purchase small volumes of water to top up water available for use with caution. These irrigators are assumed to use 15% less water.

In assessing the 2019-20 demand levels for the irrigation districts, the 2018 Mallee Horticulture Crop Report has been used and only applying these volumetric reductions to the production % for each commodity and irrigation district contained within the report.

The assessed reductions for 2019-20 season is 9,478 ML from WP4 demand for the irrigation districts, as below.

District	Table Grapes/ Nuts/Citrus	Wine Grapes	Dried Fruit	Vacant	Other	Reduction ML from WP4
Mildura	34%	16%	12%	25%	13%	2,812
Merbein	18%	10%	21%	36%	15%	2,339
Red Cliffs	22%	25%	8%	24%	21%	3,968
Robinvale	91%	3%	0%	2%	4%	359
Total Reduction						9,478

The 2018 Mallee Horticulture Crop Report also highlights that the districts have moved extensively to efficient on-farm irrigation methods being drip and low level.

For the Millewa district, the demand has been assumed to reduce by 20% being 170 ML. The Millewa's water availability is based on the district's Bulk Water Entitlement ("BWE") as the Millewa customers do not have individual water shares. It has been assumed that LMW would purchase allocation water to cover any allocation water shortfall. Due to the dry conditions and the Bureau of Meteorology outlook, low level of feed available for live-stock, it is considered that the stock levels will be reduced and therefore the water demand. The Millewa has in past years used more than its BWE, with the lower allocation forecast LMW will need tight management of the Millewa's BWE and its customer usage.

The Private Diverters do not get billed on water usage but are billed based on the Annual Use Limit (AUL) ML as a condition of their Water Use Licence. The current level of AUL held and the projected growth remains aligned to the pricing submission and no change has been made for the Corporate Plan. The growth is within the table grape, almond and citrus commodities and we consider this growth will continue to occur.

Table 10 shows the forecast volumes for all services.

Table 10 Rural Services Forecast Volumes Summary - ML pa

Service/District	100%	60%	100%	100%	100%	100%
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Pumped Irrigation						
Mildura	35,595	30,544	33,229	33,395	33,562	33,730
Mildura HPS	4,149	3,228	3,539	3,557	3,574	3,592
Merbein	20,404	17,997	20,742	21,157	21,580	22,012
Red Cliffs	31,494	25,422	29,831	30,278	30,732	31,193
Robinvale	22,605	20,136	22,082	22,082	22,082	22,082
Total Irrigation	114,247	97,327	109,422	110,468	111,530	111,530
Stock & Domestic						
Millewa Urban	49	49	49	49	49	49
Millewa Rural	850	850	850	850	850	850
Yelta WWD	5	5	5	5	5	5
Diversers (AUL)						
Diversers	590,538	615,548	633,751	646,031	657,565	657,565

Drainage services are expected to be maintained at existing levels for the duration of WP4.

10.3 Key urban risks and mitigations

- Water security and community amenity and liveability objectives are not achieved, especially under drought conditions:
 - Maintain 50% buffer of water entitlements over water demand.
 - Establish comparative operating efficiency benchmarks and targets.
- Flood, blackwater and Blue Green Algae events causing highly variable water quality over sustained periods and associated increases in operational costs:
 - Implement strategy to leverage our investment in operational technology.
 - Continue operator up-skilling.
- Operational efficiencies are not achieved or delayed leading to higher costs and upwards pressure on prices:
 - Implement the Transform project for key urban business processes.
 - Establish comparative operating efficiency benchmarks and targets.

10.4 Urban demand

To set urban demand, which is a major consideration in setting urban prices and therefore, forecast the average water demand per equivalent connection for LMW, it is necessary to make an assumption about the average daily maximum temperature and average monthly rainfall that will apply

over the forecast period. The historical behaviour of the weather forms the basis for making these projections.

Table 11 shows the forecast annual water demand per equivalent connection using a range of historically averaged time periods.

Table 11 Forecast Annual Demand per Equivalent Connection

Average weather (length of period)	Average annual demand per equivalent connection (kL)
5 years	477.1
20 years	455.4
30 years	445.0
70 years	431.7

On the basis that a change in weather patterns has become increasingly likely, LMW proposes to use forecast demand using the average of the past five years of weather patterns. Thus, for the forecast period, the average demand per residential connection is assumed to be 477 kL per annum.

When forecasting average demand for new properties it is also necessary to take into account the fact that new lots tend to be smaller, with less water intensive gardens and homes with more water efficient appliances in homes. LMW has assumed that new properties use 80% of the water consumed by existing properties.

Non-residential consumption per equivalent connection is assumed to stay to grow that consumption grows in line with the number of new non-residential connections.

For WP4, LMW worked through this process and consider that the forecast fundamentals and assumptions are still valid.

LMW have taken into account the Northern Victoria Resource Manager's 1 April 2019 outlook for the 2019-20 irrigation season whereby the Murray System outlook for seasonal determination of high-reliability water shares on dry inflow conditions is 53%.

The Bureau of Meteorology has released its 26 April 2019 climate outlook whereby the Bureau's climate model suggests a short-lived El Nino may develop in the coming months. If El Nino does develop, it would increase the chances of drier conditions in the east of Australia.

Whilst the urban customers are on Permanent Water Saving Rules it is considered that no further water restriction will be put in place throughout the 2019-20 financial year. LMW's urban Bulk Water Entitlement is approximately 32 GL and LMW's urban allocation water available for use based on an 60% allocation would be 19.2 GL where the annual raw water demand average is approximately 21 GL. LMW will be implementing strategies to ensure adequate urban supply to meet demand.

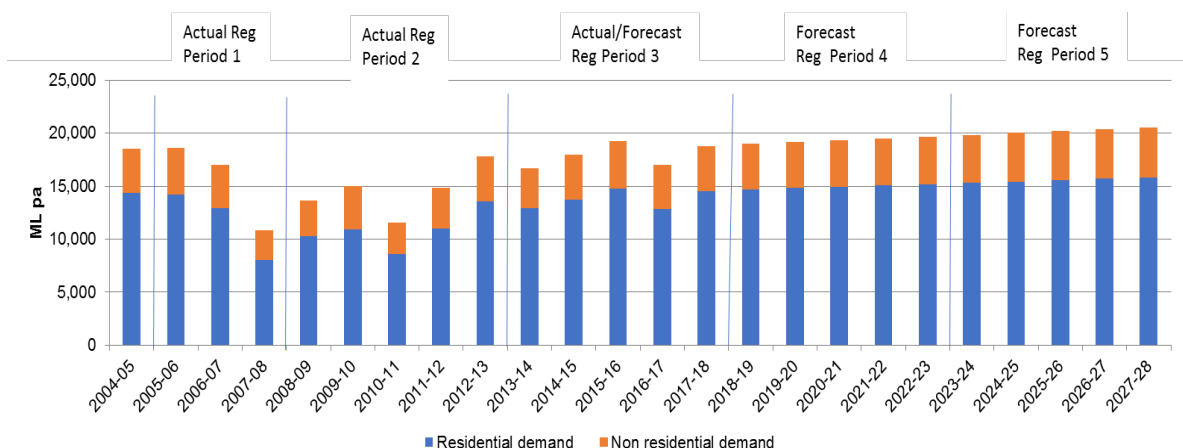
Table 12 shows the water volumetric demand forecast estimate for 2018-19 and the forecast for the remainder of WP4, based on the above connection forecasts and equivalent connections demand.

Table 12 Water Volumetric Demand Forecast - ML pa

	2018-19	2019-20	2021-21	2021-22	2022-23	2023-24
Residential demand	15,428	14,813	14,947	15,071	15,195	15,195
Non-residential demand	4,663	4,346	4,394	4,438	4,482	4,482
Total water demand	20,092	19,159	19,341	19,509	19,677	19,852

Figure 3 shows the historic actual and forecast residential and non-residential demand from 2004-05 through to 2027-28 and indicates the steady growth in customers and consequently demand over the period.

Figure 3 Actual and Forecast Volumetric Demand



Recycled Water: Koorlong is the main wastewater treatment plant where recycled water is supplied under a commercial contract to a mixed irrigation business. Around 2,400 ML per annum is available from this source, with use subject to contractual needs and quality of supplied water for its purpose. The demand recycled water is estimated at over 2,000 ML per annum and is currently limited by a lack of winter storage. Pricing for the recycled water has recently been reset to reflect allocation market prices with a discount to allow for the additional costs associated with utilising recycled water.

For the wastewater treatment plants 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.

Developed Lots: The historic developer lots and forecast for the next regulatory period are shown in Table 13.

Table 13 Forecast Number of Development Lots

Lot Type	Historic Actual / Forecast for Current Period					Projected Demand for Corporate Plan Period				
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Water - residential	357	254	261	330	334	338	341	314	317	317
Sewerage - residential	338	247	269	330	334	338	341	314	317	317
Water - non residential	7	15	10	44	44	45	45	42	42	42
Sewerage - non residential	15	17	20	20	20	20	20	20	20	20

10.5 Water Trading Plan

LMW currently holds an urban bulk entitlement of 32GL and Murray/Goulburn High Security Water shares but only use approximately 21GL on average. Traditionally the balance is either carried over or traded as allocation on the water market. Income has varied each year depending on the market and generally it has ranged from \$300K to \$1.2M.

During 2018-19 LMW sought to trade between 6 to 11GL of allocation on the open market. Depending on water allocations forecast in 2019-20 and 2020-21, LMW will consider strategies to ensure security of supply for customers as the first priority before trading any excess allocation.

LMW is currently forecasting an additional \$850K in income from allocation trading in each year of the planning period. This additional income has been included to offset against the urban revenue requirement and entitlement purchases.

11 Financial Statements

The financial statements in Appendix A have been prepared in accordance with the Financial Management Act 1994, applicable Financial Reporting Directions, Australian Accounting Standards and other mandatory professional reporting requirements.

The financial statements reflect the combination of the previous sections, demand, pricing, operating expenditure and capital expenditure.

LMW continues to show forecast statutory deficits due to the valuation of assets and associated depreciation calculations used. The result for 2019-20 is a deficit of \$5.234m which improves throughout the planning period to a deficit in 2023-24 of \$2.598m.

The forecast results remain closely aligned with the 2018-19 Corporate Plan with no significant deviations.

Although LMW's financials show an ongoing deficit, the cash position and the financial sustainability remains sound.

LMW maintains a strong cash flow from operations with the financial indicators demonstrating ability to meet interest expenses and service debt while maintaining a strong ability to finance capital works from the cash flow. See Appendix B for all financial indicator forecast targets.

Dividend

LMW's financial statements show deficits after tax over the planning period, therefore no dividend payment has been forecast.

Borrowings

For LMW to achieve its Capital Works program over the 2018-23 period, LMW has forecast the requirement to borrow externally from Treasury Corporation Victoria an additional \$14m whilst retiring debt of \$6.2m as loan principal falls due or the debt matures.

LMW's Capital Works program in year 2019-20 is \$32M which is driving the requirement for the \$14m of external funding within that year and the re-financing of \$5m of that debt that matures in 2023-24. Loans increase from \$46.5m to \$58.6m in 2019-20 then decreasing by \$6.2m to \$52.4m by the end of the planning period with the cash position remaining strong.

Table 14 Net Borrowings

\$'000	19/20	20/21	21/22	22/23	23/24
Proceeds from Borrowings	14,000	-	-	-	5,000
Repayment of Borrowing	(2,855)	(1,415)	(2,880)	(2,932)	(3,988)
Net Borrowings	11,145	(1,415)	(2,880)	(2,932)	(1,012)

LMW monitors its debt in line with its approved Treasury Management Policy.

The Department of Treasury and Finance performs an annual desktop review of the financial position of Government business enterprises. This review is performed based on financial statements presented in the prior year annual report and financial projections as submitted for the next year's budget.

Based on this review, LMW has been assigned a proxy credit rating of 'A' for the 2018-19 year which has been used for the Corporate Plan. The rating is used to calculate the Financial Accommodation Levy for new financial accommodation to be charged to the organisation.

Refer to Appendix A for full Corporate Plan financial statement templates.

Refer to Appendix B for financial performance indicators and targets.

11.1 Sensitivity Analysis

LMW has previously undertaken sensitivity analysis around demand and interest rates increasing however due the low asset/debt gearing and the Treasury Corporation of Victoria's stable cash rate outlook no interest rate analysis has been completed for 2019-20.

LMW foresee the risk of drought reducing rainfall and therefore storages

within the Murray catchments as the biggest emerging risk.

LMW has undertaken two sensitivity analysis scenarios of results:

1. Volumetric water usage increase due to a 100% water allocation declaration in 2019-20 irrigation season (currently 60%).
2. Volumetric water usage decrease due to a 40% water allocation declaration in 2019-20 irrigation season and a further dry year in 2020-21 irrigation with another was 40% water allocation declaration before returning to full allocation for the remainder of the irrigation seasons.

Scenario1

Demand forecasting increased WP4 levels for the irrigation seasons 2019-20 to 2022-24. Water demand forecasts for the sensitivity analysis were as follows.

Table 15 Urban Demand Forecasting 100% water allocation declaration

Usage (ML)	19/20	20/21	21/22	22/23	23/24
Total Usage	19,160	19,343	19,511	19,680	19,851

Table 16 Rural Demand Forecasting 100% water allocation declaration

(ML)	19/20	20/21	21/22	22/23	23/24
Mildura	36,585	36,768	36,952	37,136	37,322
Merbein	20,335	20,742	21,157	21,580	22,012
Red Cliffs	29,390	29,831	30,278	30,732	31,193
Robinvale	22,082	22,082	22,082	22,082	22,082

Based on the 60% allocation declaration used for demand forecast and the assumptions used, an additional 11GL would be used in the rural sector should an 100% allocation declaration be made in the 2019/20 irrigation season.

The additional usage would generate an additional \$621k in revenue leaving LMW in a sound financial position. The additional revenue would cause the rural revenue cap to be breached requiring LMW to reduce pricing in the 2020/21 irrigation season. The unit price reduction would only be small per customer and the price impact will vary for the different irrigation districts.

Scenario 2

Currently the major Murray catchment dams water levels as at 9th May 2019 are Hume Dam 13.49% and Dartmouth Dam 63.76%.

As per the Rural Demand analysis in section 10.2 with the following factors:

- Bureau of Meteorology climate outlook released 26 April 2019 regarding El Nino

- Northern Victoria Resource Manager's 1 April 2019 outlook for the 2019-20 Murray System seasonal determination of high-reliability water shares on dry inflow conditions to be 53%

Should the dry conditions continue, and the water allocations determination are only 40% for 2019-20 with dry conditions continuing with the further 40% allocation determination in 2020-21, water availability would be reduced significantly.

LMW has an Urban Bulk Water Entitlement of approximately 32GL and extracts approximately 21GL of raw water annually. It is considered that LMW would introduce staged restriction to manage the urban water demand.

Based on LMW's experience through the Millennial drought the demand level on staged restrictions for urban customers is below;

Restriction Level	% reduction in demand
Permanent Water Savings	0%
Stage 1	10%
Stage 2	15%
Stage 3	25%
Stage 4	30%

It is considered that Stage 2 restriction would be introduced for the urban customers with this scenario.

Table 17 Urban Demand Forecasting 40% water allocation declarations

	40%	40%	100%	100%	100%
Usage (ML)	19/20	20/21	21/22	22/23	23/24
Total Usage	16,286	16,469	19,511	19,680	19,851

The rural irrigators own their own water share entitlements and the water allocation determinations combined with water trading opportunities determine water availability on an irrigator by irrigator basis. The analysis in section 10.2 for Rural Demand describes the factors considered in assessing the demand levels for the irrigation districts for 2019-20 & 2020-21 and include:

- 2018 Mallee Horticulture Crop Report
- Irrigators in the table grape, almonds and citrus commodity categories will purchase allocation water even if the market is expensive
- White wine and dried fruit irrigators due to commodity prices are assumed to reduce water usage by 25% even though they will

purchase small volumes of allocation to crop or moth ball variety sections that are less profitable.

- Red wine irrigators due to improved prices for their commodity will purchase small volumes of water to top up water available for use with caution. These irrigators are assumed to use 15% less water
- The market will be very price competitive

Table 18 Rural Demand Forecasting 40% water allocation declarations

(ML)	19/20	20/21	21/22	22/23	23/24
Mildura	32,743	32,926	36,952	37,136	37,322
Merbein	17,412	17,820	21,157	21,580	22,012
Red Cliffs	24,912	25,353	30,278	30,732	31,193
Robinvale	19,155	19,155	22,082	22,082	22,082

The combined effect on the financial results of the reduced water usage is shown in table 19 below:

Table 19 Sensitivity analysis financial results at 40% compared to Corporate Plan assumption of 60%

	Year 1	Year 2	Year 3	Year 4	Year 5
	2019/20	2020/21	2021/22	2022/23	2023/24
	'000	'000	'000	'000	'000
Total Revenue	64,381	64,108	73,379	75,693	76,712
Total Expenditure	75,901	76,005	78,273	79,230	80,650
Sensitivity Net Results	(8,119)	(8,812)	(3,480)	(2,531)	(2,811)
Corporate Plan Results	(5,234)	(3,545)	(3,224)	(2,316)	(2,598)
Result variance (loss)	(2,885)	(5,267)	(256)	(215)	(213)

The financial sensitivity analysis indicates that LMW would increase its loss by \$2.8m in 2019-20 and a further \$5.3m in 2020-21 with Scenario 2 outcomes realised.

The reduced water deliveries generate lower volumetric charges by \$9.2m and with no urban water allocation trading in 2019-20 or 2020-21 will reduce revenue by a further \$1.7m over this period.

LMW has a large capital works program over the Corporate Plan period. The combination of this program and the 40% allocation scenario deplete LMW cash reserves. However, LMW would only need to re-finance an additional \$3m of borrowings when they mature over the 2019/20-2020/21 period

instead of repaying the debt as it matures. New borrowings for 2019-20 are forecast to be \$14m which would remain unchanged, at the end of the 2023-24 would increase from \$54m to \$57m.

LMW would need to absorb the urban revenue reduction due to the price cap form of price control.

The rural form of price control is a revenue cap, to recoup the revenue losses LMW could have to increase prices to irrigators for services over the remaining regulated pricing period.

Appendix A

Corporate Plan Template

Financial Statements

Lower Murray Water - Corporate Plan

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Year Ending 30 June	Forecast 2020 (F)	Forecast 2021 (F)	Forecast 2022 (F)	Forecast 2023 (F)	Forecast 2024 (F)	Current Forecast 2019 (F)
Revenues and Expenses (Detailed) (\$'000)						
Revenue From Core Business (As Applicable)						
Bulk Water Fixed Charges to Other Corporations	-	-	-	-	-	-
Bulk Water Charges	-	-	-	-	-	-
Urban Water Supply:						
Service / Fixed						
Residential	6,426.00	6,672.00	6,872.00	7,079.00	6,877.00	6,298.00
Non-residential	1,478.00	1,534.00	1,580.00	1,628.00	1,683.00	1,437.00
Total Service / Fixed	7,904	8,206	8,452	8,707	8,560	7,735
Usage/Volumetric						
Residential	9,945.00	10,294.00	10,574.00	10,861.00	10,737.00	10,405.00
Non-residential	3,557.00	3,694.00	3,804.00	3,919.00	4,369.00	3,469.00
Total Usage/Volumetric	13,502	13,988	14,378	14,780	15,106	13,874
Urban Sewerage						
Service / Fixed						
Residential	13,303.00	13,834.00	14,268.00	14,717.00	15,008.00	12,909.00
Non-residential	2,260.00	2,338.00	2,402.00	2,468.00	2,525.00	2,253.00
Total Service / Fixed	15,563	16,172	16,670	17,185	17,533	15,162
Usage/volumetric						
Residential	-	-	-	-	-	-
Non-residential	-	-	-	-	-	-
Total Usage/volumetric	-	-	-	-	-	-
Trade Waste Revenue by Agreement	310.00	317.00	324.00	332.00	339.00	366.00
Trade Waste Usage Revenue	-	-	-	-	-	-
Recycled Water						
Service/Fixed Charges	-	-	-	-	-	-
Usage / Volumetric Charges	186.00	190.00	195.00	199.00	204.00	197.00
Total Recycled Water	186	190	195	199	204	197
Rural Water						
Rural Water Fixed Revenue						
Irrigation	13,354.00	13,192.00	13,512.00	13,851.00	14,175.00	12,664.00
Stock and Domestic	662.00	669.00	677.00	683.00	698.00	667.00
Diversions	5,118.00	5,608.00	5,889.00	6,198.00	6,254.00	5,028.00
Groundwater	-	-	-	-	-	-
Total Rural Water Fixed Revenue	19,134	19,469	20,078	20,732	21,127	18,359
Rural Water Usage Revenue						
Irrigation	5,671.00	6,552.00	6,826.00	7,113.00	7,277.00	6,398.00
Stock and Domestic	170.00	182.00	171.00	169.00	173.00	187.00
Diversions	-	-	-	-	-	-
Groundwater	-	-	-	-	-	-
Total Rural Water Usage Revenue	5,841	6,734	6,997	7,282	7,450	6,585
Total Revenue From Fees & Charges	62,440	65,076	67,094	69,217	70,319	62,278

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	Forecast	Forecast	Forecast	Forecast	Forecast	Current Forecast
Year Ending 30 June	2020 (F)	2021 (F)	2022 (F)	2023 (F)	2024 (F)	2019 (F)
Operating, Maintenance & Administration (OMA) Expenses						
Operating and Maintenance Expense	32,933	33,178	33,701	34,568	35,369	34,159
Administration Expense	9,790.00	9,334.00	9,933.00	9,788.00	10,013.00	9,034.00
Total OMA Expenses	42,723	42,512	43,634	44,356	45,382	43,193
OMA Expenses Breakdown (Total OMA)						
Bulk water Supply	3,851.00	3,923.00	3,947.00	3,971.00	3,989.00	3,769.00
Headworks	-	-	-	-	-	-
Urban water - Treatment	2,632.00	2,823.00	2,885.00	3,028.00	3,098.00	2,860.00
Urban water - Reticulation	3,568.00	3,677.00	3,677.00	3,924.00	4,015.00	3,903.00
Sewerage - Reticulation	1,530.00	1,507.00	1,566.00	1,579.00	1,615.00	1,699.00
Sewerage - Treatment	1,892.00	1,888.00	1,943.00	1,995.00	2,041.00	2,047.00
Recycled Water	-	-	-	-	-	-
Surface Water Diversions	158.00	166.00	170.00	174.00	178.00	150.00
Gravity Irrigation	6,694.00	7,528.00	7,679.00	7,978.00	8,263.00	7,933.00
Pumped Irrigation	-	-	-	-	-	-
Stock and Domestic	335.00	292.00	298.00	296.00	332.00	631.00
Groundwater	-	-	-	-	-	-
Drainage Diversions	467.00	448.00	459.00	470.00	481.00	509.00
Other	21,596.00	20,260.00	21,010.00	20,941.00	21,370.00	19,692.00
Total OMA Expenses (Repeat)	42,723	42,512	43,634	44,356	45,382	43,193
Operating Statement (FS1) (\$'000)						
Revenue						
Service Charges	42,911	44,164	45,524	46,956	47,559	41,622
Usage Charges	19,529	20,912	21,570	22,261	22,760	20,656
Developer Contribution	1,030.00	1,053.00	1,077.00	1,102.00	1,128.00	5,959.00
Developer Contributions - Gifted Assets	1,332.00	1,363.00	1,394.00	1,426.00	1,459.00	1,389.00
Government Contributions / Grants	-	-	-	-	-	-
Investment Interest	141.00	202.00	300.00	351.00	125.00	136.00
Profit (loss) from Sale of Assets	(55.00)	145.00	(55.00)	(55.00)	(55.00)	642.00
Other Revenue	3,364.00	3,434.00	3,515.00	3,597.00	3,681.00	2,836.00
Total Revenue	68,252	71,273	73,325	75,638	76,657	73,240
Expense						
Operating, Maintenance and Administration Expense (OS)	42,723	42,512	43,634	44,356	45,382	43,193
Environmental Contributions	2,278.00	2,278.00	2,278.00	2,278.00	2,278.00	2,278.00
Interest Expense	3,195.00	3,264.00	3,078.00	2,880.00	2,690.00	3,180.00
FAL	-	-	-	-	-	-
IT	-	-	-	-	-	-
Labour	-	-	-	-	-	-
Consultants	-	-	-	-	-	-
Depreciation and Amortisation	27,510.00	28,345.00	28,917.00	29,409.00	29,995.00	27,502.00
Other Expense	-	-	-	-	-	-
Total Expense	75,706	76,399	77,907	78,923	80,345	76,153
Earnings Before Tax	(7,454)	(5,126)	(4,582)	(3,285)	(3,688)	(2,913)
Income Tax Expense	(2,220.00)	(1,581.00)	(1,358.00)	(969.00)	(1,090.00)	(874.00)
Net Operating Result	(5,234)	(3,545)	(3,224)	(2,316)	(2,598)	(2,039)
Dividends Expense	-	-	-	-	-	-
Transfers (to)/from Reserves	-	-	-	-	-	-
Other Adjustments	-	-	-	-	-	-
Net Profit (Loss)	(5,234)	(3,545)	(3,224)	(2,316)	(2,598)	(2,039)
Retained Profit (Loss) Carried Forward	(98,887)	(104,121)	(107,666)	(110,890)	(113,206)	(96,849)
Closing Retained Profit (Loss)	(104,121)	(107,666)	(110,890)	(113,206)	(115,804)	(98,888)

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	Forecast	Forecast	Forecast	Forecast	Forecast	Current Forecast
Year Ending 30 June	2020 (F)	2021 (F)	2022 (F)	2023 (F)	2024 (F)	2019 (F)
Balance Sheet (FS2) (\$'000)						
Current Assets						
Cash on Hand	4,896.00	8,453.00	13,722.00	18,800.00	22,009.00	3,217.00
Receivables	14,499.00	12,464.00	12,074.00	12,051.00	12,116.00	14,756.00
Less Provision for Impaired Receivables	(202.00)	(202.00)	(202.00)	(202.00)	(202.00)	(202.00)
Investments	-	-	-	-	-	-
Inventories	4,028.00	4,028.00	4,028.00	4,028.00	4,028.00	4,028.00
Prepayments	286.00	286.00	286.00	286.00	286.00	286.00
Other Current Assets	-	-	-	-	-	-
Total Current Assets	23,507	25,029	29,908	34,963	38,237	22,085
Non-Current Assets						
Infrastructure	934,027.00	951,838.00	966,123.00	980,610.00	1,000,716.00	906,065.00
less Accumulated Depreciation	(103,048.00)	(130,638.00)	(158,786.00)	(187,412.00)	(216,609.00)	(76,269.00)
Infrastructure WDV	830,979	821,200	807,337	793,198	784,107	829,796
Land and Buildings	25,203.00	25,335.00	25,416.00	25,499.00	25,593.00	24,920.00
less Accumulated Depreciation	(1,466.00)	(1,880.00)	(2,302.00)	(2,732.00)	(3,170.00)	(1,065.00)
Land and Buildings WDV	23,737	23,455	23,114	22,767	22,423	23,855
Plant, Equipment and Motor Vehicles	19,971.00	20,889.00	21,646.00	23,725.00	26,062.00	18,175.00
less Accumulated Depreciation	(12,399.00)	(12,487.00)	(12,576.00)	(12,667.00)	(12,760.00)	(12,313.00)
Plant, Equipment and Motor Vehicles WDV	7,572	8,402	9,070	11,058	13,302	5,862
Capital Works In Progress	19,831.00	19,831.00	19,831.00	19,831.00	19,831.00	19,831.00
Total Property, Plant & Equipment	882,119	872,888	859,352	846,854	839,663	879,344
Non-current Receivables	181.00	181.00	181.00	181.00	181.00	181.00
Deferred Tax Assets	25,491.00	25,491.00	25,491.00	25,491.00	25,491.00	25,491.00
Non-current Investments	-	-	-	-	-	-
Intangible Assets	8,497.00	9,665.00	10,861.00	12,086.00	13,327.00	7,353.00
Other Non-current Assets	-	-	-	-	1.00	1.00
Total Non-Current Assets	916,288	908,225	895,885	884,612	878,663	912,370
Total Assets	939,795	933,254	925,793	919,575	916,900	934,455
Current Liabilities						
Bank Overdraft	-	-	-	-	-	-
Current Payables	9,792.00	9,791.00	9,792.00	9,792.00	9,793.00	9,793.00
Short Term Borrowings	2,831.00	2,880.00	2,932.00	3,988.00	6,047.00	1,831.00
Finance Lease Liabilities (PPP) - current liabilities	-	-	-	-	-	-
Other Lease Liabilities - current liabilities	-	-	-	-	-	-
Employee Benefit Provision	2,317.00	2,317.00	2,317.00	2,317.00	2,317.00	2,317.00
Provision for Dividend	-	-	-	-	-	-
Other Current Provisions	-	-	-	-	-	-
Other Current Liabilities	-	-	-	-	-	-
Total Current Liabilities	14,940	14,988	15,041	16,097	18,157	13,941
Non-Current Liabilities						
Long Term Borrowings	55,776.00	54,312.00	51,380.00	47,391.00	46,344.00	45,632.00
Long Term Payables	-	-	-	-	-	-
Finance Lease Liabilities (PPP) - non current liabilities	-	-	-	-	-	-
Other Lease Liabilities - non current liabilities	-	-	-	-	-	-
Long Term Employee Benefit Provision	3,638.00	3,638.00	3,638.00	3,638.00	3,638.00	3,638.00
Deferred Tax Liabilities	135,373.00	133,792.00	132,434.00	131,465.00	130,375.00	137,593.00
Other Non-current Liabilities	1.00	2.00	2.00	2.00	2.00	-
Total Non-Current Liabilities	194,788	191,744	187,454	182,496	180,359	186,863
Total Liabilities	209,728	206,732	202,495	198,593	198,516	200,804
Net Assets	730,067	726,522	723,298	720,982	718,384	733,651
Equity						
Government Equity Contributions	633,499.00	633,499.00	633,499.00	633,499.00	633,499.00	631,849.00
Asset Revaluation Reserve	200,689.00	200,689.00	200,689.00	200,689.00	200,689.00	200,689.00
Other Reserves	-	-	-	-	-	-
Accumulated Funds (Losses)	(104,121.00)	(107,666.00)	(110,890.00)	(113,206.00)	(115,804.00)	(98,887.00)
Total Equity	730,067	726,522	723,298	720,982	718,384	733,651

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	Forecast	Forecast	Forecast	Forecast	Forecast	Current Forecast
Year Ending 30 June	2020 (F)	2021 (F)	2022 (F)	2023 (F)	2024 (F)	2019 (F)
Cash Flow Statement (FS3) (\$'000)						
Cash Flows From Operations						
Cash Receipts						
Service and Usage Charges Income	62,337.00	64,974.00	66,992.00	69,113.00	70,216.00	62,080.00
Other Customer Revenue	3,725.00	5,570.00	4,007.00	3,724.00	3,720.00	506.00
Receipts from Government	-	-	-	-	-	-
Developer Contributions	2,362.00	2,416.00	2,471.00	2,528.00	2,586.00	7,348.00
GST Refunds from ATO	-	-	-	-	-	-
Investment (Interest) Income	141.00	202.00	300.00	351.00	125.00	136.00
Other Cash Receipts	-	-	-	-	-	-
Total Cash Receipts from Operations	68,565	73,162	73,770	75,716	76,647	70,070
Cash Payments						
Payments to Suppliers and Employees	(42,723.00)	(42,512.00)	(43,634.00)	(44,356.00)	(45,382.00)	(42,056.00)
Interest and Other Costs of Finance Paid	(3,195.00)	(3,264.00)	(3,078.00)	(2,880.00)	(2,690.00)	(3,180.00)
GST paid to the ATO	-	-	-	-	-	-
Income Tax Payments	-	-	-	-	-	-
Environmental Contributions	(2,278.00)	(2,278.00)	(2,278.00)	(2,278.00)	(2,278.00)	(2,278.00)
Other Payments (inc. capital repatriation)	-	-	-	-	-	-
Total Cash Payments from Operations	(48,196)	(48,054)	(48,990)	(49,514)	(50,350)	(47,514)
Net Cash Inflow (Outflow) from Operations	20,369	25,108	24,780	26,202	26,297	22,556
Cash Flows From Investing Activities						
Proceeds/(Payment) from Investments	-	-	-	-	-	-
Payments for Infrastructure Assets	(32,310.00)	(21,161.00)	(17,456.00)	(19,017.00)	(24,925.00)	(30,283.00)
Payments for Property, Plant & Equipment	-	-	-	-	-	-
Payments for Intangible Assets	-	-	-	-	-	-
Proceeds from Sale of Assets	825.00	1,025.00	825.00	825.00	825.00	4,700.00
Net Cash Inflow (Outflow) from Investing Activities	(31,485)	(20,136)	(16,631)	(18,192)	(24,100)	(25,583)
Cash Flows From Financing Activities						
Proceeds from Borrowings	14,000.00	-	-	-	5,000.00	6,000.00
Proceeds from Government Equity Contributions	1,650.00	-	-	-	-	800.00
Repayment of Borrowings / Overdraft	(2,855.00)	(1,415.00)	(2,880.00)	(2,932.00)	(3,988.00)	(4,784.00)
Payment of Dividends	-	-	-	-	-	-
Net Cash Inflow (Outflow) from Financing Activities	12,795	(1,415)	(2,880)	(2,932)	1,012	2,016
Net Increase (Decrease) in Cash	1,679	3,557	5,269	5,078	3,209	(1,011)
Cash Held at the Beginning of the Year	3,217	4,896	8,453	13,722	18,800	4,228
Cash Held at the End of the Year	4,896	8,453	13,722	18,800	22,009	3,217
Cash on Hand per Balance Sheet	4,896	8,453	13,722	18,800	22,009	3,217

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	Forecast	Forecast	Forecast	Forecast	Forecast	Current Forecast
Year Ending 30 June	2020 (F)	2021 (F)	2022 (F)	2023 (F)	2024 (F)	2019 (F)
Key Performance Indicators						
Financial Performance Indicators						
Short Term Liquidity Indicators						
Current Assets	23,507	25,029	29,908	34,963	38,237	22,085
Current Liabilities	14,940	14,988	15,041	16,097	18,157	13,941
Net Working Capital (\$'000)	8,567	10,041	14,867	18,866	20,080	8,144
Working Capital Ratio (%)	157.3%	167.0%	198.8%	217.2%	210.6%	158.4%
Profitability Indicators						
Earnings Before Net Interest and Tax	(4,400)	(2,064)	(1,804)	(756)	(1,123)	131
EBITDA	23,251	26,483	27,413	29,004	28,997	27,769
Total Revenue from Fees & Charges	62,440	65,076	67,094	69,217	70,319	62,278
Total OMA (incl. Env Contribution) Expenses	45,001	44,790	45,912	46,634	47,660	45,471
Total Income	68,252	71,273	73,325	75,638	76,657	73,240
Total Assets at Start of Reporting Period	934,455	939,795	933,254	925,793	919,575	905,637
Total Assets at End of Reporting Period	939,795	933,254	925,793	919,575	916,900	934,455
Average Total Assets	937,125	936,525	929,524	922,684	918,238	920,046
Return on Assets (%)	(0.5%)	(0.2%)	(0.2%)	(0.1%)	(0.1%)	0.0%
Gross Operating Margin (%)	27.9%	31.2%	31.6%	32.6%	32.2%	27.0%
Net Profit Margin (%)	(6.4%)	(2.9%)	(2.5%)	(1.0%)	(1.5%)	0.2%
Underlying Result (%)	(10.9%)	(7.2%)	(6.2%)	(4.3%)	(4.8%)	(4.0%)
Debt Servicing Indicators						
Net Interest Expense (income)	3,054	3,062	2,778	2,529	2,565	3,044
Net Operating Cash Before Net Interest and Tax	23,423	28,170	27,558	28,731	28,862	25,600
Net Interest Payments (Receipts)	3,054	3,062	2,778	2,529	2,565	3,044
Cash Interest Coverage (Times)	7.7x	9.2x	9.9x	11.4x	11.3x	8.4x
Long term Interest Coverage (Times)	(1.4x)	(0.7x)	(0.6x)	(0.3x)	(0.4x)	0.0x
Long Term Viability Indicators						
Total Debt	58,607	57,192	54,312	51,379	52,391	47,463
Total Equity	730,067	726,522	723,298	720,982	718,384	733,651
Asset Gearing ratio (%)	6.2%	6.1%	5.9%	5.6%	5.7%	5.1%
Internal Financing Ratio (%)	63.0%	118.7%	142.0%	137.8%	105.5%	74.5%
Debt to Equity (%)	8.0%	7.9%	7.5%	7.1%	7.3%	6.5%
Owners Return Indicator						
Net Operating Result	(5,234)	(3,545)	(3,224)	(2,316)	(2,598)	(2,039)
Total Equity at Start of Reporting Period	733,651	730,067	726,522	723,298	720,982	733,414
Average Total Equity	731,859	728,295	724,910	722,140	719,683	733,533
Return on Equity (%)	(0.7%)	(0.5%)	(0.4%)	(0.3%)	(0.4%)	(0.3%)
Efficiency Indicators						
Total Credit Sales Revenue	63,470	66,129	68,171	70,319	71,447	68,237
Accounts Receivable at Start of Period	14,735	14,478	12,443	12,053	12,030	9,289
Accounts Receivable at End of Period	14,478	12,443	12,053	12,030	12,095	14,735
Average Accounts Receivable	14,607	13,461	12,248	12,042	12,063	12,012
Net Cash from Operations	20,369	25,108	24,780	26,202	26,297	22,556
Total Operating Cash Receipts	68,565	73,162	73,770	75,716	76,647	70,070
Accounts Receivable Turnover (Days)	84.0	74.0	66.0	63.0	62.0	64.0
Operating Cash Flow Efficiency (%)	29.7%	34.3%	33.6%	34.6%	34.3%	32.2%

Appendix B

Performance Indicators

Performance Reporting

Performance Report - Ministerial Reporting Direction 1

	KPI No.	Key Performance Indicator	Measure of	UOM	Industry Reference Point / Benchmark	2019-20 Target
Financial Indicators	F1	Cash Interest Cover - Net operating cash flows before net interest and tax / net interest payments	Ability to meet ongoing interest expense and service debt	times	> 2.5 times	7.7x
	F2	Gearing Ratio - Total Debt (including finance leases) / total assets * 100	Ability to fund proportion of assets using debt	per cent	< 50%	6.2%
	F3	Internal Financing Ratio - Net operating cash flow less dividends / net capital expenditure * 100	Measures ability to finance capital works from cash flow	per cent	> 35%	63.0%
	F4	Current Ratio - Current assets / current liabilities (excluding long-term employee provisions and revenue in advance)	Ability to meet existing liabilities in the short term (12 months)	times	> 0	1.6x
	F5	Return on Assets - Earnings before net interest and tax / average assets * 100	Measure of profitability as a percentage of assets	per cent	> 0%	-0.5%
	F6	Return on Equity - Net profit after tax / average total equity * 100	Measure of profitability as a percentage of shareholder equity	per cent	> 0%	-0.7%
	F7	EBITDA Margin - Earnings before interest, tax, depreciation and amortization / total revenue * 100	Ability to generate surplus to fund operations and asset renewal	per cent	> 0%	34.1%
	F8	Credit Rating	Evaluation of credit risk	rating	n.a	A
Water and Sewerage Service Indicators	WS1	Unplanned water supply interruptions - No. of customers receiving five unplanned interruptions in the year / total number of water (domestic and non-domestic) customers * 100	No. of water customers receiving more than (x) unplanned interruptions in the financial year (ESC REW 9)	per cent	target as specified in customer service code (number)	0%
	WS2	Interruption time - Average duration of unplanned water supply interruptions	Total duration of all water supply customer-interruptions (ESC REW 8)	minutes	target as specified in customer service code (minutes)	60
	WS3	Restoration of unplanned water supply - Unplanned water supply interruptions restored within five hours / total unplanned water supply interruptions * 100	Water supply interruption when water supply is lost and until fully restored (ESC REW6)	per cent	target as specified in customer service code (%)	99.40%
	SS1	Containment of sewer spills - Sewer spills from reticulation and branch sewers contained within five hours / total sewer spills from reticulation and branch sewers	As per ESC RES 7	per cent	target as specified in customer service code (as a % of total sewer spills)	97%
	SS2	Sewer spills interruptions - No. of residential sewerage customers affected by sewerage interruptions restored within five hours	Residential sewerage customers experiencing sewerage interruptions restored within (x) hours (ESC RES 9)	per cent	target should be average of last five years results OR Corporate Plan target (%)	97%
	C1.4 (formally WRS1)	Rural water supply deliveries - number of orders delivered/total number of orders * 100	Irrigation water orders delivered on day requested (NPR S1)		target as specified in customer service code (%)	98.0%
	C1.5	Applications completed within agreed timeframes - number of applications completed/total number of applications				85.0%
	WSR2	Unavailability of Domestic and Stock Supply - duration that domestic and stock service is unavailable in excess of on-property storage requirement/length of water season * 100	Unavailability of domestic and stock supply systems for continuous periods in excess of (x) hours as specified in service standard (NPR S3)		target as specified in customer service code (%)	0.0%
Customer Responsiveness Performance Indicators	WSR3	Groundwater supply - number of transfers processed within target period/total number of transfers processed * 100	Processing permanent transfer of surface diversion or groundwater licences within (x) days (VS 3)		target as specified in customer service code (%)	NA
	CR1	Water quality complaints - No. of complaints per 1000 customers	No. of water quality complaints regarding discolouration, taste, odour, stained washing, illness or cloudy water (ESC CRS 4)	number	target should be average of last five years results OR Corporate Plan target (number)	1.38
	CR4	Billing Complaints - No. of complaints per 1000 customers	ESC CRS 7 NPR S7 for rurals	number	target should be average of last five years results OR Corporate Plan target (number)	0.63
	CRR2	Billing and account complaints - No. of complaints per 1000 customers				0.53
Environmental Performance Indicators	E1	Effluent re-use volume (end use)	Volume of treated sewage effluent reused either by	per cent	Corporate Plan target (%)	60%
	E2	Total net CO2 emissions - URBAN Net tonnes CO2 equivalent	Net tonnes of CO2 equivalent emissions (scope 1 and scope 2 emissions only) for the whole business and its activities (ESC CRR 5)	tCO2-e	Corporate Plan target (tonnes)	16,993.0
	E2	Total net CO2 emissions - RURAL Net tonnes CO2 equivalent	Net tonnes of CO2 equivalent emissions (scope 1 and scope 2 emissions only) for the whole business and its activities (ESC CRR 5)	tCO2-e	Corporate Plan target (tonnes)	19,163.0

Appendix C

Tariff Schedule

		2018/19	2019/20	Forecast	Forecast	Forecast	Forecast
		Price	Price	2020/21	2021/22	2022/23	2023/24
Tariff and Price Component Summary	Unit	(1 July 2018)	(1 July 2019)				
URBAN PRICES		PPM - Price Path Mechanism includes CPI & Cost of Debt					
Water - Availability - Domestic & Non-domestic							
20mm	pa	206.32	207.04	PPM - 0.35%	PPM - 0.35%	PPM - 0.35%	PS5
Usage - Domestic							
First Tier	kl	0.4481	0.4497	PPM - 0.35%	PPM - 0.35%	PPM - 0.35%	PS5
Second Tier	kl	0.8157	0.8184	PPM - 0.35%	PPM - 0.35%	PPM - 0.35%	PS5
Third Tier	kl	1.0482	1.0518	PPM - 0.35%	PPM - 0.35%	PPM - 0.35%	PS5
Usage - Non Domestic							
Volumetric	kl	0.8157	0.8184	PPM - 0.35%	PPM - 0.35%	PPM - 0.35%	PS5
SEWERAGE							
Sewerage - Domestic & Non-domestic							
Availability	pa	487.04	488.76	PPM - 0.35%	PPM - 0.35%	PPM - 0.35%	PS5
RURAL PRICES							
Irrigation							
Mildura Irrigation							
Delivery Share	DS	593.28	599.36	Overall	Overall	Overall	
Delivery Fee	ML	52.89	54.55				
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*	CPI + 0.4%	CPI + 0.4%	CPI + 0.4%	PS5
Service Charge	Ass	100.00	100.00				
Drainage Div 1	DS	59.00	58.52				
Mildura High Pressure Irrigation							
Delivery Share	DS	734.24	802.76	Overall	Overall	Overall	
Delivery Fee	ML	95.15	94.39				
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*	CPI + 2.6%	CPI + 2.6%	CPI + 2.6%	PS5
Service Charge	Ass	100.00	100.00				
Drainage Div 1	DS	59.00	58.52				
Merbein Irrigation							
Delivery Share	DS	394.36	405.20	Overall	Overall	Overall	
Delivery Fee	ML	45.46	46.06				
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*	CPI + 0.2%	CPI + 0.2%	CPI + 0.2%	PS5
Service Charge	Ass	100.00	100.00				
Drainage Div 1	DS	93.72	92.84				
Red Cliffs Irrigation							
Delivery Share	DS	458.28	468.08	Overall	Overall	Overall	
Delivery Fee	ML	45.43	47.00				
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*	CPI + 1.0%	CPI + 1.0%	CPI + 1.0%	PS5
Service Charge	Ass	100.00	100.00				
Drainage Div 1	DS	94.00	92.96				
Robinvale Irrigation							
Delivery Share	DS	947.72	944.96	Overall	Overall	Overall	
Delivery Fee	ML	81.59	83.25				
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*	CPI - 0.7%	CPI - 0.7%	CPI - 0.7%	PS5
Service Charge	Ass	100.00	100.00				
Drainage Div 1	DS	89.80	88.96				
Domestic & Stock							
Millewa Rural (Irrigation)							
Delivery	kL	0.18	0.16	Overall	Overall	Overall	
Service Charge	Ass	100.00	100.00				
Rural Access - House	Connection	552.05	536.46	CPI - 1.7%	CPI - 1.7%	CPI - 1.7%	PS5
Rural Access - Scrubland	ha	0.58	0.57				
Rural Access - Stock	ha	2.36	2.37				
Millewa Urban (Irrigation)							
Delivery	kL	0.61	0.66	Overall	Overall	Overall	
Service Charge	Ass	100.00	100.00				
Urban Access - No Offtake	Connection	276.02	268.23	CPI - 0.4%	CPI - 0.4%	CPI - 0.4%	PS5
Urban Access - Offtake	Connection	552.05	536.46				
Other Stock & Domestic (Irrigation)							
Connection Charge (Pipeline)	Connection	310.40	314.53	Overall	Overall	Overall	
Delivery (Pipeline)	ML	413.96	414.02	CPI -1.1%	CPI -1.1%	CPI -1.1%	PS5
Service Charge	Ass	100.00	100.00				
Licensing							
Diversions (Irrigation)							
Operational Fee	ML/AUL	2.44	2.47	Overall	Overall	Overall	
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*	CPI +1.5%	CPI +1.5%	CPI +1.5%	PS5
Service Charge	Ass	100.00	100.00				
Non Water Users							
Entitlement Storage Fee Murray Basin HR	ML/Ent	9.10	9.22*				
Service Charge	Ass	100.00	100.00				

* Entitlement Storage Fee Estimate
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