Melbourne Water Annual Report

2018/19

VICTORIA State Government

Melbourne Water

Enhancing Life and Liveability

Enhancing Life and Liveability

For over 125 years, Melbourne Water has been planning and building for our future.

The infrastructure set up all those generations ago is still in use today – a testament to our ingenuity and foresight.

Melbourne Water is proud of the contribution it makes to Melbourne's famous liveability, by supplying high-quality drinking water, providing outstanding sewerage services, managing the region's drainage and keeping waterways healthy.

Melbourne Water does not work alone. It engages and collaborates with a wide range of partners that include Melbourne's retail water companies, councils, developers, contractors, Traditional Owner groups, the community and government agencies to deliver all that it does.

Guided by our vision of creating Healthy People, Healthy Places and a Healthy Environment, Melbourne Water's passionate team of experts helps make Greater Melbourne a fantastic place to live. We are owned by the Victorian Government and we work hard to deliver sustainable public health, financial and environmental solutions.

With the ever-present challenges of population growth, urbanisation and an increasingly changing and variable climate, we are also working hard to build a more resilient and water-sensitive city, one with a smart and sustainable water supply.

Our focus is not only to deliver exceptional essential services to the people of Greater Melbourne today, but help secure a sustainable and healthy community for the generations to come.

About this report

The *Melbourne Water Annual Report 2018/19* describes Melbourne Water activities undertaken between 1 July 2018 and 30 June 2019 to meet our customer needs, regulatory obligations and contribute towards achieving our vision of enhancing life and liveability.

Melbourne Water is a Victorian Government-owned statutory authority.

As part of our commitment to sustainability, a limited number of copies of this report will be printed. An online version and accessible text format of this report are available at Melbourne Water. **www.melbournewater.com.au**

If you would like a copy of this report in a different accessible format, please contact Melbourne Water on **131 722** (within Victoria) or **(03) 9679 7100** (outside Victoria), or email **enquiry@melbournewater.com.au**

Aboriginal Acknowledgement

Melbourne Water respectfully acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners and custodians of the land and water on which all Australians rely. We pay our respects to Wurundjeri, Bunurong and Wadawurrung, their Elders past, present and future as Traditional Owners and the custodians of the land and water on which we rely and operate.

We acknowledge and respect the continued cultural, social and spiritual connections of all Aboriginal Victorians, and the broader connection the Aboriginal and Torres Strait Islander community has with the lands and waters. We recognise and value Traditional Owners' inherent responsibility to care for and protect them for thousands of generations.

Contents

The Year in Review

Report from the Chair and Managing Director

In 2018, Melbourne was once again named as one of the world's most liveable cities. Defined by its richly multicultural society, green open spaces and diverse cultural attractions, this vibrant city has maintained its position in the top three since 2002. Melbourne Water is proud to be one of the contributors to the city's famous liveability through the delivery of essential water, sewerage, drainage and waterway management services to the community.

Like many cities around the world, Greater Melbourne is faced with a number of challenges. An increasingly changing and variable climate means a less predictable one, and an estimated population of 8 million by 2051 will only place a greater demand on our services. Diversifying our water supply to secure water for our future remains a high priority.

As part of the global effort towards sustainability, we continue to support the commitment we have made as signatories to the United Nations Global Compact. We use the objectives of the Sustainable Development Goals to help guide us in building a more sustainable future across the Greater Melbourne region and beyond, both through the delivery of our services and our strong emphasis on partnerships and knowledge sharing.

Creating more opportunities for the community to influence – and be involved in – the decisions we make continues to be at the forefront of how we do business. Community and stakeholder engagement have supported the development of key strategies and projects this year including the *Sewerage Strategy*, *Healthy Waterways Strategy* and the *Yarra Strategic Plan*. Key capital projects such as the M41 water main renewal and the Murrumbeena to Malvern flood mitigation project have both relied on early engagement to manage community impacts and help build awareness of the long-term benefits of this new infrastructure.

We know listening to our customers and engaging with the community helps improve our services. Our customer-centric approach has seen reputation scores across all customer segments – measuring satisfaction, trust and respect – remain steady and strong, with solid improvements in the developer and business segments.

Guided by the commitments made in *Water for Victoria*, Melbourne Water has made significant steps to recognise and support Aboriginal values across our services. The launch of our *Innovate Reconciliation Action Plan* in 2018, and the establishment of two new Aboriginal Engagement positions within the organisation, have helped us to deepen our knowledge and understanding of the values of water for Traditional Owners and Aboriginal Victorians. Relationships with Traditional Owners were fostered this year through large-scale projects and a number of local events and activities led by our Aboriginal Engagement team.

The warmer and drier conditions throughout 2018/19, coupled with higher demands for water, contributed to the Minister for Water's decision to order 125 billion litres of water from the Victorian Desalination Plant (VPD) for the 2019/20 financial year, the highest order to date. We continue to manage water security through objectives of the *Melbourne Water System Strategy*, which is strongly aligned to the delivery of *Water for Victoria*. This year we initiated a water security public awareness campaign in collaboration with Melbourne's retail water companies, the first to be undertaken since the Millennium Drought. This initial context setting will be followed by future messaging campaigns and specific behaviour-change initiatives over the next three years to help the community understand its role in creating secure water supplies for Greater Melbourne.

At the core of our safety commitment is our journey towards a truly generative safety culture where safety is an inherent part of everything that we do. We also pride ourselves on being innovative and challenging traditional ways of managing safety. In 2018/19, we developed a new incident reporting system which cut red tape for staff, as well as a series of new apps to support safety in the field. To foster team morale, we held a number of family day events at the Winneke Treatment Plant, Western Treatment Plant and Eastern Treatment Plant, which were well attended by over 500 people.

As a business, we continue to plan for and manage risks to our services and assets, including major disaster events. In August 2018, Stony Creek suffered devastating impacts from an industrial fire in West Footscray. Due to the incident's scale, threat to public health and the high level of community concern involved, Melbourne Water's response was immediate and extensive. Following recovery efforts, we have since developed the *Stony Creek Rehabilitation Plan* in partnership with local community and stakeholders to help restore, enhance and protect the condition of the creek and its surrounds well into the future.

This year saw two bushfire events at our major water harvesting catchments, Thomson and Upper Yarra. Thanks to best practice asset management and the strong support of Emergency Management Victoria there were no impacts to our water supply customers. Such events serve as timely reminders of the importance of managing and protecting our assets to ensure we live up to our vision of *enhancing life and liveability* for the community we serve.

We are leading the water sector with the integration of automation, machine learning and artificial intelligence into our business-as-usual operations. The adoption of this technology drives efficiency and delivers the highest possible safety standards. We proactively embrace the opportunities these technologies offer, while ensuring our staff are prepared to be water leaders in the jobs of the future.

We continue our commitment to environmental stewardship, including our transition to carbon neutral operations by 2030. This goal has led Melbourne Water to examine all parts of our business over the past year to seek opportunities to reduce our emissions. From our transition to an electric vehicle fleet and increasing our renewable energy generation, to our innovation challenge to find solutions to the global issue of scope 1 emissions from our wastewater treatment process, we are focused on the long-term environmental sustainability of our services.

Our changing operating environment also means we need to consider the financial impacts of managing population growth, the effects of climate change and ensure we continue to provide excellence in our service delivery. We are developing improved long-term modelling capabilities to help us better understand the implications of these challenges across a number of regulatory periods to manage future costs so our services remain affordable for our customers and the broader community.

In accordance with the *Financial Management Act 1994*, we are pleased to present Melbourne Water's Annual Report for the year ending 30 June 2019.

John Thwaites
Chairman

23 August 2019

Michael Wandmaker
Managing Director

23 August 2019

Our Strategic Direction

Water is central to life. Water sustains our natural environment, our communities and the economy we depend on.

By supplying high-quality drinking water, providing reliable sewerage services, managing major drainage and building resilience to flooding, and managing Melbourne's waterways Melbourne Water makes a vital contribution to our enviable lifestyle.

Our core services are essential to making Melbourne a great place to live. We are committed to finding new ways to unlock value for the community through the provision of services. This includes creating liveability benefits, integrating across our services to deliver multiple benefits, and finding new ways to embed social and environmental sustainability into our operations.

As a service delivery organisation, customers are at the centre of how we design and deliver these services. We actively look for opportunities to make our organisation easy to work with and improve customer and community experiences.

We are committed to enhancing life and liveability for the community of Melbourne and work toward achieving this by helping to create healthy people, healthy places and a healthy environment, now and into the future.

Healthy people: by providing safe, affordable, world-class drinking water and sewage treatment, and supporting Melburnians to live healthy lifestyles, we protect public health and strengthen the wellbeing of our community.

Healthy places: by managing the impacts of climate change, building our resilience to flooding across the region, and partnering to deliver sustainable land and water management, we create more desirable places to live.

Healthy environment: by being innovative with resource recovery, reducing our emissions, improving the quality of waterways and engaging with the community, we enhance biodiversity and help protect our natural assets.

Our values of care, integrity and courage are integral to the way we do business and treat one another. They are intrinsically linked to our vision of enhancing life and liveability, and guide all that we do.

Care: we put safety and wellbeing first at all times, and seek the best for our colleagues, community, customers and environment.

Integrity: we are open and transparent in everything we do, treating people with respect and taking full responsibility for our words and actions.

Courage: we empower each other to believe in ourselves, speak up, innovate and learn from our mistakes to continuously improve how we do things and achieve the best possible outcomes.

We employ a team of diverse, smart and capable people to help make Melbourne a great place to live. Our people are skilled in balancing the immediate needs of the community with the long-term needs of the environment. By utilising a process of continuous improvement, our people are supported to be agile in their approach to embrace innovative ideas.

As a statutory authority owned by the Victorian Government, Melbourne Water works hard to deliver sustainable public health, and cost-effective and affordable solutions that deliver social and environmental value, while building strong relationships with our customers, government and industry.

Delivering the Victorian Government's plan for water

Water for Victoria is the Victorian Government's state-wide water plan. It identifies priorities for managing water across the State, including the Melbourne region. The plan drives improved outcomes for communities in the way water is managed, and delivers shared benefits while addressing challenges such as climate change and population growth.

We work closely with government to deliver our services, which have been crucial in supporting Melbourne to grow into the city it is today. This Annual Report outlines our achievements in 2018/19 to meet the changing needs of the Melbourne region and addresses priorities detailed in *Water for Victoria*.

Our strategic performance

We track our performance through a set of key performance indicators (KPIs) aligned to our strategic direction. The indicators provide us with a framework for setting performance targets in the long term beyond our statutory requirements.

See our statutory Performance Report (pages 142-146) for full detail on our operational performance for 2018/19.

Cardinia Reservoir

Building a Sustainable Community

Melbourne Water is signatory to the United Nations Global Compact, the world's largest sustainability initiative.

This means we support the United Nations' (UN) Sustainable Development Goals (SDGs) that are part of the initiative, which aim to mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change while ensuring that no one is left behind. The SDGs are a common set of 17 goals that guide us in working towards a sustainable future for the communities we serve. Melbourne Water contributes to each of these 17 goals in some aspect and they are embedded into our long-term direction setting. They play a critical role in delivering sustainable outcomes through our core services to benefit our communities and helping to build a more sustainable Melbourne region.

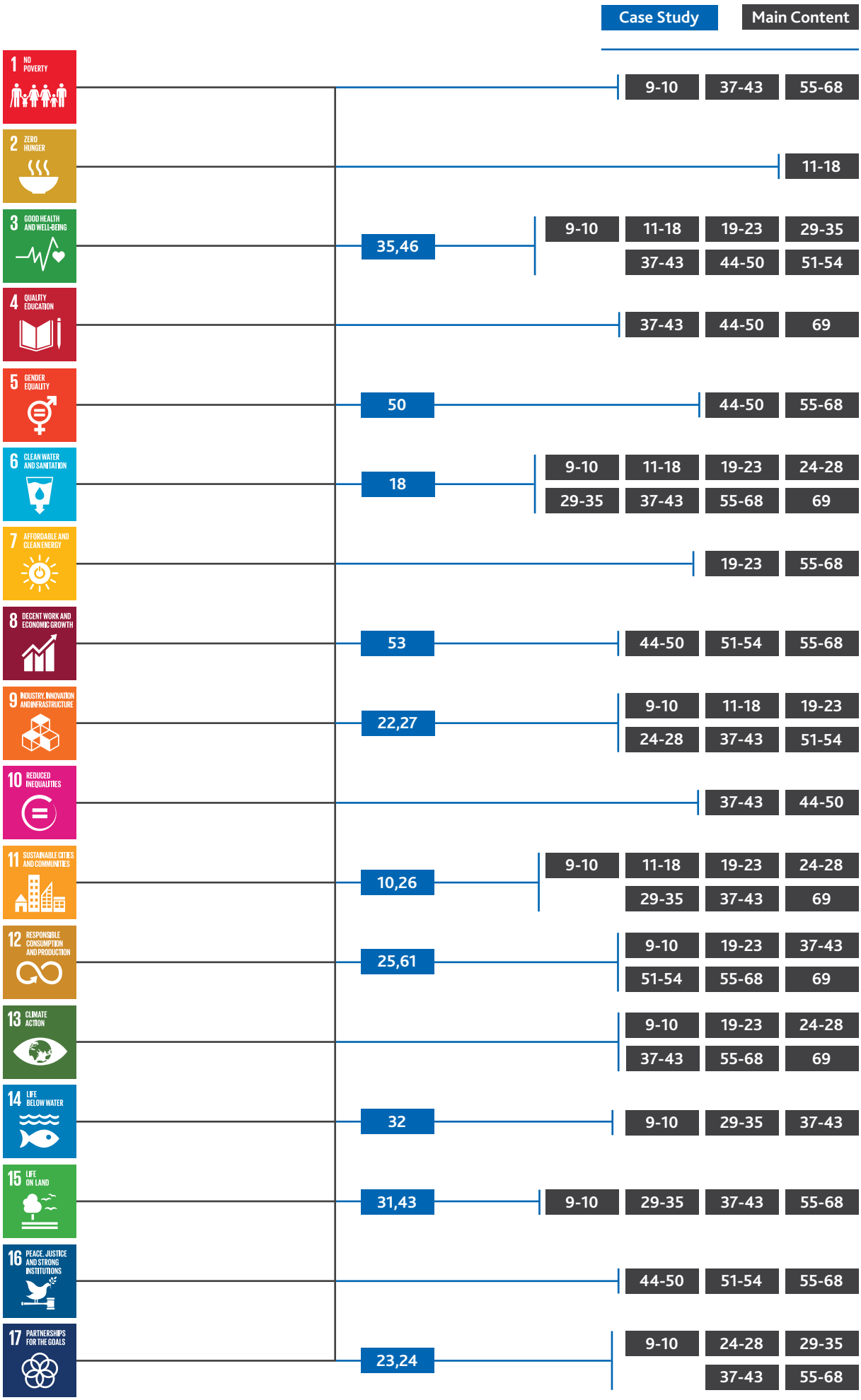
The water industry is in a strong position to advance the SDGs, not only through the vital role of clean water and sanitation in creating and delivering sustainable communities, but more broadly through its crucial role in planning for a more liveable region for future generations. Melbourne Water has a proud history of designing and implementing sustainable water management for Greater Melbourne and the SDGs provide us with a common framework to continue this work in partnership with our customers, stakeholders and the community.

The *Melbourne Water Annual Report 2018/19* provides information on how Melbourne Water is contributing across all the SDGs.

How to navigate this report from a sustainable reporting context

The interdependent nature of the UN SDGs means that by delivering our strategic direction, Melbourne Water contributes to all 17 goals. Each section of this report highlights how we contribute to relevant SDGs. Case studies throughout this report describe business activities that make targeted contributions towards the SDGs. The SDG icons are used throughout the report to highlight these contributions.

To learn more about how we determined our material goal focus, see the Global Reporting Initiative index (Appendix H – Global Reporting Initiative).


Case Study
Main Content
1 NO POVERTY
9-10
37-43
55-68
2 ZERO HUNGER
11-18
3 GOOD HEALTH AND WELL-BEING
35,46
9-10
11-18
19-23
29-35
37-43
44-50
51-54
4 QUALITY EDUCATION
37-43
44-50
69
5 GENDER EQUALITY
50
44-50
55-68
6 CLEAN WATER AND SANITATION
18
9-10
11-18
19-23
24-28
29-35
37-43
55-68
69
7 AFFORDABLE AND CLEAN ENERGY
19-23
55-68
8 DECENT WORK AND ECONOMIC GROWTH
53
44-50
51-54
55-68
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
22,27
9-10
11-18
19-23
24-28
37-43
51-54
10 REDUCED INEQUALITIES
37-43
44-50
11 SUSTAINABLE CITIES AND COMMUNITIES
10,26
9-10
11-18
19-23
24-28
29-35
37-43
69
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
25,61
9-10
19-23
37-43
51-54
55-68
69
13 CLIMATE ACTION
9-10
19-23
24-28
37-43
55-68
69
14 LIFE BELOW WATER
32
9-10
29-35
37-43
15 LIFE ON LAND
31,43
9-10
29-35
37-43
55-68
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
44-50
51-54
55-68
17 PARTNERSHIPS FOR THE GOALS
23,24
9-10
24-28
29-35
37-43
55-68

Delivering Valued Services

Melbourne Water makes a vital contribution to Melbourne's enviable lifestyle by supplying **high-quality drinking water**, providing reliable **sewerage services**, **integrating drainage systems**, building resilience to flooding, and **enhancing our waterways** and land for greater community use.

Taking an Integrated Approach to Service Delivery

Integrating the way we deliver our services will maximise benefits for our customers and the broader community.

The combined pressures of ongoing population growth and climate change affect the entire water cycle. These impacts range from an increase in demand for water to generating more stormwater in the urban environment, as well as a reduction in the amount of water captured by our water supply catchments. These challenges need an integrated approach to identify the solutions that deliver the best long-term value to the community.

Integrated Water Management (IWM) captures the idea that all parts of the water cycle are connected, from water supply to sewerage management, treatment and stormwater capture. By taking an integrated approach when planning and delivering these services, we can achieve better value for the community and better outcomes for the environment over the long term.

Effective IWM requires aligned water and land use planning, which makes sure that investment decisions consider benefits such as flood mitigation, urban cooling and a healthy environment.

Success depends on the collaborative management of water, land and related services by multiple agencies and service providers to maximise economic, social and ecological benefits to the community. This approach is informed by local values and priorities, with a focus on increasing benefits across water supply, wastewater, stormwater and flood management, healthy waterways, and landscape and community values.

IWM is critical to Melbourne's long-term resilience and the security of the whole water cycle. It has the potential to deliver long-term benefits by further diversifying the sources of water available to us, effectively increasing the capacity of the water systems to meet the needs of the growing population. These water sources can be derived from stormwater, which runs off hard surfaces when it rains, and from recycled water that is highly-treated sewage. Both can be used for a range of non-drinking purposes, such as watering gardens or growing crops, and consequently offset the demand for drinking water from reservoirs and the Victorian Desalination Plant.

Increased water source diversity extends the overall capacity of the water system to counterbalance the need for major water supply upgrades. It also secures the health of our waterways by reducing the impacts of stormwater on the environment.

Successful IWM will lead to a more resilient Melbourne, with increased water security, reduced environmental impacts and flooding, and additional sources of water that are less vulnerable to climate change. These new water sources are ideally suited to building and maintaining cool, green open spaces in a city that is becoming more densely populated.

Strategies

As a business that operates across the water cycle, Melbourne Water is in a genuine position to integrate water management in the planning and delivery of water services throughout the Greater Melbourne region in both urban and rural contexts. However, we cannot deliver these benefits alone. Success requires strong partnerships with government agencies, retail water companies, councils, the community and others to align regulation, planning and service delivery. We do this through service strategies that are developed collaboratively, and often co-owned with our partners, to establish a more comprehensive approach to IWM.

Melbourne Water made significant progress on IWM in 2018/19. The *Melbourne Water System Strategy*, *Melbourne Sewerage Strategy* and *Healthy Waterways Strategy* all identify IWM as critical to achieve our vision of enhancing life and liveability.

Case study

Engaging the community – Sunbury's water future

Sunbury has been identified as an area of growth by the Victorian State Government, with the population forecast to more than double over the next 20 years. The effects of a growing population, increasing urban development and climate change will impact the available water sources in the Sunbury region as well as local waterways.

To address these challenges, Western Water and Melbourne Water are working together to investigate future water solutions for the Sunbury region. The aim is to make the most of all available water resources, including rainfall in the catchments, wastewater from households, stormwater that runs off rooves and roads and water recycled from wastewater.

As part of the engagement process, Sunbury's Water Future community panel was formed from members of the local community. The panel explored and deliberated topics and solutions relating to the future of Sunbury's water management and delivered their official recommendations in June 2019. Western Water and Melbourne Water will provide a response to the panel's recommendations within the next three months and, over the next few years, will use the panel's recommendations to the greatest extent possible in developing a detailed integrated water management plan for Sunbury.

IWM forums

The Victorian Government's water policy, *Water for Victoria*, commits to putting IWM into practice and to ensuring community values and local opportunities are embedded in water planning. Each of the five catchments within the Port Phillip and Westernport regions has its own IWM Forum. These forums bring together State and local government agencies and other stakeholders to discuss issues across the whole water cycle and create a shared vision for the future. They provide an 'enabling environment' for identifying opportunities and developing and overseeing a prioritised work program for collaboration and IWM investment. These types of opportunities help us to protect waterways, reduce demands on the potable network, create a diverse water portfolio in an uncertain future and improve flooding risks.

During 2018/19, five Melbourne Water executives including the Managing Director participated in 11 IWM forums across the Port Phillip and Westernport regions. Seven strategic outcomes were established against which project opportunities have been assessed. A *Strategic Directions Statement* was prepared for each catchment which identified prioritised IWM project opportunities, including a mix of strategic and on-ground projects. The statements also include a commitment for forum partners to develop a catchment-scale IWM plan for each catchment area.

Facilitating IWM for urban renewal projects

Significant opportunities have been identified for investment in IWM to improve water security, re-use waste and achieve healthy waterways consistent with community aspirations. Melbourne Water is now collaborating with the Department of Environment, Land, Water and Planning (DELWP) to facilitate IWM across the following focus areas:

- wastewater
- stormwater
- land use and water planning
- governance
- decision-making frameworks.

Supply of Water Products

A safe and secure water supply is essential to our way of life – for us as individuals, for our businesses and for the environment.

Against the backdrop of a rapidly growing city and a constantly changing climate, we manage our catchments, water storages and the water transfer network to ensure water supply remains secure. We also remain vigilant in preparing for drought, flood, bushfires and other critical events.

Melbourne's water supply comprises 10 storage reservoirs with a total capacity of 1812 billion litres. Melbourne Water supplies, treats and transfers this drinking water to the city's three metropolitan retail water companies and other regional water businesses, who in turn provide it to households and businesses across Melbourne.

Melbourne is one of only a few cities in the world that draws most of its drinking water from protected, or closed, catchments. These pristine mountain catchments throughout the Yarra Ranges act as a vast natural filter, producing some of the highest quality drinking water in the world. The water harvested from these closed catchments means it needs minimal treatment, providing a low-cost source that underpins the affordability of our drinking water.

On average, about 30 per cent of Melbourne's drinking water comes from open catchments. This water undergoes additional treatment processes to ensure it meets the same quality requirements as water from closed catchments.

Maroondah Reservoir

156,700 HECTARES OF PROTECTED CATCHMENTS

and

142,000 HECTARES OF OPEN CATCHMENTS IN THE MID-YARRA

10 STORAGE RESERVOIRS

TOTAL CAPACITY

1812 BILLION LITRES

37 SERVICE RESERVOIRS

14 WATER TREATMENT *PLANTS*

221KM *AQUEDUCTS*

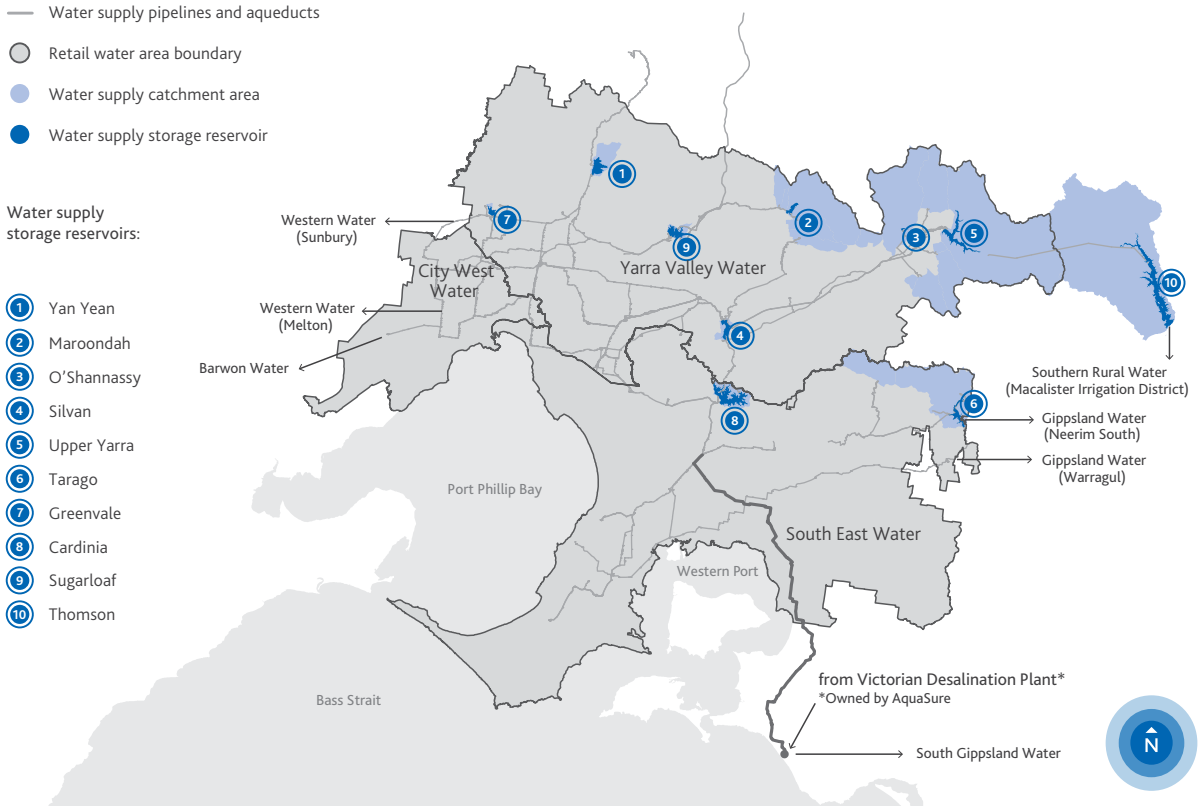
461 BILLION LITRES

HIGH-QUALITY DRINKING WATER DELIVERED TO CUSTOMERS AND THE COMMUNITY

MAXIMUM ANNUAL OUTPUT FROM THE VICTORIAN DESALINATION PLANT OF UP TO **150** BILLION LITRES

1067 KM WATER MAINS

Melbourne's water supply system



Managing supply and demand

In July 2018 the storages were 58.3 per cent full (1057.1 billion litres). In October, they climbed to 64.8 per cent (1173.4 billion litres). By June 2019 they were at 50.1 per cent (908.2 billion litres), a net decrease of 8.2 per cent (148.9 billion litres) over the year. Storage levels at 30 June 2019 were the lowest for this time of year since 2010, but still well above the 453.2 billion litres low of 26 per cent experienced in 2009. The volume of water in storage has been trending lower each year since 2013, shown in the chart on the following page.

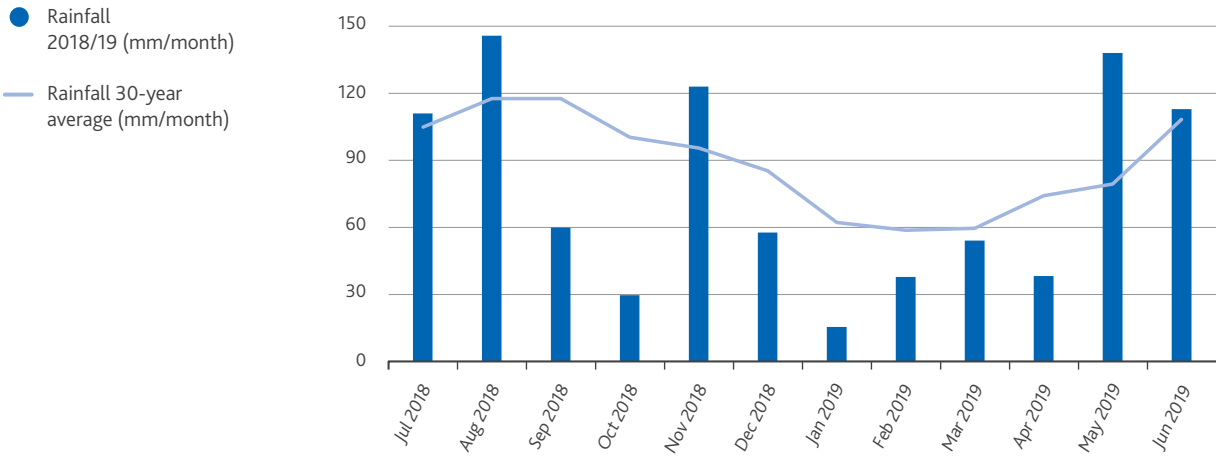
Water in Melbourne's storages typically increases during the winter-spring 'filling season' before being drawn down during the warmer, drier summer-autumn season. Winter-spring in 2018 saw catchment rainfalls (down 13 per cent) and inflows (down 22 per cent) below the 30-year average. Monthly rainfall across Melbourne's storage catchments varied from a high of 146 millimetres in August (2018), to a low of 15 millimetres in January (2019). The total rainfall of 923 millimetres for the 12-month period was 13 per cent below the 30-year average.

The monthly reservoir inflow varied from a high of 99 billion litres in August 2018, to a low of 6 billion litres in February 2019.

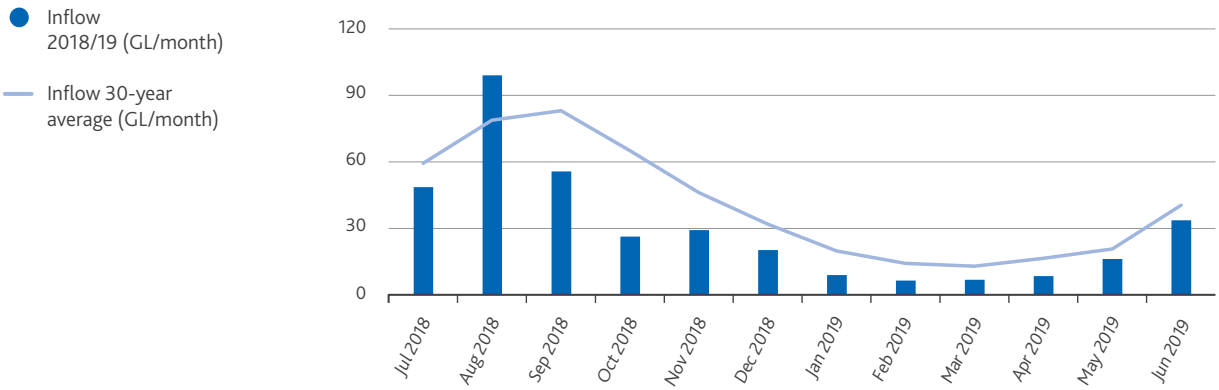
The 2018/19 total inflow to Melbourne's four major harvesting storages (Thomson, Upper Yarra, Maroonda and O'Shannassy) of 359 billion litres, was 41 per cent below the long-term annual average of 613 billion litres for the pre-Millennium Drought period (1913/14 to 1996/97).

The 2018/19 inflows were also 27 per cent below the 489 billion litres average of the last 30 years – providing recent historical context to water resources data. They were 14 per cent below average for the period since 1997, which is a DELWP scenario for future water resources planning to represent recent streamflow conditions.

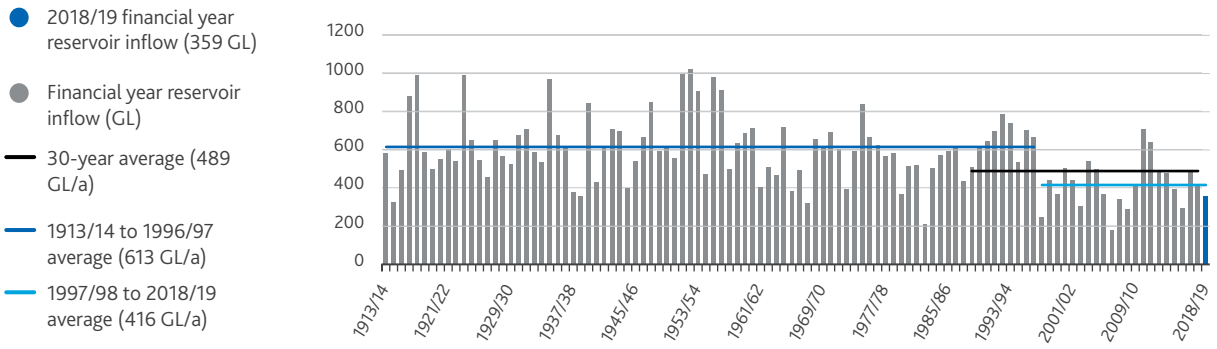
Monthly average rainfall at Melbourne's major harvesting reservoirs



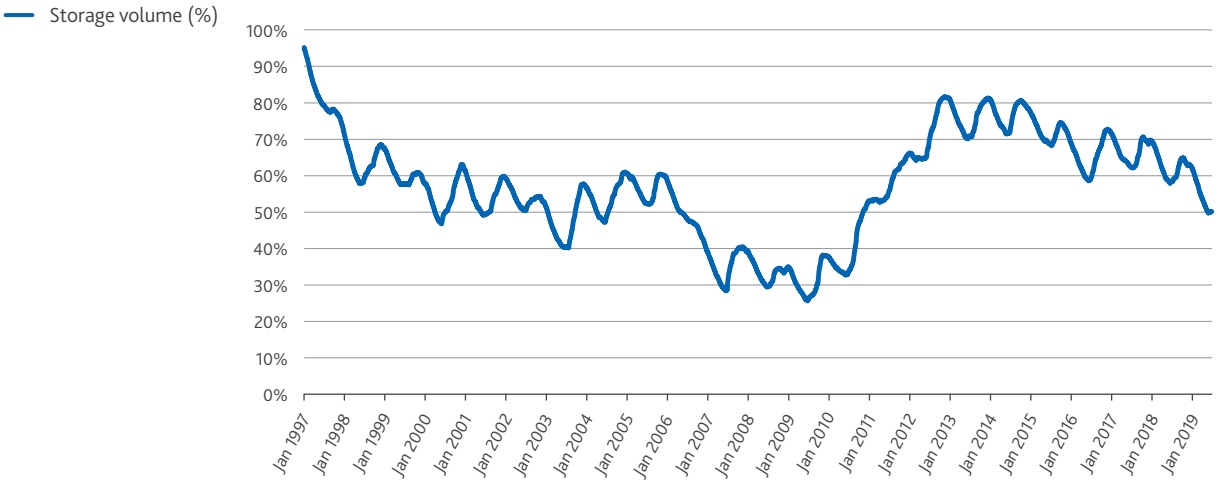
Monthly average inflow at Melbourne's major harvesting reservoirs



Long-term inflow to Melbourne's major harvesting storages (Thomson, Upper Yarra, Maroondah, O'Shannassy reservoirs)



Melbourne water storage




Yan Yean Reservoir

Water from the Victorian Desalination Plant

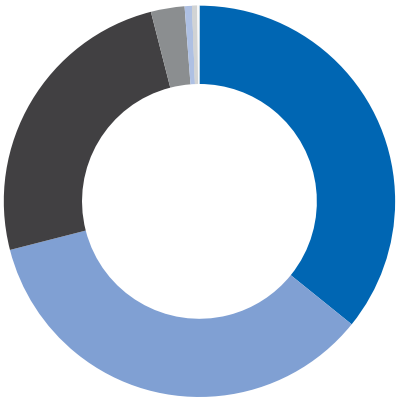
Melbourne's water system also includes the Victorian Desalination Plant (VDP), also known as the Victorian Desalination Project or Wonthaggi desalination plant, which complements our catchments by providing a secure, rainfall-independent source of high-quality water. The plant can provide up to 150 billion litres of drinking water each year.

The VDP delivered 15 billion litres of drinking water in 2018/19 at no additional charge to customers. The Minister for Water also announced an order for a further 125 billion litres to be delivered in 2019/20. Operational and planning advice provided by Melbourne Water and Melbourne's retail water companies helped inform this decision.

Supplying our customers

Melbourne Water supplied 461 billion litres of water in 2018/19, which is 3 per cent more than last year, to meet customer expectations.

2018/19 retail water consumption



- 35.8% Yarra Valley Water 164.9 billion litres
- 35.2% South East Water 162.0 billion litres
- 25.0% City West Water 115.1 billion litres
- 2.8% Western Water 12.8 billion litres
- 0.7% Gippsland Water 3.0 billion litres
- 0.4% Barwon Water Water 1.9 billion litres
- 0.2% South Gippsland Water 0.9 billion litres

Water consumption

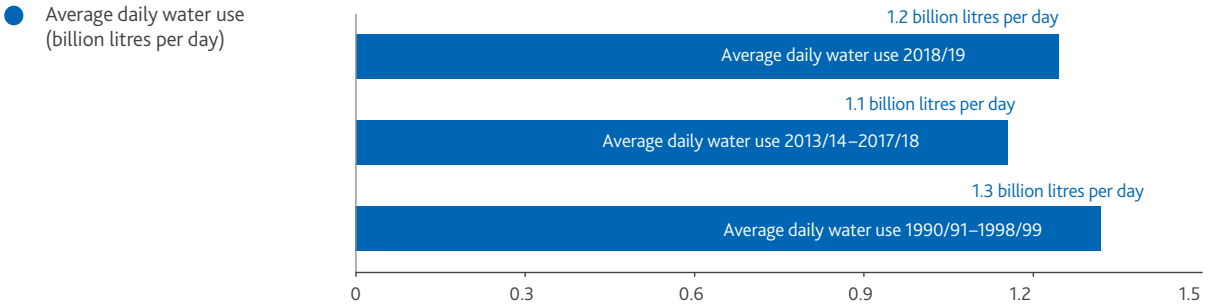
Permanent water saving (use) rules apply across Victoria so we continue to use water wisely. Melbourne's residential water use in 2018-19 was 162 litres per person per day – slightly above the Victorian Government target of 155 litres. This is one litre more than last year and equal to the last five-year average. It was the same last year and equal to the last five-year average.

Melburnians averaged 1.2 billion litres of water per day this year – nine per cent more than the last five-year average. This increase in overall water use is primarily attributable to ongoing growth in population. While water consumption has been increasing over the past seven years, it is below that of the 1990s. For example, when metropolitan consumption peaked in 1997, Melburnians averaged 1.5 billion litres per day – around 25 per cent above current levels.

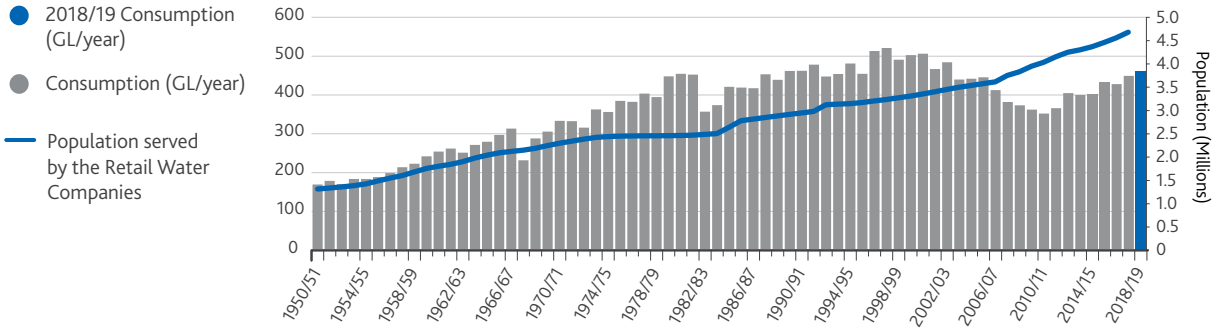
Temperature and rainfall influence water use, especially during warmer months, for watering gardens, parks and sports grounds. However, most residential water use occurs inside by showers and baths, toilets, taps, washing machines and cooling. Promoting water efficiency, while continuing to support liveability, is key to the metropolitan water industry's strategy for managing our water supply, while meeting the long-term challenges of population growth and climate change.

Melbourne Water continues to work with Melbourne's retail water companies, other government agencies, councils, developers, industry leaders, Traditional Owner groups and the wider community to make the best use of our precious water supplies. We provide updated water use and storage level data online each day.

Average daily total water use for Melbourne including non-residential



Long-term total consumption by financial year



Drinking water quality strategy

Adopting microbial health-based targets in the *Drinking Water Quality Strategy* has been a strong driver in identifying opportunities for improvement within our existing processes to deliver safe, secure and affordable drinking water to our customers and the community. Our 2017/18 assessments of source water for our unfiltered, protected catchments and reservoirs outline our current service levels for drinking water quality and helped develop a robust, long-term improvement plan.

We are currently finalising a rigorous work program that began in early 2018. It has identified a range of options and costs for improving treatment barriers, including catchment management best practice. The three agencies responsible for managing Melbourne Water's protected catchments (Melbourne Water, DELWP and Parks Victoria) are collaborating on an improved catchment management program to ensure effective coordination and optimal delivery of safe drinking water for all Melburnians. Melbourne Water is well underway to deliver on the 14 KPIs of the *Drinking Water Quality Strategy*. Recent work has focused on gathering the information needed to prioritise catchment management and water treatment improvements across all assets and to drive the development of evidence-based investment programs for the next Price Submission.

Water quality compliance

Our commitment to delivering high-quality drinking water continued in 2018/19. Full compliance with the Safe Drinking Water Regulations was achieved, and there were no incidents within our treatment plants or distribution network with public health impacts.

Recycled water

Melbourne Water produces recycled water at the Western Treatment Plant (WTP) and the Eastern Treatment Plant (ETP), providing Class A and Class C recycled water to customers. Class A is the highest class of recycled water and can be used for a range of non-drinking purposes. Class C water is treated to a lower standard and has greater restrictions on its use.

Using recycled water not only reduces the amount of treated sewage discharged into Port Philip Bay and the ocean but provides a valuable water source for agriculture close to the city. Using recycled water means the volume available is not dependent on the climate, providing a reliable source of water to support sustainable businesses.

Recycled water can be used to irrigate public open spaces, flush toilets and water gardens in residential estates and in industrial processes, including wash down facilities. It helps relieve the demand on our drinking water supply.

We continue to support the investigation of new opportunities to increase recycled water use at both the ETP and WTP, to provide a greater security of supply for Greater Melbourne now and into the future.

Recycled water volumes used onsite and supplied to our customers in 2018/19 are shown in Table 1.

Table 1: Recycled water produced for 2018/19

	Volume 2018/19 (ML)
Total wastewater treated*	305,509
WTP	
Conservation flows used onsite	5091
Non-agricultural on-site use	6
Agricultural on-site use	19,714
Southern Rural Water	
– Werribee Irrigation District	6316
– Werribee Tourist District	115
City West Water	
– Werribee Employment Precinct	121
– MacKillop College	31
– Water tankers/standpipes	3
– West Werribee Dual Supply (non-residential)	142
– West Werribee Dual Supply (residential/ commissioning)	155
Western Treatment Plant Sub Total	**31,774**
Eastern Treatment Plant	
Re-used onsite	9038
Trility – Eastern Irrigation Scheme	6099
Supply to South East Water – South Eastern Outfall	1686
Eastern Treatment Plant Sub Total	**16,880**
Total	**48,624**

* Not all wastewater treated is available for re-use.

Maintaining our world-class infrastructure

In 2018/19, Melbourne Water invested $103.9 million in critical upgrades to our world-class water supply network, ensuring security for future generations.

This included $29.9 million to continue work on the M41 water main renewal project, a 4.7 kilometre pipe running through the narrow, inner streets of Fitzroy and East Melbourne. After almost 100 years of service, the M41 needed to be replaced. This critical piece of infrastructure supplies drinking water to over 350,000 residents and businesses, and we are committed to minimising the impact on them and the local environment. Early stakeholder engagement during the planning phase helped build awareness of the project and communicate its potential disruption. Having commenced works in May 2018, they will be completed two months ahead of schedule in September 2019. Melbourne Water also invested $330,000 in a playground for Edinburgh Gardens to thank local residents for their patience during construction. Students from Fitzroy North Primary School were also engaged to help name the project's tunnel boring machine, complete with a 'paint the pipe day' community event.

In 2019, Melbourne Water initiated upgrade works on two critical reservoirs within Melbourne's water supply network. Melbourne Water will make significant investments at O'Shannassy Reservoir and Upper Yarra Dam to ensure these older assets keep pace with current best-practice dam safety standards, securing Melbourne's world-class drinking water. Works at O'Shannassy Reservoir also provide the additional benefit of increasing annual water harvest by 3 gigalitres per year, following project completion in mid-2020. While there is no public access at O'Shannassy Reservoir, the community has previously been welcome to visit the impressive Upper Yarra Dam wall and parklands. To ensure the safety of staff and community, access will be temporarily closed, and Melbourne Water has worked closely with Parks Victoria to ensure the park and camping grounds are reinstated for the community to enjoy from mid-2021.

Case study

Safeguarding water quality during bushfires

Melbourne Water's role in safeguarding the quality of Greater Melbourne's water supply is never more critical than when it is at risk. During the hot and dry 2018/19 summer season, lightning strikes ignited bushfires on 25 January and 1 March, impacting the Thomson and Upper Yarra catchments. These catchments account for 70 per cent of Melbourne's total storage capacity.

Bushfires impact the quality of drinking water as rainfall can later wash ash and sediment into reservoirs, reducing water clarity which ultimately requires treatment, causing delays in the water supply.

Along with other emergency agencies, Melbourne Water provided first-attack capability and direct firefighting support to DELWP as part of its Forest Fire Management Victoria arrangements. We also actively monitored and managed potential impacts to water quality over the incident period through close collaboration with Melbourne's retail water companies.

The Thomson catchment fire was officially contained on 15 February and Upper Yarra on 25 March. Remediation works to reduce the risk of ash and sediment flowing into the reservoirs began almost immediately, as did work to stabilise severely burnt areas until vegetation regrowth.

Our bushfire contingency planning and management, along with an expert team of staff, ensured water quality was not impacted over this critical time. If required, Melbourne Water can draw on a variety of water sources, including 10 major storage reservoirs and the Victorian Desalination Plant. Our flexible water supply system allows us to transfer water to where it is needed most.

Sewerage Management

For over 100 years, Melbourne's sewerage system has protected public health and the environment and contributed to making Melbourne one of the world's most liveable cities.

Challenges such as our growing population, the changing urban environment and climate change require the continued strategic development of the sewerage system to ensure that Melbourne remains a liveable and sustainable city for generations to come.

We are increasingly realising multiple benefits from our sewerage system: recovering and re-using biosolids and creating energy from the sewage treatment process to enhance environmental outcomes.

Melbourne's Sewerage Strategy

Melbourne is facing a number of complex challenges over the next 50 years. Factors such as population growth, climate change and the pace of urban development are all placing pressure on our systems. Customers and the community continue to expect more from our services. Meanwhile, technological advancements enable us to realise the range of new solutions becoming available to us.

As our city changes, it is important to have a plan which ensures the continued provision of sewerage services into the future. The *Melbourne Sewerage Strategy* was released in December 2018. This ambitious 50-year strategy was collaboratively developed by Melbourne Water, City West Water, South East Water, Western Water and Yarra Valley Water.

The strategy highlights current and future challenges, identifying opportunities for the provision of sewerage services. It sets out how we will ensure our sewerage system continues to provide world-class sanitation, and the protection of public health and the environment, while ensuring customer value and affordability. It includes a framework for making 'best for community' decisions which will provide us with a resilient and adaptable system.

The *Melbourne Sewerage Strategy* describes a transformation in our sewerage system – from a single-use waste disposal model to a resource recovery system. We are planning for a future system in which water, biosolids and energy are sustainably recovered and put back into productive use.

In implementing the strategy, we will continue to work with our customers and the community, adapting our approach to ensure it remains aligned with community needs and expectations.

The decisions we make with the community will ensure affordable services for current and future generations.

400 KM OF SEWERS

9 SEWAGE PUMPING *STATIONS*

12 AIR TREATMENT *FACILITIES*

60% WESTERN TREATMENT PLANT WERRIBEE

SEWAGE TREATMENT

40% EASTERN TREATMENT PLANT BANGHOLME

305 GL OF SEWAGE REMOVED AND TREATED

Our system

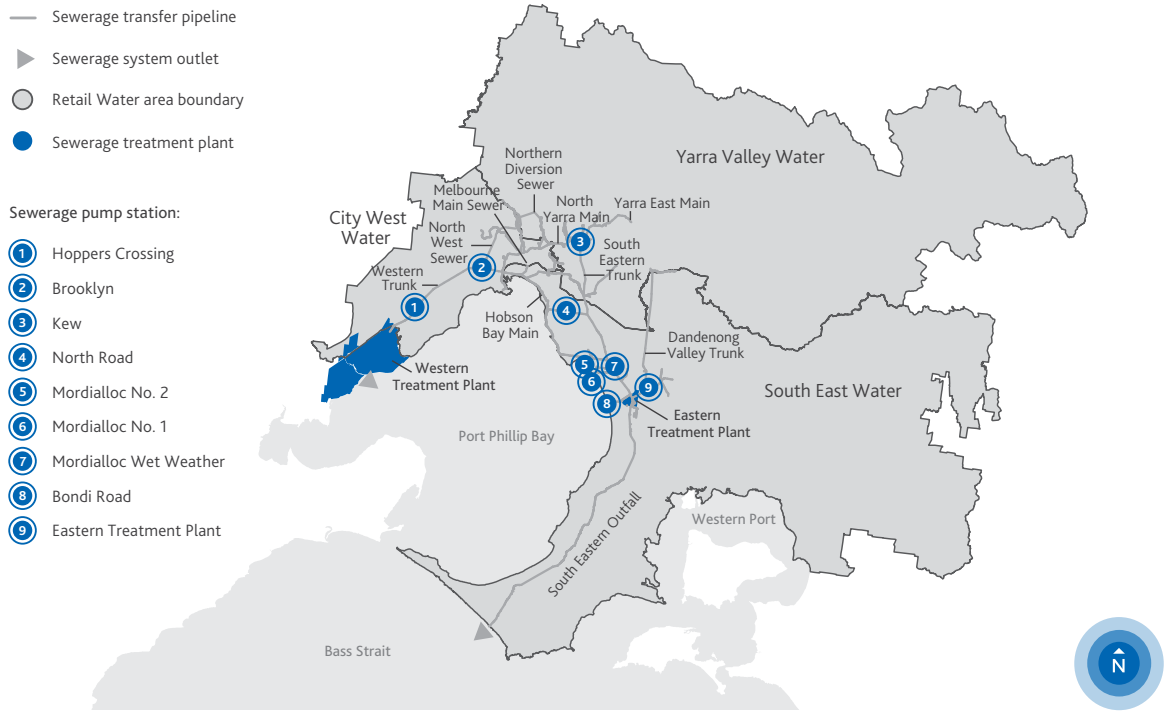
Sewerage is the invisible network of pipes that makes Melbourne work – treating the city's liquid waste and ensuring its safe disposal.

As outlined in the strategy, we are taking measurable steps to reposition our sewerage system from being viewed as a waste disposal system to one that is a true resource recovery system and a key contributor to Melbourne's future as a water sensitive city. The process of transforming the sewerage system into a resource recovery system will need action, from changing rules and limits within our processes, through to changing paradigms both within the water industry and in the realm of our policymakers, regulators, customers and community.

The resource recovery system of the future will still collect sewage from homes, businesses and industry, but it may also include collection of additional materials, such as high strength organic food waste, that could present resource recovery opportunities. Treatment for safe discharge will transform to valued product generation that can support economic development and enhance public health and the environment.

Our system is characterised by two major treatment plants – the Western Treatment Plant (WTP) at Werribee and the Eastern Treatment Plant (ETP) at Bangholme. These plants rely on the sewerage transfer system to move large volumes of sewage across the city, including 400 kilometres of sewers, nine sewage pumping stations and 12 air treatment facilities.

Melbourne Water's sewerage system



Our sewerage system is more than just a waste disposal system. The sewage treatment at the WTP contributes to its thriving Ramsar wetlands which support tens of thousands of rare and endangered birds by providing reliable, non-weather-dependent freshwater ponds with the nutrients to enable a thriving food web. The WTP also helps to maintain the health of Port Phillip Bay by removing organic and nitrogen compounds prior to discharge.

Operating to high customer and regulatory standards, Melbourne Water treated a total of 305.5 billion litres of sewage at the ETP and WTP in 2018/19. More than 26 billion litres of recycled water was delivered to our customers from the WTP and 7.8 billion litres from the ETP.

A total investment in capital works at our treatment plants of $123.8 million in 2018/19 enables us to continue to support Melbourne's future health and liveability through our world-class infrastructure. This investment includes $23.2 million to expand treatment capacity at the WTP and $10.5 million to renew ageing aeration blowers at the ETP. In addition we invested $18 million to expand renewable energy generation at the WTP.

In 2018/19 we undertook a number of sewer relining projects, including the North Yarra Deviation Sewer Relining Project ($14.7 million). This project involved the relining of a critical sewer pipeline that carries one-fifth of Melbourne's total sewage in the inner west. The North Yarra Deviation sewer services many inner suburbs including Footscray, Kensington, Carlton and Fairfield.

Case study

Western Treatment Plant upgrade

In 2018/19, construction was completed on an innovative nutrient removal plant, significantly increasing the capacity of the WTP to treat Melbourne's sewage.

The new Nutrient Removal Plant at the WTP in Werribee treats 140 megalitres of wastewater per day, which is equivalent to 56 Olympic-sized swimming pools. The new addition is more energy efficient and was built with the latest advanced monitoring and controls. This additional capacity will support Melbourne Water in meeting the needs of Melbourne's expanding population.

The nutrient removal plant is designed to minimise the carbon and energy consumed in treatment, enabling the WTP to continue to maximise renewable energy generation into the future. It was commissioned in early 2019 and will undergo proof-of-performance testing over the next 12 to 24 months. This period allows Melbourne Water to test the plant's capability through all seasonal conditions, ensuring it delivers benefits as designed.

This project marks the completion of the second of a three-stage program of capital works that began in 2012 to increase the WTP's capacity. Melbourne Water will complete its pilot trial program on a new process technology for the next stage of the program in 2019/20. Functional design has commenced on the next stage of augmentation and will continue into 2019/20.

This project is an example of cutting-edge technology and design which will benefit both the community and the environment.

Case study

Minimising the impacts of the Brighton Main Sewer upgrade through community collaboration

Melbourne Water is committed to delivering multiple benefits for all our projects. We actively seek opportunities to maintain and improve community outcomes and the Brighton Main Sewer highlights this commitment.

To maintain our world-class sewerage system, Melbourne Water embarked on a complex 12-month program of works in February 2018 to upgrade and rehabilitate the Brighton Main Sewer. The project alignment is 4.5 kilometres long, running along Beach Road between Orlando Street in Hampton and St Kilda Street in Brighton. Works were completed in November 2018.

Built between 1907 and 1908, the single layer brick sewer is one of the main sewers in Melbourne Water's 400-kilometre network. The ageing asset had begun to deteriorate in some sections, posing possible environmental and public health implications for Bayside residents.

Stakeholder engagement was vital to the project's success. Beach Road is one of the world's busiest road bike circuits with between 12,000 and 20,000 cyclists using this route each week for commuting, training or recreation. Critical to the engagement process was establishing a close working relationship with cycling advocacy group Bicycle Network Victoria. Incorporating feedback early in the project planning phase ensured works would be scheduled in the quieter autumn and winter months and at night to avoid commuter impact.

Once design was initiated, we were able to consider critical design feedback about temporary steel plating of work sites, which would reduce safety risks to cyclists, wear on car tyres and noise pollution to neighbouring residents.

"The credit goes to Melbourne Water and its contractors, who worked closely with Bicycle Network to get an understanding of what was needed to get a good outcome for the pedal-powered road users."

Bicycle Network Victoria

The project team consistently received positive feedback, especially in relation to keeping the traffic corridor of Beach Road operational while undertaking major relining works and manhole rehabilitation.

More than 50 positive responses from residents and businesses were logged during the project's 'works' stage, via direct email, in person and social media.

Flood Resilience and Drainage

As the floodplain manager for the Port Philip and Westernport catchments, Melbourne Water enhances liveability for our communities through flood prevention, and response and recovery initiatives delivered collaboratively with our partners and local communities.

Melbourne, like many cities, is prone to flooding as a result of a number of factors which include a changing and variable climate. In addition, many properties that were developed before flood management controls were introduced are located within the floodplain. We continue to drive strong planning controls to mitigate flooding in an effort to address the challenges of increased urbanisation and a growing city.

Through our *Flood Management Strategy*, we continue to work with a range of stakeholders within all responsible agencies to collaboratively deliver outcomes across a number of areas. In partnership with the Victoria State Emergency Service (SES), and through a commitment to continuous improvement, the strategy is being refreshed to align our actions to key challenges and opportunities for the region. Critical to our forward planning was to understand the impact of climate change, and to use this information to drive our decision making in relation to flood risk management activities.

By providing opportunities for community and stakeholder input, we are better informed to identify issues of most concern and able to develop appropriate solutions for each area. By improving the management of extra stormwater from new developments and urban consolidation, we will help avoid new risks while also achieving other benefits for the region.

Partnerships play an integral role in progressing the delivery of flood prevention, response and recovery initiatives. Warning services can help communities take action to reduce the effects of floods. Due to the rapid onset of flash floods, automated messaging is considered the most efficient means of informing the community of flood risk.

We are working with Emergency Victoria, the SES, DELWP and the Bureau of Meteorology following the successful trial of a pilot flood alert mobile phone app developed by Melbourne Water. These partners will collectively send flash flood alerts and information to the community through the Emergency Victoria mobile phone app.

This service will be complemented with flood education and awareness provided through our partnership with the SES, helping us to meet our commitment to provide the correct information, at the right time, for the people who need it. It is expected that a trial of this new service will be completed by June 2020.

Melbourne Water has also worked with our customers and stakeholders to improve flood resiliency across the region by undertaking flood mapping and seeking to improve communication with the community during flood events.

We continue to drive stronger planning controls through planning scheme amendments, one of the most effective ways to mitigate the effects of flooding, by ensuring appropriate development. In conjunction with councils, we completed amendments to municipal planning schemes with Yarra Ranges, Bayside and Stonnington. We are progressing further amendments with Manningham, Moorabool and Maribyrnong. These amendments will deliver flood data and planning controls for approximately 22,000 properties.

In the past 12 months, collaborative flood modelling was completed for Maroondah and Banyule councils. The 2018/19 program also included catchments from the Cardinia, Casey, Frankston, Kingston, Knox, Mornington, Wyndham and Whittlesea municipalities. These projects are progressing well.

Melbourne Water is collaborating with DELWP to help implement a number of actions outlined in the *Marine and Coastal Act 2018* Transition Plan. These include scoping the role to provide coastal erosion advice as provided for in the Act, completion of a coastal hazard assessment for Port Phillip Bay, supporting strategic planning to assist coastal councils plan for sea level rise in partnership with the Municipal Association of Victoria and the Association of Bayside Municipalities, and by reviewing flood controls and policy in Victoria Planning Provisions to clarify applicability to sea level rise.

Melbourne Water has also produced *Flood Mapping Standards for Major Infrastructure Projects* that clearly articulates the standards and criteria by which Melbourne Water assesses floodplain impacts and flooding risks associated with major infrastructure projects. This allows infrastructure project consortia and projects to clearly understand Melbourne Water's requirements at all phases of a project's life cycle. It also supports the current Victorian Government infrastructure program while ensuring the protection of the community from unacceptable flood effects.

During 2018/19 $24.4 million was allocated to construction of flood mitigation projects, including a major upgrade of the Murrumbeena Main Drain ($21.3 million).

The Merrilands Main Drainage Improvement Program addressed concerns about several properties in McCrae Street which had flooded above floor levels on several occasions, most recently on 26 December 2016. The aim of the improvement program was to maximise the capture of overland flows into existing pits and pipes through inlet pits during lower rainfall events. It contained most of the overland flow within the drainage reserve by reshaping a channelised section between McCrae and Fyfe streets to minimise flood waters directly affecting the previously flooded properties.

Case study

Flood Modelling

A revision of Melbourne Water's *Technical Specifications for Flood Modelling* has been completed, bringing the specifications in line with the new *Australian Rainfall and Runoff 2016 Guidelines*. This marks a significant update of the specifications to account for an additional 30 years of climate data and the inclusion of climate change scenarios. The specifications are also now being broadened to include the requirements for flood mitigation projects and development schemes. This will ensure that mapping undertaken by any Melbourne Water team is completed to an appropriate standard for use and sharing.

We also worked closely with Banyule City Council and residents to undertake a major flood study to investigate and design flood mitigation works for the St Helena East Main Drain in Eltham. Residents in this location are regularly subject to significant depth and velocity flooding making it dangerous for property and people. The planned works include additional pipes to carry the flood waters and an expanded retarding basin to slow the passage of water. Works are scheduled to commence in 2020.

The adoption of new technology is helping to drive new opportunities for risk reduction and flood mitigation. An exciting development is the introduction of the Flood Management Portal, completed in 2018/19, which aims to support more effective collaboration across the flood management sector. An interface to capture and manage the actions and commitments agreed to by key stakeholders within flood management plans, including councils, the SES and other flood management stakeholders, this simple and easy-to-use portal currently contains actions identified from the seven flood management plans. Further actions will be updated and included in the portal. It enables governance groups to have appropriate oversight and visibility of actions and commitments within their flood management plans.

A trial project has been implemented at the Salt Creek Drainage Grate, a critical drainage asset in our network. Cameras and level sensors have been installed enabling photos to be uploaded directly to Melbourne Water. The artificial intelligence (AI) image processing determines if the grate is blocked and then provides a notification that it requires cleaning, resulting in a more responsive outcome for our customers.

Another pilot project implemented in 2018/19 is the Steele Creek Networks Visualisation. This pilot project will implement a catchment-monitoring system to provide operational visibility for the Steele Creek catchment. This will enable us to better understand how our drainage assets are performing and provide 'real time' indication of catchment condition and health. It is anticipated that a wider roll out of similar monitoring systems for our drainage network will commence in 2019/20.

Case study

Elster Creek Action Plan

In October 2017, the *Elster Creek Action Plan* was adopted following extensive community consultation. A collaboration between Melbourne Water and the cities of Bayside, Glen Eira, Kingston and Port Phillip, the Elster Creek Catchment, located in Melbourne's south-east, extends across four municipal boundaries. Many properties in the area were susceptible to flooding when excessive rainfall compromised the capacity of the catchment's drainage systems.

In 2018 the *Elster Creek Action Plan* was completed with a range of projects being achieved through its implementation. The whole of the catchment underwent a flood mapping exercise for a range of flood risk scenarios and physical infrastructure works options were assessed for the purpose of reducing flood risk.

Planning policies have been reviewed and provisions made to determine better regulatory options for flood risk management. An analysis of the potential use of distributed flood risk reduction treatments was undertaken in some areas. The outcome of this analysis is expected to open up new avenues for the use of local storages, in both public and private spaces, to reduce flooding. A community reference group has been formed to enable the agencies and the local community to work together on an ongoing basis.

Elster Creek and its surrounding communities will also benefit from being part of an advanced flood warning system involving a flood app as well as the use of smart gauges, which are in development.

A *Flood Management Plan* for the whole of the Elster Creek catchment is also being developed which will provide an ongoing program of works focused on reducing flood risk in the catchment.

The ongoing collaborative partnership between Melbourne Water and the participating councils has led to the exploration of evidence-based and creative solutions to minimise flood risk and provide optimal community benefits.

Case study

Murrumbeena to Malvern Flood Mitigation

The Murrumbeena to Malvern project sought to improve the passage of flood waters between Bute Street, Murrumbeena and Gardiners Creek, Malvern. The first design, considered in 2006, envisaged flow under the rail reserve through the use of four large diameter circular pipes. These were to be installed one by one using a tunnel boring machine. This approach was developed to maintain integrity and operation of the railway embankment.

Rather than the contentious and lengthy community disturbance of tunnel boring, we solved the problem by completely rethinking and redesigning the solution by putting community impact 'front of mind'. This was only made possible by Melbourne Water's project team developing sustainable, long-standing and mutually supportive relationships with the Level Crossing Removal Project (LXRP) and Glen Eira City Council.

Early engagement with stakeholders, and specifically the LXRP, allowed us to take advantage of their construction program for the elevated viaduct (SkyRail). It allowed us to jointly meet community expectations around 'getting it done in one go' for a community already suffering from construction fatigue.

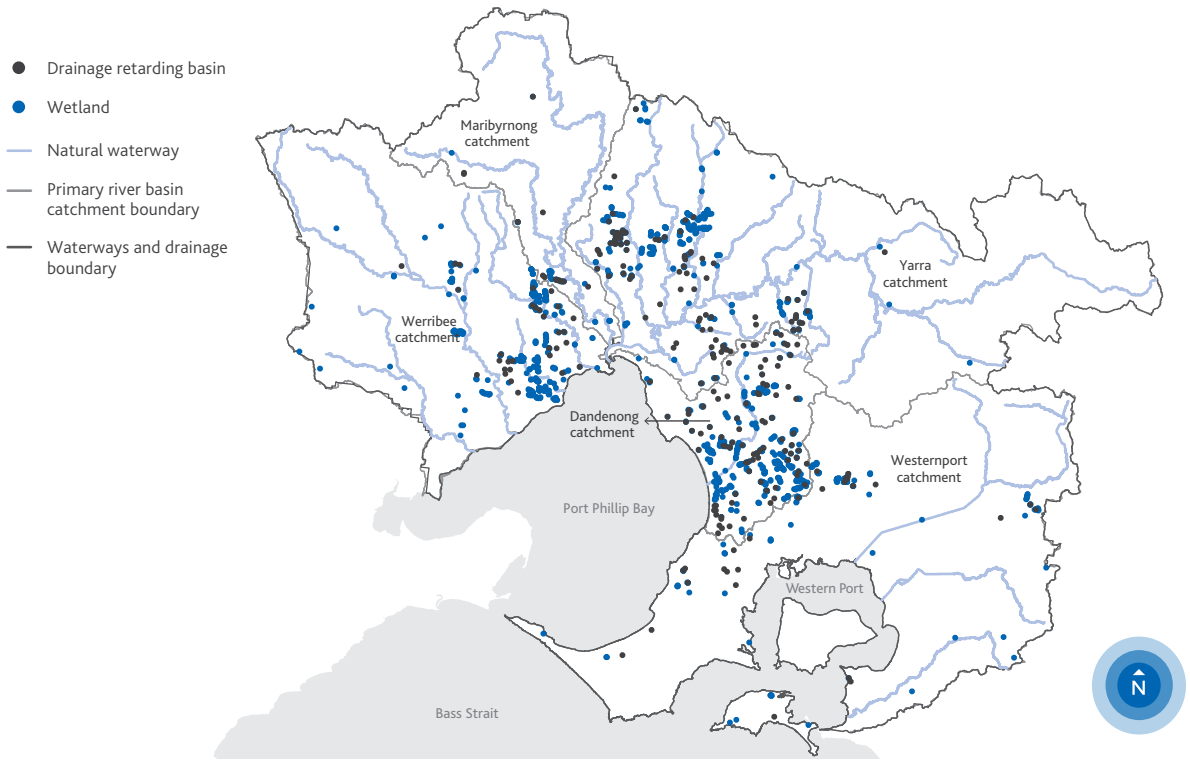
By working with stakeholders we were able to realise a number of additional project and liveability benefits over and above the functional requirement of passing water from upstream to down.

A man-made embankment was removed to restore the natural overland flood flow path of the Murrumbeena Creek. Community access to high-quality open spaces were unlocked to the north of the railway line by transforming steep embankment slopes to at grade land. Removing sections of the grassed embankments also improved natural light to the area, and provided a better link between neighbours and the suburb.

A previously dead-end space was also activated at Riley Reserve, in line with the City of Glen Eira's open space master plan. A new walking and cycling corridor provided new opportunities for active transport within the area while also connecting residents of southern Murrumbeena to green spaces and existing trails extending as far as Scotchman's Creek Trail.

The 18-month project led to the installation of more than 2 kilometres of new concrete pipe, at a total cost of $40.9 million.

Melbourne Water's waterways and drainage system



Land development

With Melbourne's population increasing, and forecast to rise to over 8 million people by 2051, facilitating the provision of housing for our growing city is of great importance to our community. Melbourne Water contributes to healthy places and a healthy environment by supporting our customers across the entire breadth of land development. From broadacre greenfield areas, through to urban renewal and development in established suburbs, we help to deliver developments that are flood resilient and provide for stormwater treatment to protect the health of waterways and bays, with water-sensitive urban design principles supporting enhanced amenity and liveability outcomes.

In 2018/19, our Development Services team facilitated stormwater management strategy designs for 15 catchments across five gazetted precinct structure plan areas covering around 4000 hectares. Understanding catchments and flood risk, and the existing values of waterways and their sensitivity to change, helped the team to design strategies that best service future urban areas, minimise risk and maximise opportunities for healthy people, healthy places and healthy environment.

Over 1100 hectares of residential development land in growth areas met Melbourne Water's requirements for planning compliance, meaning Melbourne Water supported the development industry to deliver over 19,000 homes. We also supported development capital works which included 10 flood retarding basins, 15.4 kilometres of underground pipes to manage drainage and flood flows, 5.6 kilometres of waterway rejuvenation and 20 new wetlands to provide stormwater treatment and habitats for diverse flora and fauna. The majority of newly constructed assets transfer to Melbourne Water's ownership and are incorporated into our overall drainage networks in the Port Phillip and Westernport catchments. This significant and sustained growth in Melbourne Water's asset base requires additional ongoing maintenance activity and renewals planning.

We also provided input for stormwater and drainage planning for major State Government infrastructure projects. These included Melbourne's Level Crossing Removal Program and line duplication projects for the Hurstbridge and Cranbourne lines, the Suburban Roads Upgrade – West, North & South East, the Mordialloc Freeway Project, the Westgate Tunnel Project, the North East Link Project, the Metro Tunnel Project, Regional Rail Revival, Melbourne Airport Rail, Suburban Rail Loop and the Western Rail Plan.

In 2018/19, we responded to 10,214 statutory town planning referrals for development and subdivision, 11,090 non-statutory works applications and 2171 planning enquiries for development advice. These are key services that help maintain and enhance public safety and protect homes and other buildings in established areas from the effects of flooding. This process also ensures that standards for stormwater quality, waterway amenity and drainage management are achieved and that our waterways and bays are protected.

Waterway Management

Melbourne Water works to protect and improve the quality of our waterways, establish healthy ecosystems and enhance biodiversity in an increasingly urbanised region.

25,000 km RIVERS & CREEKS

479 WETLANDS

160 URBAN LAKES

314 MONITORING STATIONS

Healthy rivers, estuaries and wetlands play a vital role in many aspects of our daily life. Our community engagement has highlighted how much the people of Greater Melbourne value waterways in supporting environmental health and their overall quality of life.

Our waterways sustain a diversity of life including birds, fish, frogs, platypus and vegetation. They provide places for people to gather, exercise and relax, and they are important sites of cultural significance. They support our growth and prosperity by providing drainage and flood mitigation, and also provide economic benefits by supplying water for agriculture, recreational fishing and commercial industries, and tourism opportunities.

Melbourne Water is responsible for ensuring that we continue to care for the health and vitality of the region's waterways as well as contributing to the health and wellbeing of Port Phillip Bay and Western Port Bay, now and into the future. We also contribute to the *Victorian Waterway Management Strategy* and the *Regional Waterway Strategy* (known as the *Healthy Waterways Strategy*, see case study on page 31).

Managing the health of our rivers, creeks, wetlands and estuaries

Melbourne Water monitors and provides targeted maintenance and improvement works for 25,000 kilometres of rivers and creeks, and more than 700 stormwater treatment systems and wetlands across our region.

We work together with local government, agencies, non-government organisations and community groups to enhance the environmental, social, cultural and economic value of our waterways and protect them from a variety threats, including climate change and population growth.

In 2018/2019, we contributed to the health of our waterways through direct maintenance works, capital projects and incentives programs that included:

- 1088 sites where Melbourne Water conducted active weed control to protect native vegetation, increase biodiversity, improve the stability of river banks and provide better habitat for a wide range of animals
- 1360 sites where Melbourne Water conducted grass cutting to improve access to waterways, help control litter and provide high-quality public open space
- the removal of over 21,500 cubic metres of silt from our stormwater system and more than 1400 cubic metres of litter and debris from our drains, helping protect the quality of water in our rivers and creeks and preventing litter from entering our waterways. This is one of the many activities Melbourne Water undertakes to improve water quality under the *State Environment Protection Policy* (Waters) (SEPP)
- 29 new waterways capital investment projects across the Port Phillip and Westernport region, initiating major works to stabilise river banks, improve stream connectivity, rewater billabongs, replant sections of waterways, build habitat for platypus and other wildlife, and significant weed and pest control projects
- building three new fishways and significantly upgrading an existing fishway to improve waterway connectivity and provide better habitat for fish and other animals.

In addition to works directly contributing to the health of our waterways, our work over the past year included:

- supporting local communities in bushfire recovery through targeted incentive programs
- continuing to deepen our engagement with Aboriginal communities, including a project where consultation with Traditional Owners in the Macedon Ranges region resulted in renaming nine waterways, now gazetted by DELWP, recognising the deep significance of these waterways for Aboriginal people
- providing timely and targeted emergency response to waterway pollution incidents large and small, for example, the industrial warehouse fire near Stony Creek and various recycling facility fires, helping protect our natural resources
- piloting new automated technologies for activities like grass cutting and water quality testing, to make our waterway monitoring and maintenance activities more efficient, and safer for our people and the community
- strengthening our collaboration with our customers and community on significant projects such as the *Monbulk Creek Platypus Management Investment Plan*, and continuing to work with four local councils, community groups, and other agencies to find whole-of-catchment flood solutions for the Elster Creek Catchment in Melbourne's south-east.

Case study

Healthy Waterways Strategy

Approved by the Minister for Water in October 2018, the *Healthy Waterways Strategy* is a celebration of catchments and community of the Port Phillip and Westernport regions, and provides a single framework for the management of their rivers, wetlands and estuaries. The strategy brings together world-leading science, community knowledge and management experience in a single framework for protecting our waterways and enhancing the long-term health, amenity and lifestyle of Greater Melbourne.

The strategy is founded on collaboration between waterway managers, scientific teams, communities, Traditional Owners, interest groups and government agencies. Over 630 individuals representing over 220 organisations partnered to shape the strategy, from project inception in September 2016 to formal consultation on the draft in July 2018.

That same breadth of partners is now working together to implement the strategy, aligning on-the-ground activities to meet performance objectives, developing our knowledge-sharing and reporting systems, and finding new ways of working together to deliver on the strategy's vision.

A key milestone in strategy implementation was the release of the draft *Monitoring, Evaluation, Reporting and Improvement* (MERI) *Framework* in June 2019. The MERI framework will ensure that all delivery partners have access to the right data and the right tools to evaluate our effectiveness in implementing the strategy, respond to emerging challenges and adapt our way of working to new opportunities. It is also a tool to identify knowledge gaps, assumptions, and opportunities for improvement that need to be addressed to maximise the social, cultural, environmental and economic value of our waterways now and into the future.

The *Healthy Waterways Strategy* contributes to delivery of the *Port Philip and Westernport Regional Catchment Strategy*.

River Health Incentives Program

A total of 1105 private, community and agency grants were awarded through our River Health Incentives Program in 2018/19. This amounted to over $5.4 million in support for

our delivery partners to utilise their skills, expertise and local knowledge to create great outcomes for waterways across the region. With clear guidelines in place for each grant program, we ensure the activities funded align with public benefit.

Within the past year, our River Health Incentives Program supported:

- 183 Community grants, which enable volunteer community groups to protect and improve local rivers and creeks through direct works such as weed control and revegetation, or offer organisational support that builds volunteer skills and knowledge and increases community awareness of the issues facing our waterways
- 107 Corridors of Green grants, providing matched-funding support to local councils and other public land managers to manage weeds, fence off rivers and creeks, revegetate riverbanks with indigenous plants, and help protect waterway health through better land management practices
- 765 Stream Frontage Management grants, which provide cost-share project funding to private landholders who manage a waterway frontage on their property. These funds are for weed control, fencing and native vegetation planting programs that increase biodiversity, improve the stability of river banks and provide better habitat for a wide range of animals
- 50 Rural Land Program grants that share costs of work for private landowners to better manage runoff from stormwater and improve water resource management in rural areas. Landholders receive benefits such as improved soil health, access to water and input cost reduction, while waterway health is improved for the broader community. The program also incorporates education, including whole farm planning, soil testing and fertiliser planning, chemical use and other specifically directed educational initiatives. The Rural Land Program also contributes significantly to reducing sediment and nutrients like nitrogen (which can feed algal blooms) from entering Port Phillip Bay and Western Port Bay, helping us meet our commitments to the *Port Phillip Environmental Management Plan* and improving the health of our region's open waters.

Living Rivers Program

A key contributor to the long-term health of our waterways is sustainable stormwater management. Melbourne Water is improving stormwater management practices across our region through the Living Rivers Program, which works in partnership with councils to build understanding, new skills and practical tools to protect our rivers, creeks and bays from urban stormwater.

While the objective of the Living Rivers Program is to improve stormwater quality and reduce stormwater quantity, projects funded through the program also provide a range of other benefits to the community such as greener open spaces, alternative water supply options and reduced localised flooding.

In 2018/19, Living Rivers awarded $3.4 million in funding for 46 projects across 22 council areas. These projects will be delivered over the coming three years and range from strategic planning and capital works to training and community engagement.

Of the 46 projects funded last financial year, 17 will result in the construction of physical stormwater harvesting assets that are expected to reduce the amount of nitrogen reaching our waterways by up to 572 kilograms per year. That improves habitat for plants, animals and the overall health of the waterways and bays.

Case study

Protecting our bays

The rivers, creeks, and estuaries across our region sustain life and provide wonderful spaces to exercise, socialise and relax, which is why we invest so much in looking after them. But it is not just waterways that we care about; all our waterways eventually connect into our bays – Port Phillip Bay and Western Port – and Melbourne Water is committed to also take care of those natural resources through our work.

This includes managing sediment entering the bays which negatively affects water quality and conditions for marine life, and managing the amount of nitrogen entering the bays, which the State Government's *Port Phillip Bay Environmental Management Plan 2017-2027* highlights as a key threat to ocean health because of its contribution to algal blooms.

Our incentives programs make a key contribution to the health of our bays, with the Rural Land and Living Rivers programs funding works that directly reduce nutrients entering Port Phillip Bay and sediment entering Western Port.

In 2018/2019, new capital projects funded by the Living Rivers Program will reduce the nitrogen reaching our waterways – and eventually the bays – by around 572 kilograms per year. At the same time, co-funded works through the Rural Land program prevented the runoff of 1380 kilograms of nitrogen and 423 kilograms of phosphorus from entering Port Phillip Bay. It also prevented 145.7 tonnes of sediment from entering Western Port, which improves water quality and conditions for marine life.

Managing streamflow

Melbourne Water produces stream flow management plans, local management rules and a *Drought Response Plan* to document the ways in which water will be managed to ensure it is shared fairly between diverters and the environment. Further information about water use by our diverter customers can be found in Appendix D – Private Diversion Licences.

During 2018/19 Melbourne Water has completed the review of the Little Yarra and Don and Woori Yallock Stream Flow Management plans and completed our stakeholder engagement process. We will extend our commitment to these plans for another five years. Melbourne Water also completed its engagement with the Amendment Consultative Committee to review the *Stream Flow Management Plan* for Olinda Creek, which was finalised with amendments. The objectives of these plans are to manage the water resources of Little Yarra and Don, Woori Yallock and Olinda Creek catchments, develop sustainable allocations for agriculture and other uses, and maintain an environmental water regime to sustain waterway health.

Delivering environmental water releases

To enhance the natural environment, Melbourne Water works in conjunction with the Victorian Environmental Water Holder to release water that improves seasonal flow within key river systems across the Port Phillip and Westernport regions.

These releases, also known as environmental flows, help improve the environmental quality of rivers by flushing sediments, encouraging vegetation growth, and helping fish to spawn and migrate. Environmental flows also improve the quality of habitat for platypus, macroinvertebrates, fish and frogs.

To help measure the environmental benefits of these flows, an innovative tracking system has been installed in the Tarago River to monitor the movement of fish in response to flows.

We engage with a range of organisations when planning the release of environmental flows so they can make the most of them. This includes community groups such as canoeing clubs and river-based businesses such as caravan parks. Understanding their preferences means we try to schedule flow releases at times when they deliver the most benefits to recreational users of the rivers. We also advise these organisations, and the broader public, of these flows in advance so they can take advantage of the higher water levels.

In 2018/19 Melbourne Water released over 18.5 billion litres of water, as shown in Table 2.

Table 2: Environmental water delivered for 2018/19

River	Volume	Outcomes
Yarra	16,472 ML	Two winter-spring releases and two summer-autumn releases were delivered from the Yarra Entitlement during 2018/19. The releases into the main stem aimed to improve aquatic habitat and water quality by minimising the risk of low dissolved oxygen in pools in the lower reaches, maintaining in-stream and riparian vegetation, and maintaining habitat for macroinvertebrate communities (an important food source for platypus, native fish and other aquatic fauna). Environmental water was also released into three billabongs in the Yarra Floodplain – Yering Backswamp, Burke Road and Willsmere billabongs – to improve wetland vegetation and provide habitat for frogs and birds. Monitoring these sites was undertaken in partnership with Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation.
Tarago and Bunyip Rivers	1,210 ML	Three releases were made from Tarago Reservoir, along the Tarago and Bunyip main drains, to enhance water quality, provide habitat for River Blackfish, platypus and macroinvertebrates, and to support spawning of Australia Grayling.
Werribee	740 ML	Three releases were made into the upper Werribee system (around Pyrites Creek), to flush the build-up of organic matter and improve habitat for frogs and macroinvertebrates. Four releases were made in the lower Werribee system to improve water quality and promote fish movement.
Maribyrnong	154 ML	Three environmental flow releases improved water quality and enriched small rapid habitats in the upper reaches of the river system. These releases also provided movement opportunities for small native fish in the upper reaches, and refreshed small rapids and pool habitats in the middle reaches for macroinvertebrates, platypus and fish.

As the storage operator, Melbourne Water also made environmental releases of 12,699 ML from Thomson Reservoir in 2018/19 in cooperation with the West Gippsland Catchment Management Authority and on behalf of the Victorian Environmental Water Holder.

Case study

Yarra Strategic Plan

The Yarra River is the lifeblood of Greater Melbourne, providing 70 per cent of our high-quality drinking water and supporting our world-famous liveability. Protecting the Yarra River and its parklands is critical to the future prosperity of our whole region.

In 2017 Melbourne Water was nominated as the lead agency for the development of the *Yarra Strategic Plan* and the *Yarra River 50 Year Community Vision*, to ensure the ongoing management and protection of the Yarra River corridor.

The *Yarra Strategic Plan* has recently been drafted and is in the process of being reviewed and endorsed by contributing partners before being shared for broader public engagement. To ensure a collaborative approach to the development of the plan, Melbourne Water formed the Yarra Collaboration Committee and has been working closely with committee members, including senior representatives from the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation as well as the State and local government agencies who manage the river corridor.

The draft plan is the result of this extensive stakeholder collaboration alongside engagement with the community, and also brings together insights from the *Yarra Strategic Plan Progress Report* and feedback from the Yarra River Community Assembly.

A progress report was released in October 2018 and provided an update of the work undertaken to date. The report was accompanied by the *Yarra Strategic Plan Map Book* which, for the first time, publicly showcased maps of the whole Yarra River corridor. The Yarra River Community Assembly is the group responsible for writing the *Yarra River 50 Year Community Vision*, and in February 2019 the assembly came together again to reflect on the draft plan and how it represented their vision.

The draft *Yarra Strategic Plan* includes a series of performance objectives that will help deliver foundational actions on Yarra River land in the next 10 years. The draft plan also includes a land use framework to ensure the Yarra is at the centre of future land use and development decisions. Once the final plan is developed and approved, it will enable collaborative management of the river with Traditional Owners, guide local planning, and ensure the Yarra is managed as one living and integrated entity.

Case study

Stony Creek rehabilitation

In August 2018, Stony Creek in Melbourne's inner west suffered devastating impacts from a fire in an industrial warehouse in Tottenham/West Footscray that was housing unregistered toxic chemicals. Firewater runoff washed into the creek causing contamination to a five-kilometre reach, resulting in a significant loss of plant and animal life and effects on human health.

Described as the worst pollution event to a Melbourne waterway in almost 30 years, the scale of the disaster – including the high level of community concern and public impacts – commanded a matching response. Melbourne Water joined a collaborative multi-agency partnership to respond to the incident, the on-ground recovery efforts, and long-term rehabilitation planning, which included extensive consultation with the community.

Our priority was to clean up the most publicly used and visited parts of Stony Creek first, and prevent further contamination downstream. Melbourne Water's recovery works since the fire incident have included pumping 70 million litres of polluted water from the creek, removing toxic sludge by scraping creek banks and pressure-washing rocks and vegetation, and clearing away affected trees and shrubs. More than 2,000 cubic metres of contaminated sediment has been removed from the creek.

Melbourne Water, together with our partner agencies and the local community, recognised that a sustained effort was required to move beyond the recovery of Stony Creek and focus on a more positive phase of rehabilitation.

Local community input was used to influence a rehabilitation plan, in collaboration with our partner agencies – Maribyrnong Council and the Victorian Environment Protection Authority (EPA). Through community events, online activities and conversations, the local community contributed their ideas, aspirations and priorities to support the long-term rehabilitation and future protection of Stony Creek. Their insights, values and recommended actions were used to create the 10-year *Stony Creek Rehabilitation Plan*.

Improving How We Do Business

Our Customers, Our Community

Melbourne Water provides a range of valued services to customers and the community who are at the centre of everything we do.

We also partner and develop relationships with our customers to deliver shared services to our community. Our community is those that are engaged, invested in, contribute to or are impacted by the decisions we make. Our community resides in the Greater Melbourne region and benefits from the services we provide with our customers and partners.

To assist the organisation to define and understand its customers, Melbourne Water separates its customer base into key segments. These are:

- State Government
- Local government
- Retail water companies
- Industry leadership
- Direct service customers (including developers)
- Suppliers
- Engaged community groups
- Community.

We also collaborate with Aboriginal Victorians and Traditional Owners who help inform our decisions about our future services.

Proudly customer-centric

The *Melbourne Water Customer and Community Strategy* outlines our approach to customers, why they matter to us, and how we plan to better manage and respond to their needs to continue building their trust and confidence. Our *Relationship Management Framework* helps us understand them, and we have defined the services they receive from us within our *Services Framework*.

This customer-centric approach is leading the way we engage with customers and is evident in some of our flagship projects such as our Price Submission Engagement process, our water literacy campaign, and the co-design and co-delivery of service strategies such as our *Healthy Waterways Strategy*.

Our Customer Research and Insights Program, including complaints management, and our Reputation Survey track customer satisfaction and improvements, while our Operating Environment Scan keeps us up-to-date with changing customer expectations like digital technology.

The way we implement our programs, frameworks and tools is driven by customer insights and by understanding their changing needs. By adopting a customer-centric way of doing business, this helps to reduce reputational risk, builds on a social licence to operate, and leads to an increased sense of community trust and confidence in us as an organisation.

So far our customer-centric journey has seen us:

- group our customer base into eight segments, with relevant segment plans and over 20 customer plans
- improve our business-to-customer service across our Customer Service Centre and digital channels via our website (almost 2 million visits in 2018), *YourSay*, *Community Online Maps* and social media platforms
- deliver a Service Portfolio, which clearly outlines the end-to-end process of delivering services to customers, which is supported by a *Services Policy and Framework*
- increase water literacy through digital technology such as virtual tours of the Western Treatment Plant (WTP) and the Frog Census App
- educate future generations about the water cycle through our 'gamification' project
- embed customer capability for all our people through our *Leadership Competency Framework*, Success Profiles and training modules.

Customer portal

With a vision to make our data more transparent, credible, easy to use and shareable, Melbourne Water has developed a secure customer portal. Registered users can view data in different formats, on different devices and get notified of updates. Having a customer portal consolidates or replaces other ways we have been communicating data and information. To be able to easily share our information enables even better collaboration with our customers, helping us to make better decisions.

We are releasing our portal to a pilot group of local government customers, so their feedback can guide enhancements and new features to improve their experience when interacting with Melbourne Water.

Measuring our customer performance

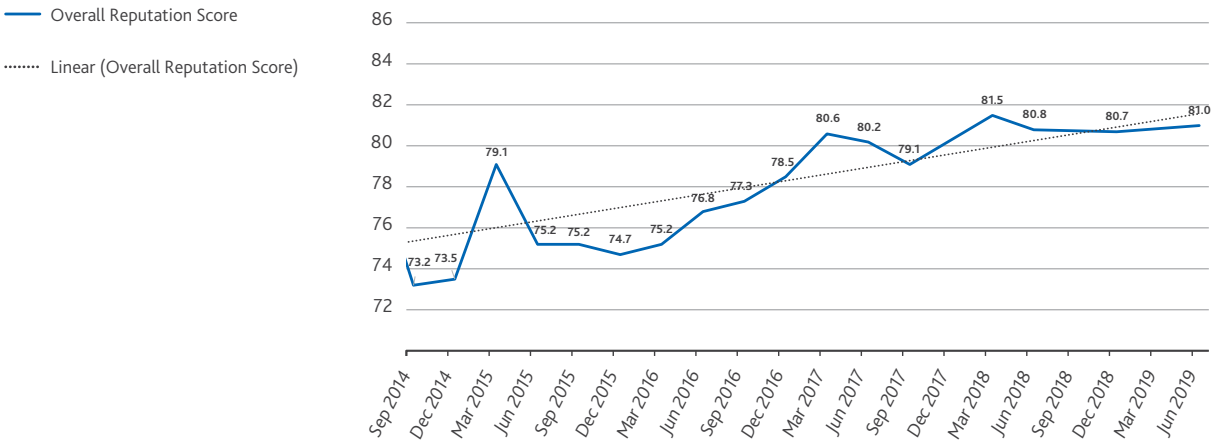
We monitor our performance with customers through research, data analysis and customer feedback which helps us drive customer experience improvements, and tailor service solutions for better customer and community outcomes.

In 2018/19, our Customer Service Centre processed more than 48,000 customer interactions including phone calls, emails, processing applications and written correspondence. Recently, we were independently benchmarked against government, utilities and the private sector for customer experience, including timeliness, friendliness and how well issues were resolved. The results put Melbourne Water in the top 10 per cent of all industries surveyed and in the top five authorities within the water sector. This great achievement exemplifies our commitment to providing a high level of customer service.

In addition, we continue to monitor our reputation to understand customer and community perceptions of us, covering aspects of trust, esteem, admiration and respect. Our reputation score over the past two years has remained steady and strong, reaching 81.0 in June 2019.

Now that we have established a strong reputational standing with our customers and community, we are ready to introduce a new customer experience metric in 2019/20. This metric will supplement reputation and help us to identify specific customer 'pain points' when accessing services and sub-services. This will move us from understanding how customers feel about Melbourne Water to *how satisfied* they are interacting with us. We can then identify where improvements can be made, particularly around processes and capability.

Melbourne Water Reputation Score – Community and Customers



Building a community that values water and the environment

Every year we work with the community and the water industry to create better community spaces, increase water literacy through visits to our sites, and partner with volunteers to protect and care for our creeks and waterways.

Community members help us to plan how and where our world-class infrastructure should be built to service and supply Greater Melbourne with affordable, high-quality water, reliable sewerage, healthy waterways, and integrated drainage and flood management services.

Next Generation Community Engagement program (Next Gen)

In 2016, Melbourne Water embarked on a bold journey to become a leader in engagement across government and the water sector through the Next Generation Community Engagement program (Next Gen).

Next Gen has transformed our customer and community engagement. This was recently recognised when Melbourne Water was shortlisted as a finalist for 'Australasian Organisation of the Year' at the 2018 International Association of Public Participation (IAP2) Core Values Awards.

This year the program has focused on driving innovation, industry leadership and embedding transformative engagement practice across every part of Melbourne Water.

Highlights include:

- roll out across Melbourne Water of our agile community engagement operating model and associated policy and procedures
- development and implementation of new engagement procedural guidelines to embed best practice engagement in our project delivery procedures (for example, Small Business, Tree Removal and Community Disruption guidelines)
- a new leadership competency framework
- a new Preferred Supplier Panel for Communications and Engagement to ensure greater consistency in our engagement delivery, drive cost efficiencies and deliver better business outcomes
- uplift of our digital engagement through Melbourne Water's *YourSay* online engagement platform and exploration of new innovative digital engagement approaches such as gamification and augmented reality
- expansion of our Next Gen Masterclass Series to continue building our engagement capability, with over 600 employees attending the sessions
- cross-sector collaboration of major project delivery to streamline and promote greater coordination of infrastructure delivery and minimise community disruption
- water industry partnership with the Australian National University's Next Generation Engagement program, Australia's largest study into infrastructure engagement, focused on evidence-based approaches for engagement across energy, water and transport.

Digital community engagement

YourSay, Melbourne Water's online engagement platform, and other emerging digital techniques such as gamification, continues our innovative use of digital technologies to expand how we engage. This enhances our community reach, increases participation in decision making, gives us a greater diversity of views and gathers rich insights to inform our work. In the last year:

- 18 Melbourne Water flagship strategies and projects were showcased on *YourSay*
- there were more than 64,000 views on *YourSay*
- Melbourne Water received 1215 insights from community
- more than 1800 community members registered to follow our key projects.

As part of Melbourne Water's Price Submission engagement approach, we are piloting gamification to drive greater participation in our engagement programs and build water literacy with the younger generation. Postcode-driven data provides players with local facts to personalise learning outcomes to each player.

Price Submission

Every five years, a service and price review guides our resources allocation and charges. All water businesses prepare a price submission to be approved by the Essential Services Commission, Victoria's independent regulator.

The Melbourne Water 2021 Price Submission will succeed the 2016 Water Plan Price Submission, setting out the water, sewerage, waterways and drainage projects along with their associated expenditures for 2021-2026.

The Price Submission engagement program is about working closely with our customers and the community to ensure we continue to deliver valued services, while addressing the global challenges of population growth and a changing climate.

Education and citizen science

In 2018/19 Melbourne Water continued to support a community that values water and the environment. Our education programs are improving water literacy in the Victorian Curriculum and allowing citizen scientists to contribute to scientific research by monitoring the health of our waterways and catchments. There were 18,676 participants in our programs in 2018/19, ranging from tours of sewage treatment plants to citizen science activities such as monitoring frogs and platypuses.

Our Litter Action project engaged 497 volunteer citizen scientists to conduct structured audits and collect litter data to reduce or eliminate litter at the source. The Diamond Creek Litter Action Group identified circular items as an entanglement threat for platypus and, with the support of DELWP's Port Phillip Bay funding, is working to change behaviours to improve the native habitat.

Our Frog Census App continues to engage citizen scientists with more than 4650 frog reports submitted by over 1300 volunteers since its launch in 2016. The app users monitor frog calls in the Yarra catchment before and after environmental watering events. In partnership with the Swinburne University School of Design, frog census data has been used to prototype a range of digital frog experiences.

Supporting Melbourne Water's focus on water literacy, the creation of new digital resources continues with the Western Treatment Plant (WTP) immersive digital tour currently in development. It will enable a virtual exploration of this diverse site, from sewage treatment and energy production to conservation wetlands. In partnership with RMIT University, schools and community groups have deployed GPS litter trackers into three waterways across Melbourne, with the journey being tracked online to provide educational data on how litter moves from waterways into Port Phillip Bay.

Clearwater capability building

Established in 2002, the Clearwater program aims to improve the quality of Victoria's water environments by better managing urban stormwater and ensuring industry puts the latest technical and scientific information into action. Managing water resources for the long term is building healthy, resilient and liveable communities. This helps professionals, organisations and the sector take an integrated approach to water management through:

- network building
- specialised training workshops
- guided technical tours
- other knowledge-sharing activities.

Melbourne Water has hosted and provided primary funding to Clearwater since 2006, with additional program funding and support provided by partners such as DELWP.

By adapting to the changing needs of the water sector, the program now incorporates technical and non-technical aspects of water sensitive urban design (WSUD) and Integrated Water Management (IWM).

Three years ago, funding from DELWP helped the Clearwater program expand into regional Victoria to improve stormwater management practices and build regional capacity for IWM. Clearwater's growing stakeholders include catchment management authorities, water retail companies and local government.

DELWP's funding and Melbourne Water's ongoing support has helped Clearwater deliver:

- *Water for Victoria* – Victoria's water plan
- the associated *Integrated Water Management Framework*
- statewide IWM forums.

Clearwater is focused on building individual, intra-organisational and inter-organisational capacity, and supporting the awareness and adoption of IWM. Clearwater helped deliver IWM in 2018/19 by presenting 37 events and connecting with over 500 participants from 123 organisations.

Collaboration and partnerships

River Blitz community events

In 2018/19, Melbourne Water partnered with the Yarra Riverkeeper Association for two river clean-up events along the Yarra River in Melbourne's CBD and along a section of the Maribyrnong River in Footscray. As local community events, more than 320 volunteers in kayaks collected nearly 1000 kilograms of waste. The River Blitzes have greatly reduced litter and microplastics travelling along the Yarra and Maribyrnong rivers and flowing out into Port Phillip Bay. This partnership with the Yarra Riverkeeper Association illustrates our commitment to supporting grassroots organisations and empowering community groups, schools and businesses to get involved and improve river health now and for future generations.

OzWater'19

Melbourne Water was the principal sponsor of Australia's international water conference, OzWater'19, held annually by the Australian Water Association (AWA). As principal sponsor, it was an opportunity for Melbourne Water to foster industry partnerships, increase brand awareness and position ourselves as thought leaders within the sector. Melbourne Water had a significant presence during the five-day program of events, including eight presentations, interactive tours along our waterways, and at our treatment plants and drainage projects, facilitating workshops and staff onsite at our exhibitor stand to engage with delegates. A highlight of the event included winning the AWA 2019 National Program Innovation Award for our Enhancing our Dandenong Creek project.

Water security

In February 2019, work commenced on a water security public awareness campaign in collaboration with the three Melbourne retail water companies – City West Water, Yarra Valley Water and South East water – the first major campaign to be undertaken since the Millennium Drought.

The campaign highlights a renewed focus by Melbourne's water companies on the importance of working together more collaboratively to deliver increased value to the community, and to better manage our precious water resources for future generations. Leveraging the State Government's Target 155 brand (T155), the campaign seeks to inform and instil confidence that by working together, Melbourne's water sector organisations are effectively managing long-term water supplies, as part of the overall water supply system.

The next steps of the campaign will further inform and support water literacy within the community and business about the environmental, social and economic context of water security in 2019 and beyond, including the key message that everyone needs to contribute to this security. That context setting will be followed by future messaging campaigns and specific behaviour-change initiatives over the next three years.

Partnering with Aboriginal Victorians and Traditional Owners

Melbourne Water has a strong commitment to reconciliation and recognises that partnering with Traditional Owners and Aboriginal Victorians is integral to providing essential services to our community and caring for our environment.

Victoria's Traditional Owners have sustainably managed land and water over thousands of generations. Their cultural, spiritual and economic connection to land, water and resources remains strong through their relationship to country.

We recognise the benefits of working collaboratively with Traditional Owners and Aboriginal Victorians who make a vital contribution to Melbourne Water's decisions about our future services, and to asset and resource management. We are therefore committed to the continuation of our strong, respectful partnership.

Aboriginal engagement

Melbourne Water's Aboriginal Engagement team leads the implementation of our *Reconciliation Action Plan* and works with Traditional Owners and the Aboriginal community on water and country.

In 2018/19, we implemented a range of new and existing work with targeted outcomes delivering on our strategies, direction and vision. Our aim is to work in partnership with key stakeholders in a clear and transparent way.

We have improved our processes and protocols and have committed to resourcing the Aboriginal Engagement team to ensure relationships with Traditional Owners continue to proposer.

This year, numerous activities and events have brought Melbourne Water and Traditional Owners together. Relationships have been fostered through large-scale projects and through engagement with our regional services teams.

Since the Aboriginal Engagement team was initiated in January 2019, Melbourne Water has delivered 20 activities to almost 400 staff with over 45 hours of cultural awareness content.

Reconciliation Action Plan

Our second generation *Innovate Reconciliation Action Plan* has been endorsed by Reconciliation Australia. Its implementation ensures the contribution of Aboriginal and Torres Strait Islander peoples are an integral part of our work and relationships continue to be fostered.

In 2018/19 we delivered the following objectives and activities:

- Developed policies and protocols to acknowledge Aboriginal people and Traditional Owners.
- Initiated processes to simplify and improve our engagement with Traditional Owners.
- Developed training resources to raise awareness of our shared history and understanding of Aboriginal and Torres Strait Islander culture.
- Provided support to build capacity for active participation in water management within the Victorian Aboriginal community.
- Continued to build stronger connections through informal meetings with representatives of Traditional Owner groups.
- Launched our *Innovate Reconciliation Action Plan*.
- Hosted a number of events during NAIDOC Week including a conversation with Melbourne Water staff and Aboriginal Elder, Aunty Pam Pedersen.
- Facilitated cultural awareness training and other activities to broaden employee skills and competence. Approximately 150 of our people have attended cultural awareness training during 2018/19.
- In addition to formal training, we have provided opportunities for employees and contractors to participate in activities and events to build their knowledge and understanding, for example Yarning Circles and a cultural burning presentation with elders. More than 200 staff participated in a range of activities for National Reconciliation Week.
- Targeted recruitment of Aboriginal and Torres Strait Islander employees to increase representation.

Case study

Cultural fire

Aboriginal people have used fire to cultivate the Australian landscape for countless generations. Our landscapes have evolved with fire and a number of our native ecosystems require fire to thrive and diversify. Many of the ecological prompts to introduce fire, such as Melbourne Water's *Ecological Burn Plan* at our Western Treatment Plant (WTP), can have similar outcomes to the cultural burns conducted by Traditional Owners.

With support from Melbourne Water's Aboriginal Engagement team, WTP staff have been developing cultural fire relationships with Wadawurrung Traditional Owners. Our WTP *Ecological Burn Plan* requires a certain number of hectares of on-site grassland to be burnt annually, and it has been identified that much of this target can be achieved through supporting Wadawurrung in their cultural fire journey. In March 2019, Melbourne Water hosted a leader in cultural burning and attended field visits at WTP with Wadawurrung to consider the best approaches for the site's grassy landscape.

Our Aboriginal Engagement team and several members of our operational staff also attended the National Indigenous Fire workshop at Barmah Forest with Wadawurrung in June 2019. The event proved beneficial for our staff to foster relationships, develop a greater understanding of culture and managing country, and to work toward further project planning.

The next phase of this fire program involves further training and burn planning, as well as establishing monitoring programs to ensure we can better assess fire impact.

Safe and Inspired People

With safety foremost, Melbourne Water aspires to be a leader in delivering our services. This will be achieved by our diverse, capable, collaborative and resilient people. Together we have the courage to go above and beyond to deliver service excellence.

Safety

Keeping our people and the community safe.

Keeping people safe continues to be our highest priority, whether they are employees, contractors, delivery partners, volunteers or visitors.

By living our organisational values of care, courage and integrity Melbourne Water continues to foster a culture where safety is at the heart of everything we do.

Melbourne Water is continuing a journey towards a truly generative safety culture. This approach, based on the model developed by psychologist Professor Patrick Hudson, embeds safety in everything we do by making it an intrinsic value we hold and share. As part of our culture we go beyond compliance and responding to safety events, and build a culture where safety is a 'whole of life' experience, starting in the home and reinforced in the workplace.

We proactively gauge the strength of our safety culture to track our progress on this journey by monitoring a range of cultural measures that provide a snapshot of three key safety dimensions:

1. A monthly metric, called the Energy Index, that captures safety activities above and beyond day-to-day tasks; for example, safety walks or investigations, innovations, collaborating with a different team, or organising team or site wellbeing activities.
2. A quarterly metric, called the Vibe, based on a net promoter score, which provides insight on how well our people think Melbourne Water is focusing on safety.
3. An annual survey across every business group to gauge progress towards creating a generative safety culture. Our most recent result (June 2019) revealed a proactive/generative safety score of 70 per cent.

We know that our focus on creating a generative safety culture is delivering results. Over the past five years we have recorded a sustained reduction in injuries and we will ensure this trend continues.

Our total recordable injury frequency rate (TRIFR) was 3.2 against a target of 2.7 for 2018/19. There were eight contractor and eight employee injuries in 2018/19. While this result is slightly higher than target, our long-term performance has seen sustained improvements through a reduction in TRIFR over the past five years, in line with our focus on safety culture. For further information and data on our expanded safety results, see Appendix G.

We pride ourselves on being innovative and constantly challenge traditional ways of managing safety. Our new set of tools – named Good to Go – does not layer staff with unhelpful bureaucracy and paperwork. It has replaced a number of safety checklist processes and emphasises managing hazards through situational awareness practices and identifying threats. Good to Go allows staff to think about what might stop them doing the activity or task, even before they start.

Team morale is a crucial part of safety culture. With this in mind, our family days at the Winneke Water Treatment Plant, and the WTP and ETP formed a part of our whole of life approach to safety, and acknowledges the close relationship between work and family life. The events were attended by over 500 people, reinforcing that safety is strongest when it is a visible part of everyday routines with processes woven into everything we do, whether at work or at home.

Technology provides a range of opportunities to improve the safety tools we use every day, including for those people who work onsite. We have developed a number of apps to support safety in the field, including:

- a Confined Space Entry Awareness app, providing clarity on defining confined spaces and helping people understand requirements for entry
- a Contractor Training Log app, which allows our people to see the training records of any field contractors
- additional apps to access Good to Go and an incident reporting system, which allow people to proactively manage safety on the go.

We are also committed to ensuring those injured in the workplace are supported through their recovery. A WorkSafe claims management audit confirmed the value of our approach, with 98 per cent compliance with the Victorian workers compensation legislation, excellent claims management practices and a commitment to continuous improvement.

Driving safety across the whole business

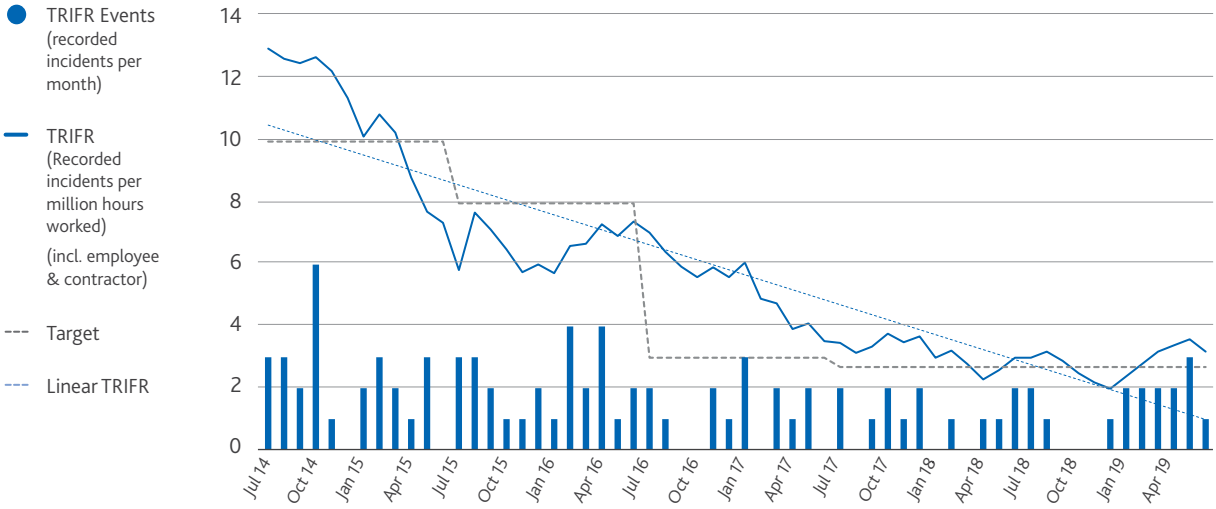
A strong safety culture means that safety is everyone's concern. In 2018/19 we delivered a range of events with a clear safety focus. Highlights include:

- a realistic mock court role-play activity based on a hypothetical severe workplace injury resulting from a failure to engage workers adequately through tool box meetings and other safety processes. Over 300 staff attended this unique and powerful event that underscored the role we all play in keeping each other safe
- the inaugural Water Industry Safety Event (WISE), hosted by Melbourne Water. The event was an opportunity for collaboration and knowledge sharing across the water industry. It was attended by safety representatives, occupational health and safety professionals, operational leaders, and operators and suppliers from a number of water authorities, with presentations from Melbourne Water, North East Water, Goulburn Valley Water, Gippsland Water and South East Water
- the award of Best Safety Leadership Program to Melbourne Water for our work with contractors, and a commendation for our Virtual Reality Design Review Process at the National Safety Council of Australia (NSCA) awards in Sydney. Melbourne Water was also awarded the National Safety Excellence Award for our overall safety program
- Safety Leadership Edge, an event designed to foster safety leadership across the business and presented by Melbourne Water's executive leadership team. More than 100 people from across Melbourne Water participated, and the leadership team had the opportunity to hear first-hand from field crew about their expectations of leaders. Our general managers shared their experience and knowledge on:
  - providing safety leadership
  - driving a safety culture
  - integrating safety as good business practice
  - perceptions of risk and managing risks
  - creating engaged teams with authentic and sometimes challenging conversations.

During 2018/19 the Major Hazard Facility (MHF) licence of the Silvan Water Treatment Plant was renewed for five years without conditions. This followed the successful relicensing of the Winneke Water Treatment Plant and the ETP in 2018. The issue of licences without conditions is a real success – only 50 per cent of Victorian MHFs were issued with five-year non-conditional licences in this round of licensing.

Our ultimate goal is to remove MHFs from our business. We have completed the next step on this pathway for the Winneke Water Treatment Plant, with the project to move from liquefied chlorine gas to sodium hypochlorite for disinfection completed and in the final stages of proof of performance. This will result in a reduction in on and off-site risk and eventually remove the need to hold an MHF licence.

Total Recordable Injury Frequency Rate



Case study

Whole of life safety through enhanced wellbeing

Melbourne Water launched a new Wellbeing Program earlier this year, based on the following principles: the program is easy to access for everyone in the business; it is simple, pragmatic and practical; and it has an element of 'whole of life'. Whole of life means that the activity has a positive impact beyond the workplace on the employee's family, friends and even the broader community. The new Wellbeing Program adopted a holistic approach and targets both physical and mental health.

For the first few initiatives of the program, our employees and contractors were offered free on-site skin cancer checks. Flu vaccinations and voluntary health checks were also offered to contractors for the first time. Engagement with the new Wellbeing Program has been overwhelming, with close to 1000 people participating in a skin cancer check. As a result, a number of our people were diagnosed with a melanoma requiring urgent medical intervention. Over 350 people participated in a 20-minute voluntary health check that included blood pressure, blood glucose and cholesterol measurements, as well as a mental health assessment, and a number of people were referred to a doctor for follow up. People posted video testimonials on our internal social media thanking Melbourne Water for these health initiatives that in some instances uncovered conditions they could proactively address. The number of flu vaccinations also increased from last year (+40 per cent), providing 811 people with the opportunity to be vaccinated.

The Wellbeing Program has raised engagement and energy around safety and wellbeing, with mental health being its next focus area.

Our People

Melbourne Water's people are central to our ability to deliver essential services to Melbourne.

Positioning Melbourne Water as an employer of choice

Attracting and retaining talent, and building employee engagement and satisfaction is important to ensure we continue to deliver outcomes for our customers and the community.

In 2019, Melbourne Water introduced the Employee Value Proposition (EVP) to help position the business as an employer of choice. The EVP was developed in consultation with Melbourne Water employees, and has been successfully embedded to enhance hiring, recruitment and on-boarding activities. The EVP outlines our commitment to staff, which includes:

- **Freedom** – our commitment to flexible working, including purchased leave, varied start and finish times, working from alternative locations, part-time work and nine-day fortnights. We understand that the organisation and our customers benefit from us enabling our employees to achieve balance in work and life.
- **Impact** – we are a talented and passionate team dedicated to enhancing life and liveability in Melbourne and beyond. Our people do truly meaningful work in a supportive and inclusive culture that encourages them to make the most of their talents.
- **People** – our people are passionate, welcoming and inclusive. We welcome Aboriginal and Torres Strait Islander peoples, people with disability, mature age and young job seekers, and those from culturally diverse backgrounds.

The EVP was used in the 2019 Engineering Graduate and 2018/19 Seasonal Fire Fighters recruitment campaigns. Both campaigns saw an increase in applications, diversity of talent and an accelerated time to hire.

Our workforce in numbers

- Melbourne Water employed 1171 people in 2018/19 compared to 1135 in 2017/18.
- We continue to actively support greater diversity in our workforce – females make up 37 per cent of our workforce in 2018/19 compared to 36 per cent in 2017/18.
- In 2018/19, 51 per cent of our vacant roles were filled internally, in line with our focus on career development.
- We delivered 3278 training sessions for staff in 2018/19 using both face-to-face and online delivery modes.

Culture and engagement

Organisational culture and employee engagement are directly related to performance, productivity, retention, advocacy and wellbeing. They are all important factors to deliver our vision of enhancing life and liveability.

Our focus on people, culture and belonging is achieving positive outcomes. This year, employee engagement rose 4 per cent to 76 per cent. This is the third consecutive year that we have seen an increase in engagement. There was significant uplift in alignment and performance factors related to

- diversity and inclusion
- social connection
- team leadership
- customer and community outcomes.

Living and breathing our values

Our culture is defined by three core values – care, integrity and courage. They are the guiding principles that help us deliver our strategies and achieve positive outcomes for our people, customers, community and the environment.

In 2019, we asked employees to better define our values so that they can be role modelled, understood and observed every day. This resulted in the successful relaunch of our values, and the impact statements that define them.

We are embedding these values in each stage of the employee life cycle including recruitment, on-boarding, performance, and reward and recognition.

Ensuring a strong talent pipeline to meet current and future business needs

Building a strong talent pipeline is fundamental to ensuring that Melbourne Water has a workforce that is ready to meet current and future business needs.

Our Career Development Centre is designed to deliver phased talent development initiatives to support our high-potential leaders. This includes coaching, 360-degree feedback and industry-wide opportunities.

In 2018/19 we introduced Coaching Circles, a new and innovative coaching program for talented senior leaders. Coaching Circles is designed to improve our coaching culture and accountability by sharing issues and solving business problems within small cohorts.

All high-potential employees were offered at least one targeted development opportunity during the year, with 100 per cent of direct reports and 71 per cent of senior managers accepting these opportunities.

Building the capability of our workforce

Continuing to build the technical capability of our workforce was a key priority in 2018/19. We achieved this through upskilling our workforce and attracting new talent.

VET programs continue to contribute to Melbourne Water's technical capability. Ten new trainees commenced their 18-month traineeship in April 2019. The Certificate III in Conservation and Land Management has been incorporated into the traineeship program to complement the trainees' on-the-job training and development.

Four business administration trainees are completing a Certificate III qualification in Business Administration.

Currently there are 23 water operators enrolled in the Water Industry Certificate III qualification, and 13 employees completed the Certificate III qualification in Civil Construction.

Our Industry Placement Program commenced in March 2019. The program will leverage industry partnerships to produce a reciprocal, sustainable long-term placement program that provides ongoing competency development opportunities for early career engineers and project managers at Melbourne Water.

We continued to grow and nurture the external pipeline of talent through graduate programs. Seven of the 2016-2018 engineering graduates completed their program in November 2018, and have had the opportunity to apply their talents by working at Melbourne Water in long-term positions.

For the coming year, 10 2019-2021 graduates – eight engineers and two IT students – were recruited and commenced their rotational program of work.

Valuing diversity and inclusion

Melbourne Water embraces difference and nurtures a connected, safe and respectful environment for our people.

Our *Diversity and Inclusion Strategy* outlines our approach to addressing barriers to diversity and inclusion. Several individual action plans have been developed to deliver this strategy. Our three priority areas are:

- accessibility and people with disability
- gender equity
- reconciliation (Aboriginal and Torres Strait Islander).

The strategy and plans include our commitment to have a workforce where:

- by 2020 3 per cent identify as Aboriginal or Torres Strait Islander
- by 2023 there is 50 per cent female representation in corporate (including leadership) roles, and 30 per cent female representation in operational roles (including those in leadership)
- by 2023 15 per cent identify as living with a disability.

The plans drive our recruitment, development and recognition of our people, and our commitment to being more diverse and inclusive.

Over the past year we have made significant progress in building an inclusive workplace culture. This is evidenced by our *2019 Culture & Engagement Survey* results, including:

- diversity inclusion items rated as 84 per cent favourable
- 90 per cent of our staff agreeing with the statement 'Melbourne Water supports a diverse and inclusive workplace'
- 83 per cent of our people recognising and understanding the advantages of diversity and inclusion (an increase of 4 per cent).

Our 2019 staff census showed that over the year the number of our employees that identify as Aboriginal or Torres Strait Islander was 1.4 per cent, more than double the 2018 result. Two traineeships were filled by Aboriginal people.

Flexible working

Access to flexible work arrangements is an important enabler for people at every stage of the employment life cycle, and particularly critical for people with disabilities, carer responsibilities or ageing parents.

Our people continue to access a range of formal and informal flexible working arrangements, with 29.4 per cent of the workforce utilising these arrangements in 2018/19, up from 25.7 per cent in the previous year.

In 2019 Melbourne Water was recognised as a leader in flexible working and was a finalist for the Best Workplace Flexibility Program for the 2019 Human Resources Awards.

Taking action on family violence

Melbourne Water is committed to supporting employees should they experience family violence.

In 2018/19 we introduced the *Family Violence Policy and Safety Plan*. This is complemented by a family violence e-learning module which aims to build employees' ability to recognise the signs, respond appropriately and be able to refer to internal and external supports if a colleague shares an experience of family violence.

LGBTI inclusion

Melbourne Water has an active LGBTI and ally employee network, Refract, which works across the organisation to build awareness and support inclusion.

Events and activities have included acknowledging Wear it Purple Day, IDAHOBIT, LGBTI Awareness and Ally Training, and participation in the Pride in Practice conference and the annual Midsumma Pride March, in solidarity and support of Victoria's LGBTI+ community.

Leading the way in gender equity

Melbourne Water is committed to achieving gender equity. *Our Gender Equity Plan (2018-2020)* takes a targeted approach to managing the impact of biases and addressing areas of under-representation of both men and women.

In 2018/19 we introduced the *Gender Equity Shortlist Policy*. This requires all hiring managers to strive for gender-equitable short lists prior to commencing the interview process. This is delivering strong progress with a 4 per cent increase in female representation in short lists and a 14 per cent increase in female commencements.

Over the past financial year there has been an increase in women in senior management roles to 43 per cent (our leadership team and their direct reports). We achieved over 50 per cent female representation in our graduate intake over 2018/19.

We are actively investing in growing the pipeline of women in the sector. In 2018/19 we hosted a career education event for secondary and tertiary-level students designed to showcase the diversity of roles available at Melbourne Water and contribute to building female students' interest in STEM fields.

Our Women in Leadership Development Program was successfully completed by 21 participants. This intensive six-month program enables participants to gain confidence, resilience and capability as leaders within the business and supports our strategic gender equality targets.

Compliance with the Disability Act 2006

The inclusion of people with a disability is an important part of our inclusion strategy. Our *Accessibility Inclusion Action Plan (2018-2021)* is leading our efforts to remove barriers that prevent people with a disability from accessing information via our website or facilities, and from gaining and keeping employment.

With a continued focus on building an inclusive culture, we experienced an increase in voluntary self-reporting of disability in 2018/19, with 7.7 per cent of our organisation reporting to have a disability.

The disability advocacy network, Kaleidoscope, was established and has created champions throughout the business and enabled two-way communication.

We are working in partnership with the Australian Network on Disability to provide mentoring and internship opportunities for people with disability. Its PACE Mentoring program is designed to encourage employees to mentor people with disability over a 16-week period to increase their job readiness.

In addition, we have introduced The Stepping Into program which provides a four-week full-time (or part-time equivalent) paid internship for university students with a disability in their final two years of study. The internship can provide a pathway to employment for graduates with disability, and provides mentors and managers with the opportunity to further develop their inclusive leadership skills.

The International Day of People with Disability was an effective platform to raise employees' awareness of disability and to strengthen relationships with external disability support services. In partnership with Wise Employment, Melbourne Water hosted a group of job seekers with disability.

Ensuring that Melbourne Water is accessible to customers and the community with disabilities is critically important, and in 2018/19 we established a project team to progress actions to increase digital accessibility across the organisation.

Case study

Supporting employees on parental leave

Supporting parents and those on parental leave is a key action within the *Gender Equity Plan* (2018-2020). Melbourne Water provides a range of support to employees though all stages of the life cycle of parental leave.

We connect with our employees on parental leave through coaching and support, and by providing updates and event information.

In 2018/19 two Keeping in Touch events provided parental leave employees with the opportunity to attend an extensive business update and to network with senior leaders. A pop-up crèche helped employees attend and reconnect with the workplace.

This biannual event has been welcomed by employees who have provided overwhelmingly positive feedback after their attendance.

The events have also provided a great opportunity to hear from employees about their experiences on leave – both good and bad. We have found this a powerful way of identifying and addressing practical barriers to returning to work.

Continuous Improvement

Melbourne Water embraces an agile and innovative approach to new ideas, and encourages business improvements so that we always aim to exceed customer and community expectations.

Improving the way we do business

A central part of the way we work at Melbourne Water is our culture of continuous improvement that responds positively to feedback, promotes ongoing evolution and targets emerging needs as they arise.

As a provider of essential services, strict regulatory compliance and strong risk management are critical to what we do. To meet these requirements, we have robust business systems and processes in place to monitor and report on our performance and to alert us early when we are off track.

Recently we have made our systems less cumbersome, without compromising their effectiveness, by streamlining our approach to managing risk. This has involved better understanding of our risks, allowing us to focus on priorities as they arise.

During 2018/19 we continued to focus on removing and reducing the 'red tape' that frustrates employees and can prevent them from doing their best work. Our *Integration and Simplification Program*, completed in June 2019, was a two-year challenge to the organisation to identify and implement solutions for almost 46,800 hours of effort in dealing with red tape across the business. Key outcomes from this program are:

- a streamlined approach to formal management systems, consolidating the management of the existing seven ISO-certified management systems applicable to our operations into a single Integrated Management System used across all areas of our business
- reduced time required for our risk management practices through the implementation of a consolidated and robust set of risks impacting the whole of Melbourne Water
- consolidated audit schedules that allow them to occur concurrently, effectively and efficiently, and reducing the disruption to operational activities and the associated administration effort
- standardised and automated routine performance reporting activities through a centralised system. This shift from manual spreadsheets has started the process to materially reduce the effort required for routine performance reporting
- improved information management through smart templates that collect information to support document search functionality and user friendly workflows for document approval and reviews. This work identified further opportunities for improvement and has become an ongoing and specialised program for 2019/20.

Taking a digital approach

Melbourne Water continues to use digital technologies and capabilities to provide valuable services in our rapidly evolving digital environment with its ever-increasing technological opportunities.

Our *Digital Strategy* outlines the digital technologies and capabilities we will use to deliver our customer and community services commitments. Refreshing this strategy will take full advantage of the next wave of digital trends such as artificial intelligence (AI), Internet of Things (IoT), analytics, digital engineering, virtual reality and augmented reality.

Our digital investment focuses on providing our business, customers and the community with the greatest benefit. We are strengthening our commitment to automation through AI, IoT and digital engineering and delivering safer, more reliable and responsive services – reducing costs for customers and the community. We are also building digital capabilities – such as service design, user experience and user training – to deliver real value to our business and customers.

To take advantage of these new and emerging technologies, Melbourne Water is investing in new capabilities and amending our digital solutions delivery so it is more agile and responsive to changing business and customer needs.

Melbourne Water is actively leveraging, extending and sharing digital capabilities and solutions with peers and partners right across the water industry, in areas like integrated sewage quality management system (ISQMS) monitoring. This will help our whole industry grow and deliver consistently high levels of service, while keeping costs low for all Victorians.

Importantly, we will continue to invest in the right tools, technologies and training, such as mobility, on-demand training and self-service, for our future workforce.

Extending business capabilities

Melbourne Water implemented a range of new digital technologies, tools and processes in 2018/19 to build our business capability and make our organisation safer, smarter, more efficient, and more responsive to customer and community needs.

These capabilities have clear benefits to our customers, including our new authenticated data sharing portal, enabling greater transparency and superior service outcomes for consumers by working more collaboratively with our water industry partners.

Our focus on building organisational capability also delivers benefits to our employees and service partners through safer operations, ensuring all our people go home safe. For example, we have introduced thermal imaging cameras to detect and extinguish hot spots after bushfires, eliminating the need for dangerous physical testing by hand. Building our capability in emerging technology means that we have eliminated exposure to dangerous working environments for over 60 of our people through the use of drones for asset inspections.

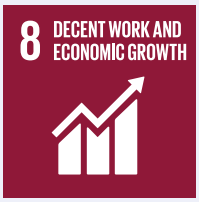
A key focus has been to embed digital innovation as a fundamental part of the way we operate. We have done this by building innovation capability right across Melbourne Water and taking advantage of new and emerging technologies such as LIDAR, AI, digital engineering and IoT.

During 2018/19 we implemented smarter and more efficient digital solutions to improve service efficiency, reliability and responsiveness for our customers and the community through delivery of initiatives including:

- developing online training registration tools for staff and service partners to streamline manual, time-intensive training processes
- providing online safety procedures and building mobile service partner training apps so that our partners can be work-ready sooner
- Developing a logbook app so control room staff can more efficiently input, search and share operational activities at our treatment plants and pumping stations, which is a critical element for shift handovers and safety procedures.
- implementing an internally developed work order app and map-based mobile applications that enable staff and service partners to quickly access and respond to service needs from the field
- implementing new digital forms and processes to enhance paperless operations in all areas of our business
- introducing AI control automation at our water supply pumping stations, resulting in increased efficiency and energy savings
- enhancing flood management capability through IoT monitoring trials for Melbourne's flood drainage network, including automated image recognition of CCTV footage to alert us when drainage grates are blocked
- upgrading our asset management system and delivering enhanced user experience through a new user interface, providing easier and more intuitive systems to support service delivery to our customers
- developing a highly-integrated sewer raft that leverages CCTV, laser scanning, sonar and pipe penetration radar capabilities, combined with AI analytics, to provide detailed monitoring and condition assessments and facilitate smarter maintenance regimes for the sewers that support Melbourne
- upgrading our finance and information management systems, improving functionality and developing new user interfaces to improve user experience and simplicity.

Case study

Virtual reality and augmented reality to design virtual plants



Melbourne Water is an internationally-recognised leader in the use of immersive technologies like virtual and augmented reality for improving plant design, safety and training. Our work has been formally recognised through the National Safety Awards, and we are actively sought out by partners across Asia and New Zealand to share our experience and learnings from our immersive technology journey. A key element of Melbourne Water's design assessment process for major capital works is the identification of safety and operating hazards at the point of design. This helps to eliminate safety risks up front and provide a safer working environment once assets are built.

The existing manual design assessment process was problematic for a number of reasons:

- Designers found it difficult to explain design concepts to operational staff
- Requests to modify asset design and operation were often being made after physical assets were built and operational staff became more aware of design improvement opportunities
- Staff expectations of asset design and function were often not met by the finished product
- Hazards were being 'designed in' to finished products, and were costly and difficult to remedy.

Working in partnership with Deakin University, Melbourne Water developed a virtual reality solution that is used to improve design effectiveness for all assets we construct.

This solution allows operators to move around and 'see' a virtual twin of the future asset. Furthermore, multiple operators are able to move around in the same virtual space, and use hand tracking to virtually operate the asset as though it was built. This allows operators to work collaboratively and more closely mirrors the way in which they work in the real world.

The results

The results are overwhelming. Not only does the virtual twin enable operators to understand and conceptualise future assets, but it also helps build their understanding of how the asset will work and provide up-front training.

The quantum of potential safety and operational issues identified at the point of design has grown substantially. Testing has shown that operators can effectively identify in excess of four times the number of safety issues using virtual reality than was previously possible under the manual assessment method.

By identifying these issues prior to design finalisation, Melbourne Water has been able to increase safety outcomes and reduce construction costs even before construction has commenced.

The future

Virtual reality presents significant design, safety, training and simulation benefits for Melbourne Water both now and into the future.

A pilot is underway using LIDAR technology to create 3D digital twins of Melbourne Water assets. These digital twins then have the potential to be combined with virtual reality technology to facilitate staff training (even when staff are in different locations), cross-skilling, knowledge sharing and operational simulation under different scenarios.

As virtual technology continues to grow and evolve, it will provide further opportunities to solve challenges and exploit opportunities in a virtual world more effectively than the real world.

Driving innovation through targeted research

To deliver on our commitment to continuously improve our services Melbourne Water engages in leading-edge research with universities, research centres, regional water authorities and other partners. During 2018/19 we undertook a number of research projects in areas that provide benefits not only to Melbourne Water but also, through collaboration, the broader community. These projects cover areas such as:

- reducing greenhouse gas emissions
- improving environmental management
- providing safe drinking water
- treating waste water
- asset maintenance
- delivering safe recycled water
- managing the health of our waterways and bays
- improving safety and liveability.

Two new research partnerships with local universities provide:

- a collaboration platform for long-term relationships and better understanding of our needs
- access to expertise, by bringing together multidisciplinary skills in the pursuit of a topic
- in-kind and cash co-funding from research partners
- more efficient contracting and procurement.

Our aquatic pollution prevention partnership with RMIT University is detecting water pollution, studying its impact on animals and plants in our waterways and bays, and tracing the source of urban and rural landscape pollutants.

The waterways research practice partnership with the University of Melbourne continues our focus on improving waterway management. Long-term monitoring of the effect of detaining stormwater in rainwater tanks and releasing it slowly after a storm has passed is improving stream health and biodiversity.

We have also developed a new model which uses existing data on stream flow, water quality, and the type and abundance of creatures. The model brings together many data sources to predict likely outcomes over the years and the effect of interventions. We are using this model to help prioritise work over the 25,000 kilometres of rivers and creeks we manage.

Melbourne Water has pledged to halve our net greenhouse gas emissions by 2025, putting us on the path to achieve net zero emissions by 2030. The WTP is accepting digestible liquid waste previously sent to landfill. This waste is added to sewage and digested in covered anaerobic lagoons. Biogas and sewage is captured and converted to electricity for use onsite and for export to the grid. The lagoon covers are critical for gas capture, but can be easily damaged, so we are monitoring and assessing movement of these massive covers using photogrammetry data collected by drones. It allows us to take remedial action before the covers fail.

Using big data and a sophisticated algorithm, Melbourne Water has better synchronised the water pumps at the Winneke Water Treatment Plant, reducing greenhouse electricity gas emissions and annual energy costs by 20 per cent. This process will be rolled out to our other pump stations in the future.

Business Sustainability

When delivering services, Melbourne Water always considers social responsibility, the natural environment and financial accountability.

Financial Sustainability

Melbourne Water is passionate about driving business efficiency and commercial decision making to ensure customer affordability.

Financial performance

Sustainable businesses have financial stability at their core. At Melbourne Water, financial sustainability is well embedded into our strategic objectives. We define financial sustainability as:

- continuing to deliver our valued services at the lowest cost to customers
- meeting our financial obligations both today and in the future
- providing a return to our shareholders.

In 2018/19 Melbourne Water's solid financial performance has delivered a positive net profit after tax result of $201.0 million.

Population growth continues to increase demand for our services which is reflected in our revenue growth for bulk water and sewerage charges. Waterways and drainage services revenue has reduced on the prior year due to lower prices offered to customers. The trend of unpredictability in our revenue continues to come primarily from the demand for land development services, with the strong performance in this area due to Melbourne's ongoing growth.

During 2018/19, Melbourne Water made cash payments to the Victorian Government of $225.0 million ($286.4 million in 2017/18). We are proud of the contribution we make towards the ongoing success of Victorian communities.

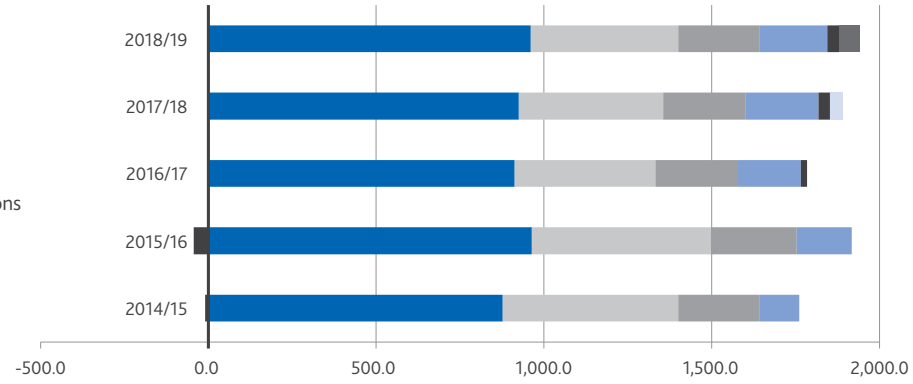
Our business needs to make many decisions to balance the financial impacts of managing population growth, the effects of climate change and ensuring we continue to provide excellent service delivery. We are focused on leveraging our technology investments to provide decision makers with the best possible information for optimal outcomes. This includes improved long-term modelling capabilities that can provide scenario analysis to consider the implications of drivers such as population growth, climate change, ageing assets and the resulting price impact on customers across a number of regulatory periods. As the next evolution in our financial management maturity, we are committed to further developing our organisational strength in data analytics, drawing on our varied datasets and powerful business intelligence tools.

Working with an Indigenous-owned business, Melbourne Water created a brochure that is primarily used to help our suppliers understand our strategies, values and intent to embed diversity and inclusion into our procurement practices. It explains the categories of the code which includes reconciliation, family violence, disability inclusion, business integrity and gender equity. The brochure is included in our tender templates and is available for viewing on the Melbourne Water website.

Melbourne Water has worked closely with the Victorian water sector and has been an early adopter of the Victorian Government's *Social Procurement Framework*. During 2018/19 we have worked to further embed and communicate the industry-wide Supplier Code of Practice that was developed through the Social Procurement Working Group chaired by Melbourne Water.

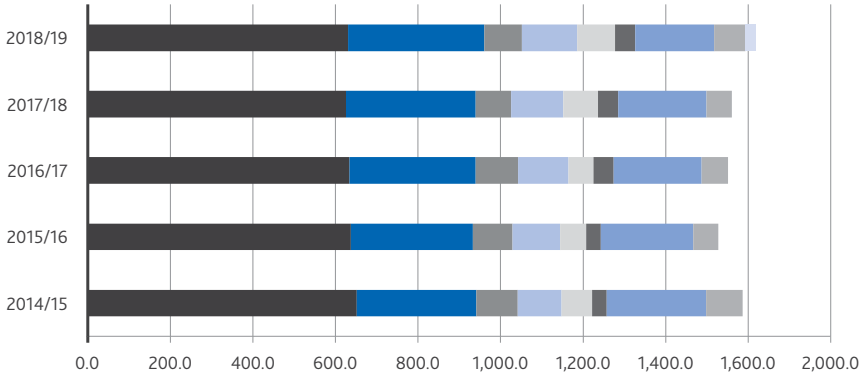
Revenue ($M)

- Bulk water services
- Bulk sewerage services
- Waterways charges
- Developer charges, contributions & contributed assets
- Other revenue and rebates
- Refinancing gain on financial instruments
- Net gain on revaluation of non-financial assets



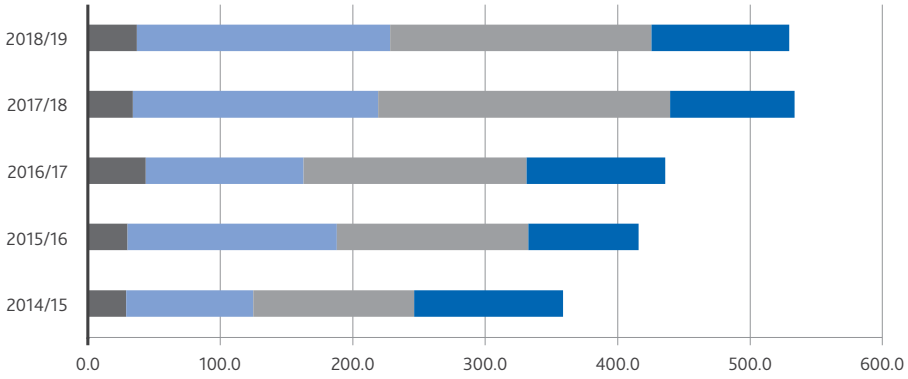
Expenditure ($M)

- Desalination plant expenses (operating, finance & amortisation)
- Depreciation & amortisation (excluding desalination)
- Operational (excluding desalination)
- Employee benefits
- Repairs & maintenance
- Administrative
- Finance costs (excluding desalination)
- Other expenses
- Net loss on revaluation of non-financial assets



Capital Expenditure ($M)

- Corporate
- Waterways and Drainage
- Sewerage
- Water



Five-Year Financial Summary

Summary of Financial Results

Statement of Profit or Loss for the year ended 30 June – Extract	2019 $M	2018 $M	2017 $M	2016 $M	2015 $M
Total revenue	1,938.8	1,890.4	1,791.4	1,871.6	1,749.7
Operating and other expenses	(595.2)	(525.3)	(512.4)	(481.8)	(514.6)
Depreciation and amortisation expenses	(408.1)	(392.1)	(383.8)	(373.8)	(367.5)
Finance expenses	(618.2)	(645.3)	(657.2)	(676.7)	(707.2)
Net profit from operations before tax	**317.3**	**327.7**	**237.9**	**339.3**	**160.4**
Tax expense	(116.3)	(118.9)	(87.5)	(185.9)	(44.2)
Net profit for the period after tax	**201.0**	**208.8**	**150.4**	**153.4**	**116.2**

Statement of Financial Position as at 30 June – Extract	2019 $M	2018 $M	2017 $M	2016 $M	2015 $M
Current assets	153.4	115.7	95.6	103.8	189.1
Non-current assets	15,125.5	15,212.9	14,786.5	14,717.2	14,346.2
Total assets	**15,278.9**	**15,328.6**	**14,882.1**	**14,821.0**	**14,535.3**
Current liabilities	1,163.5	1,216.4	1,032.7	1,018.7	852.5
Non-current liabilities	8,372.4	8,497.2	8,579.3	8,656.5	8,890.8
Total liabilities	**9,535.9**	**9,713.6**	**9,612.0**	**9,675.2**	**9,743.3**
Net assets/Total equity	**5,743.0**	**5,615.0**	**5,270.1**	**5,145.8**	**4,792.0**

Statement of Cash Flows for the year ended 30 June – Extract	2019 $M	2018 $M	2017 $M	2016 $M	2015 $M
Net cash inflow from operating activities	534.9	465.8	439.7	526.0	373.2
Net cash outflow from investing activities	(513.0)	(446.2)	(444.4)	(357.7)	(302.9)
Net cash (outflow)/inflow from financing activities	(6.3)	(21.2)	5.9	(207.1)	(140.3)

Summary of Financial Performance

Key Financial Performance Indicators

Performance Indicators	2019 $M	2018 $M	2017 $M	2016 $M	2015 $M
Cash Interest Cover	**2.1**	1.9	2.0	2.1	1.6
Gearing Ratio	**51.2%**	52.6%	53.6%	53.6%	55.9%
Internal Financing Ratio	**93.4%**	78.6%	89.0%	135.3%	103.4%
Current Ratio	**0.15 times**	0.10 times	0.09 times	0.10 times	0.23 times
Return on Assets	**6.1%**	6.4%	6.0%	6.9%	6.0%
Return on Equity	**3.5%**	3.8%	2.9%	3.1%	2.5%
EBITDA Margin	**69.3%**	72.2%	71.4%	74.2%	70.5%

Explanatory notes:

Refer to the Performance Report (pages 142 to 146) for definitions of financial performance indicators and reporting of all 2018/19 performance indicators (financial and non-financial) against targets with supporting explanations for any significant variations.

Social Sustainability

Social Procurement Framework

The *Social Procurement Framework* was developed and put into practice during 2018/19. The Victorian Government has recognised the power of procurement as a lever to create positive change and opportunities for all Victorians.

The Framework enables buyers and suppliers to deliver social, economic and environmental outcomes through procurement that will benefit the Victorian community. Building a fair, inclusive and sustainable Victoria through procurement, the Framework has 10 objectives: seven relate to social procurement outcomes and the balance relate to sustainable business practices and implementation of *Climate Change Policy* objectives. This directly aligns and supports our commitment to Sustainable Development Goals (SDGs). Melbourne Water has signed up to the United Nations Global Compact (UNGC), the world's largest corporate sustainability initiative.

Partnerships

Melbourne Water is committed to building strong and successful partnerships with our customers and other stakeholders.

During 2018/19 we commenced work with Kinaway, the Victorian Aboriginal Chamber of Commerce, the leading Victorian organisation dedicated to supporting Victorian Aboriginal and Torres Strait Islander business owners. Its focus is on changing Aboriginal and Torres Strait Islander peoples' lives through a strength-based model of business ownership and participation in the Victorian economy. This relationship supports our *Innovate Reconciliation Action Plan* and provides support to identify and build relationships with Indigenous businesses. With Kinaway, Melbourne Water will also find opportunities to inform and finalise our *Social Procurement Strategy*, part of our requirements under the *Social Procurement Framework*.

As a member of the UNGC, Melbourne Water Procurement has been an active member of the Community of Practice for Modern Slavery. Leveraging this best-practice platform, Melbourne Water has chaired a supply chain risk assessment for the Victorian water industry, a first for a utility sector. This risk assessment is a first step in providing transparency for our supply chain and prioritising risks and opportunities.

Our small scale capital delivery partner, Aqua Metro Services, is a great example of a supplier partnership that has led the way in social procurement. It has developed a *Diversity and Inclusion Management Plan* to deliver on its goals. Best practice key performance indicators have been developed around:

- supporting Indigenous business capability
- gender equality and equal opportunities
- sustainability.

Awards and recognition

Leanne Hill, Melbourne Water's Strategic Procurement Manager, won the Telstra Business Award Victoria – Public Sector and Academia category on the platform of Social Procurement and Modern Slavery.

The Department of Treasury and Finance has recognised that the Victorian water sector is an early adopter of the Victorian Government's Social Procurement Framework, with Melbourne Water featured in its newsletters and Leanne Hill speaking at Treasury Place on our water industry case studies.

Value for money

Enhancing the affordability of Melbourne Water services, Procurement supports major tender processes that result in value for money outcomes. In the 2018/19 financial year, approximately $9 million was realised in annualised savings.

Environmental Sustainability

Guided by our *Environmental Stewardship Strategy*, Melbourne Water seeks to enhance our contribution to the environmental sustainability of Greater Melbourne.

Melbourne Water is committed to reducing the environmental impacts of our services and improving environmental outcomes wherever possible. In doing so we will co-create a sustainable region through innovative resource recovery and emissions reduction.

Melbourne Water has a long history of undertaking carbon reduction initiatives, including energy efficiency programs, optimised sewage treatment processes, and generating and using our own electricity from renewable sources including biogas and hydro-electricity schemes.

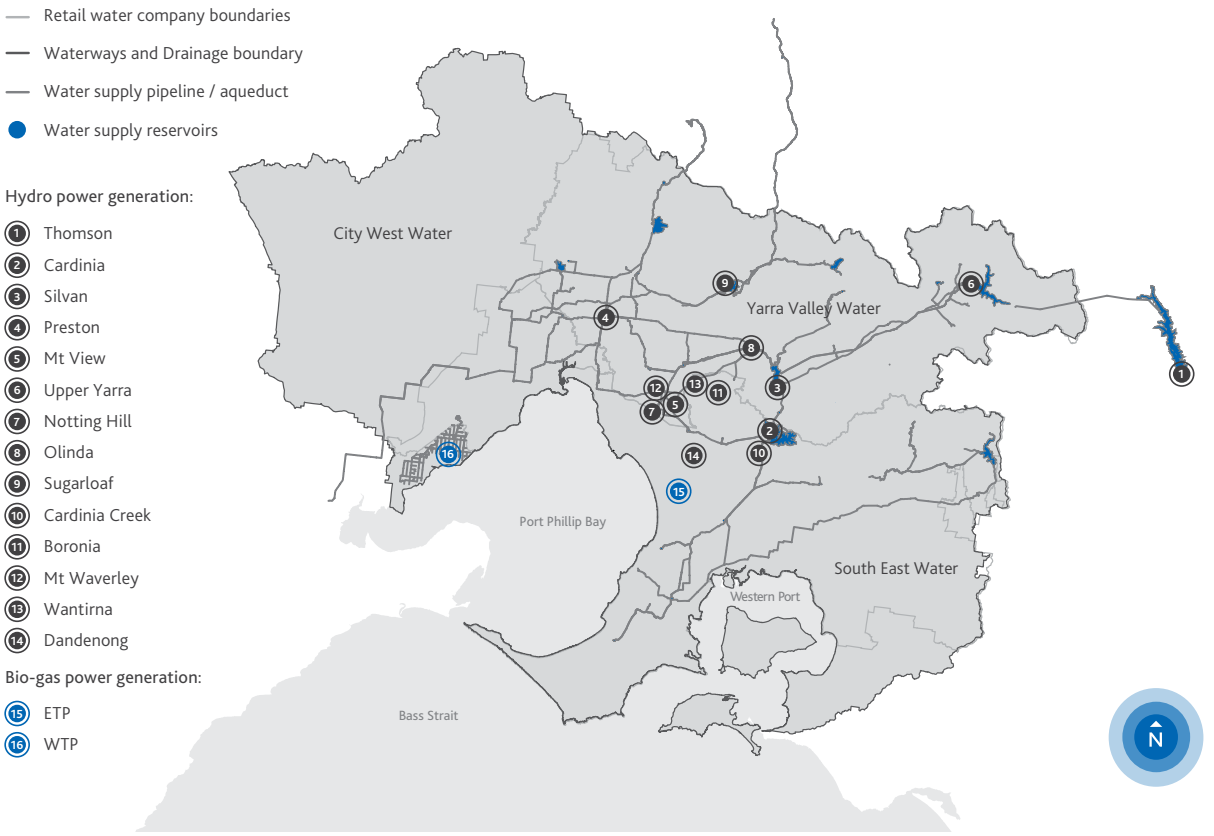
The business is on track to meet our pledge to halve net greenhouse gas emissions by 2025, and achieve net zero emissions by 2030.

We drive innovation that not only benefits our own business but the broader water sector. Recently we ran an innovation competition that brought together global expertise to find solutions to the problem of scope 1 emissions, which are generated as a natural part of the sewage treatment process.

The *Water Sector Climate Change Adaptation Action Plan* highlights priority adaptation challenges for the Victorian water sector. Our people are participating in a range of projects and engaging with DELWP to identify areas where we can assist with the next phase of action delivery.

Melbourne Water has an integrated, compliant and cost-effective approach to reducing over 30 streams of waste across the business. In the last two years we have worked with our service partners to implement best-practice approaches to minimising the environmental impact of our waste.

Renewable energy generation in the water and sewerage systems



Biosolids re-use

Biosolids are the solid materials that are generated in the wastewater treatment process and then separated from the liquid, before being fully treated and dried. Melbourne Water stores significant volumes of biosolids at both the Eastern and Western wastewater treatment plants.

Over the year Melbourne Water re-used in excess of 112,000 dry tonnes of stockpiled clay-rich biosolids from the ETP to help rehabilitate a landfill site in outer Melbourne. In addition, 120,000 dry tonnes of biosolids were used as part of the groundworks for the soon-to-be-constructed solar energy project at the ETP.

The agricultural re-use of the biosolids site from the WTP has continued for the third year with 4100 tonnes being beneficially used for crop farming in the nearby Balliang area. This program of agricultural re-use will be expanded to take in areas that can benefit from biosolids that are further afield from the WTP.

We have also developed an *Environmental Improvement Plan* to move towards re-using the full production of 41,000 dry tonnes per year of biosolids from the WTP. This will involve testing a number of treatment processes to determine suitable re-use pathways that provide benefits to our customers and the community.

Climate change and adaptation

Melbourne Water is adapting operations to prepare for a changing climate, reducing our own impacts by lowering our greenhouse emissions and generating more renewable energy.

We have a *Climate Change Adaptation Plan* which guides how we ensure our operations can continue to perform to community expectations in an uncertain future. We use the plan to ensure we are adhering to the guidelines set out in DELWP's *Guidelines for Assessing the Impact of Climate Change on Water Supplies*.

We are preparing for the challenges of an increasingly variable climate across our services including:

Water supply – adapting to less rainfall by harnessing alternative water sources such as desalination, stormwater and recycled water and conducting controlled burns to protect water supply catchments from bushfires

Sewerage system – monitoring and upgrading our system to reduce the risk of spills during extreme storms, and researching solutions to sewer corrosion and odour caused by more concentrated sewage

Drainage system – upgrading drainage in high-risk areas to cope with floods, and reviewing guidelines for development in flood-prone areas

River health – researching catchments at risk from low river flows and species most affected by temperature increases.

Additionally, our major strategies including the *Melbourne Water System Strategy*, *Sewerage Strategy* and *Healthy Waterways Strategy* all feature plans to adapt our approaches to delivering our core services in a changing climate.

Emissions reduction

Melbourne Water is progressing towards a net zero carbon emission position by 2030 in line with the Victorian Government's requirement for the water sector.

This is being achieved in two stages:

1. A 50 per cent reduction of current emissions by 2025
2. A further reduction to net zero by 2030.

The Victorian water sector in its entirety is the single largest proportion of total State Government carbon emissions, and Melbourne Water accounts for 51 per cent of this output.

The biggest use of energy within Melbourne Water is associated with the transfer and treatment of sewage, producing 84 per cent of total emissions, in comparison to the water supply system which uses a relatively low amount of energy.

Our commitment to carbon reduction has already begun through established practices as well as planned initiatives, which include:

- transition to a zero emissions vehicle fleet within 10 years. We have upgraded infrastructure at all our Melbourne Water sites to accommodate the first cohort of electric vehicle charging stations. Melbourne Water will leverage expertise from our new fleet management services provider, Custom Fleet, to provide strategic advice on the best make-up of our electric vehicle fleet
- expanding the capture of methane-rich biogas by covering the anaerobic lagoons at the WTP – this source of renewable energy already meets 95 per cent of the treatment plant's energy demands
- expanding the generation of hydro-electricity through our water transfer system, which already produces nearly 70,000 megawatt hours per year – enough to power more than 14,000 homes
- an initiative to tap into global knowledge and innovation around measuring and reducing fugitive emissions from wastewater treatment plants.

Case study

Scope 1 emissions competition

Scope 1 emissions, associated with direct emissions from biological treatment processes involved in the treatment of sewage, make up almost half the total carbon emissions of Melbourne Water's activities.

This is an area of new science where real innovation required to help find solutions.

In order to attract the best innovators from the international science and engineering community, Melbourne Water launched a worldwide competition in 2018 seeking ideas.

The competition saw an innovative 'Request for Solution' process which helped to elicit ideas from a wide range of proponents from academia and industry to citizen scientists.

From the 35 submissions received from around the world, four have now been short-listed for detailed solution analysis. These submissions are:

Cranfield University, which has proposed an alternative treatment paradigm based on abiotic processes and anaerobic treatment which eliminate the production of scope 1 emissions.

HydroTerra, which has proposed the deployment of a novel integrated above and below-surface gas-monitoring system to quantify scope 1 emissions.

WSP, which has proposed eliminating scope 1 emissions from the drying pans and the sludge stockpiles utilising gasification.

Calibre, which has proposed a thermal ammonia stripper with ammonia oxidiser that will reduce nitrous oxide emissions from the Eastern Treatment Plant.

Once the proposed solutions have been analysed in detail, applicants with suitable solutions will commence a scope of works process with Melbourne Water and these solutions may ultimately be implemented into Melbourne Water's treatment operations.

This competition highlighted how Melbourne Water has embraced looking outward for solutions that would traditionally be internally focused 'asset management' challenges. In turn, the entrants to the competition embraced the significant challenges associated with reducing scope 1 emissions from the treatment process, producing innovation that will benefit Melbourne Water, the environment and the community for decades to come.

Enhancing biodiversity

Melbourne Water manages significant landholdings that support diverse communities of native plants and animals. We develop and implement strategies that protect native biodiversity, in compliance with Victorian and Commonwealth biodiversity obligations, and our activities for 2018/19 align with the *Victorian Biodiversity Plan 2037*.

Increasing environmental values

We continue to make the most of our large land assets, having established our first native vegetation credit site at Paul and Belfrages Swamp. Increased credit sales during the year are supporting the *Enhanced Biodiversity Management Program* to create further sites in the future and improve biodiversity at other Melbourne Water sites. Our *Healthy Waterways Strategy* includes the use of the international accounting standard - System for Environmental Economic Accounting – which quantifies our natural asset base, to better manage and prioritise works on our extensive waterway and land assets.

Biodiversity conservation management

As waterways manager and a significant landowner, we have a critical role in managing the waterways, estuaries and wetlands which are essential to the survival of much of our region's biodiversity. Threatened species such as the Growling Grass Frog, Dwarf Galaxias, Latham's Snipe, Leadbeater's Possum and Swamp Skink all depend on riparian or floodplain habitat that is protected and maintained in good condition.

In 2018/19, Melbourne Water signed an agreement with the Department of Environment, Land, Water and Planning (DELWP) to implement a long-term Growling Grass Frog habitat program, funded by developer contributions as urban development proceeds. The program includes the construction of new habitat ponds, management of existing ponds and the management of land around ponds to facilitate frog dispersal between ponds. The program will meet developer obligations under Commonwealth environment law.

We also signed a Memorandum of Understanding with VicRoads to use the trees that have been felled during road construction activities. The agreement includes the use of logs to support waterway health.

The Ramsar Convention on Wetlands of International Importance is an international treaty for the conservation and sustainable use of wetlands. Melbourne Water manages both the Edithvale-Seaford Wetlands Ramsar site and the WTP, which is a major portion of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site. Melbourne Water invests in biodiversity conservation at both of these sites. We also play an important role in managing nutrient and sediment input into the Westernport Ramsar site.

Our WTP site is one of the most important refuges for waterfowl in Victoria and a popular birdwatching site. The site supports more than 100,000 waterfowl (increasing in drought years) and large numbers of migratory shorebirds. The WTP also supports what is possibly the State's largest population of the endangered Growling Grass Frog, the threatened species of bird the Australasian Bittern, the critically endangered Spiny Rice-flower shrub and important areas of threatened vegetation communities such as coastal saltmarsh and temperate grasslands. With less than 50 wild Orange-bellied Parrots left in the world, the WTP is the best known overwintering site for this critically endangered bird as well as an important study and release site for the species.

Our significant investment of $1.2 million to support land management and biodiversity conservation at the WTP in 2018/19 has included pest animal and plant control, environmental watering, species monitoring, research and meeting legislative requirements across the 10,500 hectare site. The site is managed in consultation with our key advisory committee, which is composed of community group representatives, experts, agencies and adjacent land managers.

The Ramsar-listed Edithvale-Seaford Wetlands are the largest remaining part of the former Carrum Carrum Swamp and home to many bird species, including the endangered Australasian Bittern. The wetlands also provide important overwinter habitat for migratory birds such as the Sharp-tailed Sandpiper which breeds in the high Arctic, providing essential food resources for at least six months of each year. Works in 2018/19 concentrated on groundwater investigations and monitoring, while our comprehensive bird monitoring program continued for the thirty-third year running.

Melbourne Water also manages another 41 sites of biodiversity significance (SoBS) known to support listed species or significant vegetation communities. All sites have up-to-date management plans which inform our on-ground works and prioritise investment. In 2018/19 we completed the first round of new site condition monitoring assessments at all sites. These assessments provide us with a baseline condition description and will be repeated at each site every three years. We also commissioned a series of surveys on the threatened Southern Toadlet to determine how the effects of climate change and subsequent decline in rainfall are impacting this small population of frogs.

Pollution abatement notices

As the manager of Melbourne's waterways, Melbourne Water is responsible for cleaning up pollution caused by others where the polluter cannot be identified or does not have the capacity to respond. In doing so, we frequently incur significant cost, much of which has not been included in formal Pricing Determinations.

The notices issued to Melbourne Water in 2015/16 regarding the requirement to clean up polluted silt removed from Stony and Kororoit creeks have all been complied with. The one outstanding notice issued has been revoked. The pollution was caused by historical activities in the creeks' catchments.

In August 2018, the EPA inspected a site at our South Eastern Regional Office and issued Melbourne Water with a clean-up directive following inappropriate disposal of rinse water from cleaning herbicide knapsacks. The site used to dispose of residues was cleaned up and the procedure to clean out knapsacks was revised. The notice to clean up herbicide residues from the knapsack washing practise was revoked in December 2018.

Corporate Governance

Ethics and values

Melbourne Water's directors and employees are committed to operating ethically and in the best interests of customers, the Victorian Government, employees, suppliers and other stakeholders. The organisation has adopted the *Melbourne Water Code of Conduct*.

All directors, managers and employees are expected to perform their duties with integrity and honesty. This expectation extends to dealing with our people, customers, suppliers and the community. Melbourne Water employees and managers must comply with the *Melbourne Water Code of Conduct*.

Policies and procedures exist for directors and employees in relation to the identification of actual and potential conflicts of interest. These documents are regularly updated. The Corporate Secretary maintains a Register of Directors' Interests and a register of gifts and invitations accepted by directors and employees.

As part of maintaining a safe and healthy working environment, the Board has approved behavioural and workplace policies for specific purposes, such as health and safety, and equal opportunity. These policies are widely publicised and distributed to our employees.

Powers and accountability

Melbourne Water operates under the *Water Act 1989*.

Melbourne Water has one by-law: *Extension By-Law No. 1: Water Supply Protection (2018)*.

The Minister for Water has delegated powers of management under the *Water Act 1989* relating to licensed private water diversions from waterways to Melbourne Water, effective as of 1 July 1999. The Act and by-laws can be purchased via the publications directory at vic.gov.au

The Honourable Lisa Neville MP, Minister for Water, was the Minister responsible for Melbourne Water from 1 July 2018 to 30 June 2019. Melbourne Water works with officers of the Department of Environment, Land, Water and Planning (DELWP) and the Department of Treasury and Finance (DTF). Statutory and other reports are provided, covering Melbourne Water's performance against the objectives and performance indicators stated in the *Corporate Plan*.

There have been no recorded incidents of non-compliance with laws or regulations resulting in sanctions or fines.

Primary responsibilities

Melbourne Water's Board has adopted a charter that defines its role and responsibilities within the legislative framework provided by the *Water Act 1989* and other applicable legislation including the *Public Administration Act 2004*. The Board makes plans to achieve specific objectives, including:

- long-term, sustainable, outcomes – based on a triple bottom line approach
- approval of corporate plans together with key performance indicators linked to objectives
- approval of annual financial statements and monitoring of performance against objectives and risks
- monitoring safety, health and environmental standards and management systems.

The Board has ratified a *Corporate Governance Statement*. Key features of its activities include the following:

- ensuring the Board meets frequently enough to fulfil its duties and obligations, holding 10 Board meetings during 2018/19, and undertaking site visits and strategy workshops with Melbourne Water's Leadership Team. Special Board and committee meetings are convened as required to meet the needs of the business
- a structured induction program exists for new Board and committee members
- development opportunities are made available for Board members on an ongoing basis
- conflicts of interest are declared and a director does not participate in decisions where such a conflict exists
- directors have the right to seek independent professional advice, at Melbourne Water's expense, in connection with their duties and responsibilities
- declarations of pecuniary interest by directors are made upon appointment, and thereafter annually, and confirmed at each Board meeting
- there is an annual review of Board performance.

The Board has three committees, each comprised of four non-executive directors, who meet periodically to focus on risk, audit, finance and sustainability, people, safety and remuneration, and customer and service delivery. The Managing Director and the relevant General Manager attend meetings of committees by invitation. The Board approves the charters of each committee.

Audit, Risk and Finance Committee

The role of the Audit, Risk and Finance Committee (ARFC) is to assist the Board of Directors in fulfilling its responsibilities relating to:

- financial management framework and reporting process
- risk management
- corporate governance
- audit (internal and external) and assurance
- information technology.

The ARFC comprised Merran Kelsall (Chair), John Thwaites, Fiona Rowland and Hugh Gleeson for the period 1 July 2018 to 20 June 2019. A report about the activities of the ARFC in fulfilling its charter is prepared annually.

People, Safety and Remuneration Committee

The role of the People, Safety and Remuneration Committee (PSRC) is to assist the Board of Directors in fulfilling its responsibilities relating to:

- workplace health and safety
- strategic human resources (including but not limited to diversity and inclusion, change management, employee engagement)
- organisation capability
- remuneration.

For details of directors' and executives' remuneration, refer to the financial statements.

The PSRC comprised Kathleen Bailey-Lord (Chair), Russell Anderson, Hugh Gleeson and Robyn McLeod for the period 1 July 2018 to 30 June 2019. A report about the activities of the PSRC in fulfilling its charter is prepared annually.

Customer and Service Delivery Committee

The role of the Customer and Service Delivery Committee (CSDC) is to assist the Board in fulfilling its business objectives and responsibilities relating to:

- delivery of services and experiences our customers and community value
- affordable asset delivery to enable these services
- protecting the environment and public health.

The CSDC comprised Garry Smith (Chair), Russell Anderson, Fiona Rowland and Robyn McLeod for the period 1 July 2018 to 30 June 2019. A report about the activities of the CSDC in fulfilling its charter is prepared annually.

Board of Directors

The Minister for Water, in consultation with the Treasurer, appoints the directors of Melbourne Water for terms of up to four years and the Victorian Government sets their remuneration. Directors are eligible for reappointment for subsequent terms.

In making new appointments to the Board, the Victorian Government ensures the Board has the necessary combination of skills and experience. The Managing Director is appointed by the Board, subject to the approval of the Minister in consultation with the Treasurer, for a term of up to five years.

Typically, annual reviews are conducted on the performance of the Board as a whole and of individual members pursuant to a Statement of Obligations issued by the Minister. The outcomes of these performance reviews are reported to the Treasurer and the Minister.

The Board of Directors currently comprises a non-executive chair, seven non-executive directors and the Managing Director.

John Thwaites, Chair

John Thwaites is Chair of Melbourne Water.

Mr Thwaites is a Professorial Fellow at Monash University and Chair of ClimateWorks Australia, the Monash Sustainable Development Institute, and the Peter Cullen Water and Environment Trust.

Mr Thwaites was a Co-Chair of the Leadership Council of the UN Sustainable Development Solutions Network (SDSN), launched by the Secretary General of the United Nations to provide expert advice and support on the Sustainable Development Goals. In 2013, Mr Thwaites was named as one of the 100 Global Sustainability Leaders by ABC Carbon Express.

Mr Thwaites was Deputy Premier of Victoria from 1999 until his retirement in 2007. During this period, he was Minister for Health, Minister for Planning, Minister for Environment, Minister for Water, Minister for Victorian Communities and Victoria's first Minister for Climate Change. In these portfolios he was responsible for major reforms in social policy, health, environment and water.

Prior to being elected to Parliament, Mr Thwaites was a barrister and Mayor of South Melbourne. He has degrees in Law (Honours) and Science from Monash University. Mr Thwaites was appointed as Chair of Melbourne Water on 1 October 2015.

Michael Wandmaker, Managing Director

Michael Wandmaker is Managing Director of Melbourne Water.

Mr Wandmaker has extensive senior leadership experience across several industries, both in Australia and internationally, and is a Fellow of the Institute of Engineers. He is currently a Director of the Committee for Melbourne. Mr Wandmaker was previously President of FT Services, CEO of Silcar Maintenance Services, Vice President at Siemens Canada Ltd, and held various executive positions with Tyco Services and Transfield Holdings Pty Ltd. Prior to becoming Managing Director at Melbourne Water, Mr Wandmaker was Group President and Acting CEO of UGL Limited.

Mr Wandmaker was appointed Managing Director on 22 September 2014.

Merran Kelsall, Director and Deputy Chair

Merran Kelsall was appointed to the Board in October 2015. She is Chair of the Audit, Risk and Finance Committee.

Ms Kelsall is an experienced independent director who has considerable expertise in finance, audit, risk and compliance. She has served on many boards in the private and public sectors. Her current appointments include directorships at RACV Limited and VicSuper, and Deputy President at CPA Australia Ltd. She was previously Chair and CEO of Auditing and Assurance Standards Board, and Member, International Auditing and Assurance Standards Board and Financial Reporting Council, and a Commissioner at Taxi Services Commission. She was also formerly a partner at BDO Chartered Accountants.

Ms Kelsall is a Professor of Practice at the School of Accounting, UNSW Business School.

Russell Anderson, Director

Russell Anderson was appointed to the Board on 1 October, 2017.

Mr Anderson is currently Strategy, Governance and Risk Advisor at Australian Health Service Alliance Ltd and is also self-employed as a governance consultant to the water industry. Mr Anderson's previous roles include Strategy, Risk and Corporate Governance Manager for Australian Air Express Pty Ltd and Chief Internal Auditor, Air New Zealand Group. Mr Anderson has a Bachelor of Commerce and a Graduate Diploma of Applied Corporate Governance.

Kathleen Bailey-Lord, Director

Kathleen Bailey-Lord was appointed to the Board in October 2015. She is Chair of the PSRC.

Ms Bailey-Lord is an experienced company board director with international senior executive experience across diverse industries – technology, financial services, professional services and marketing.

Ms Bailey-Lord currently serves as a non-executive director of QBE Insurance (Australia Pacific) where she chairs both the Operations & Technology Committee and the People & Remuneration Committee, Bank of Queensland where she is a member of the & Remuneration Committee and the IT Committee, and Monash College where she chairs the Audit & Risk Committee.

Ms Bailey-Lord is also a Fellow of the Australian Institute of Company Directors (AICD), a member of the AICD's Victorian Council and its Technology Governance & Innovation Panel, as well as a member of Chief Executive Women.

Hugh Gleeson, Director

Hugh Gleeson was appointed to the Board on 1 October 2015.

Mr Gleeson is an experienced company director, a professional Engineer, and has more than 30 years' experience in the energy and utilities sector.

Mr Gleeson is currently a director of Energy Queensland, the Ausgrid Partnership and GDI-Allgas Energy. He retired as the CEO of electricity and gas distribution businesses, United Energy and Multinet Gas in 2015, following 12 years in that role. He has also served on the boards of Barwon Water, Energy Networks Australia and the Energy Supply Association of Australia.

Robyn McLeod, Director

Robyn McLeod was appointed to the Board on 1 October 2015.

Ms McLeod has held the positions of Independent Commissioner for Water Security in South Australia, National Director of Water at KPMG, and Executive Director of Major Projects, Water, with the Department of Sustainability and Environment, Victoria.

She was Chief of Staff to the Victorian Energy Resources and Ports Minister, and an advisor to the Victorian Environment and Education Minister. Ms McLeod has previously worked in the areas of corporate education, industrial relations and secondary teaching. She is a graduate of the Australian Institute of Company Directors, and completed the Senior Executive Fellows Program at The Kennedy School of Government, Harvard University. She is currently a director of VicWater.

In May 2017, Ms McLeod joined the of Governance Working Group of the Board of the Good Shepherd Australia and New Zealand, and in June 2019, she was appointed to the Board of Monash Health. Previous board positions include as an inaugural director of the Australian Centre for Social Innovation and Chair of this organisation's ARFC.

Fiona Rowland, Director

Fiona Rowland was appointed to the Board on 1 October, 2017.

Ms Rowland is an experienced company board director in the areas of financial services, trusts and asset management with 16 years' executive management and CEO experience at the Bennelong Group, National Australia Bank, Australia and New Zealand Banking Group, UBS AG, and UBS Wealth Management. She has been a member of numerous governance, compliance and investment committees in the banking and philanthropic sectors.

Ms Rowland is currently appointed to the boards of Macquarie Life Limited, Commonwealth Private Limited and St Vincent's Institute of Medical Research, is an Independent External Compliance Committee Member of Franklin Templeton Investments Australia Limited and a Member of the Australian Securities & Investment Commission Financial Services & Credit Panel. Ms Rowland holds a Bachelor of Arts, a Bachelor of Law (Honours) and is admitted as a legal practitioner in Victoria. She is also a graduate of the Australian Institute of Company Directors.

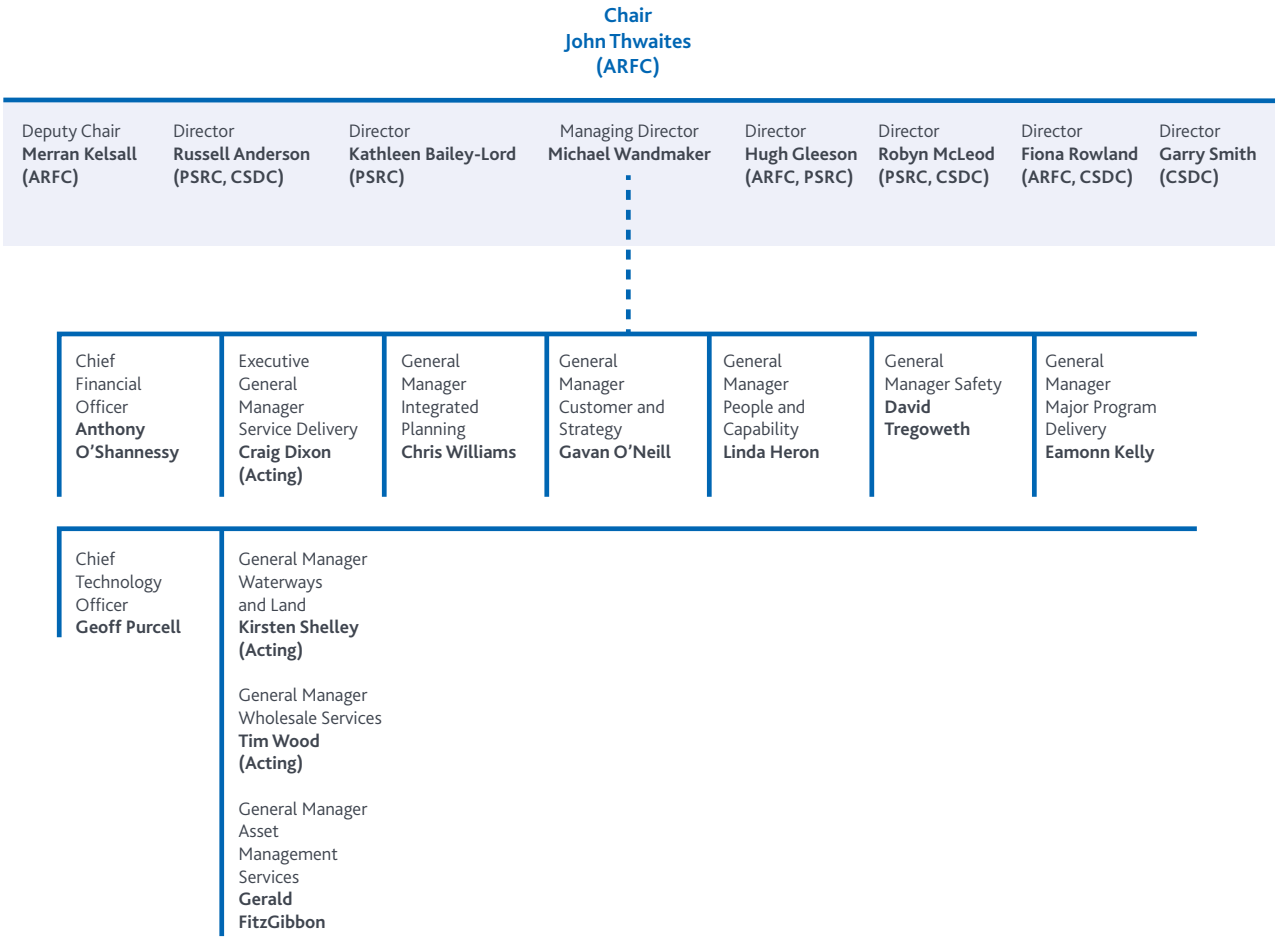
Garry Smith, Director

Garry Smith was appointed to the Board in October 2012. He is Chair of the CSDC.

Mr Smith has extensive experience in the water sector and is a director with DG Consulting, providing advice on water and natural resource management policy and strategy. He has previously held a range of senior management roles in the rural water industry.

Mr Smith is Chairman of the Greater Shepparton Foundation. His previous roles include membership of the Advisory Board for the National Centre for Groundwater Research and Training, director of the eWater Co-operative Research Centre, member of the Water Accounting Standards Board and director of Scope.

Organisational structure



Risk and Emergency Management

Risk management is central to ensuring Melbourne Water understands and manages risks and uncertainties to enhance life and liveability.

Melbourne Water maintains an *Enterprise Risk Management Framework* consistent with the International Risk Management Standard (ISO 31000:2018) and the requirements of the Victorian Government's *Risk Management Framework* (updated July 2018).

Melbourne Water's *Enterprise Risk Management Framework* is made up of a number of key elements which, when combined, create an environment for effectively managing risk and pursuing opportunities. This includes:

- an established *Risk Management Policy* and *Risk Appetite Statement*
- ongoing management of strategic, operational, financial and compliance risks that may impact on the achievement of our strategic direction, operational objectives and compliance obligations
- ongoing education and development of risk capability across the Corporation and maintaining a positive risk culture
- providing ongoing assurance over our control environment through a comprehensive risk-based audit program, based on the three lines of defence
- a comprehensive insurance portfolio.

Melbourne Water also maintains and tests its *Emergency Management Framework*, which outlines controls with respect to the preparation, response and recovery from internal and external emergencies. The Framework aligns to Australian Inter-service Incident Management System 2017 (AIIMS) and includes contingency, business continuity, emergency response and disaster recovery planning.

Directors' Report

Directors

The Directors of Melbourne Water Corporation ('the Corporation') in office during the 2018/19 financial year were:

John Thwaites (Chairman)
Michael Wandmaker (Managing Director)
Merran Kelsall (Deputy Chairman)
Garry Smith
Hugh Gleeson
Kathleen Bailey-Lord
Robyn McLeod
Fiona Rowland
Russell Anderson

Particulars of the directors' qualifications, experience and special responsibilities are set out on pages 66-67 of this report.

Directors' Meetings

During the financial period, the Corporation held 10 scheduled meetings of directors.

Attendance at meetings of the Board and its committees were:

	Board		Audit, Risk and Finance Committee		People, Safety and Remuneration Committee		Customer and Service Delivery Committee	
	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held
John Thwaites (Chairman)	10	10	4	4	-	-	-	-
Michael Wandmaker (Managing Director)[a]	10	10	4	4	4	4	3	4
Merran Kelsall (Deputy Chairman)	9	10	4	4	-	-	-	-
Garry Smith	9	10	-	-	-	-	4	4
Kathleen Bailey-Lord	8	10	-	-	4	4	-	-
Hugh Gleeson	10	10	4	4	4	4	-	-
Robyn McLeod	10	10	-	-	3	4	3	4
Fiona Rowland	10	10	4	4	-	-	4	4
Russell Anderson	10	10	-	-	4	4	4	4

The Managing Director is invited to attend all committee meetings. As he is not a member of these committees his attendance has not been included. Further, where a director has attended a committee meeting of which they are not a member, this attendance has also not been included.

(a) While the Managing Director is not a member of Board committees, he is invited to attend all committee meetings.

In addition to the regular Board and committee meetings, the Corporation held the following special meetings during the year.

	Special Board meetings		Special Audit, Risk and Finance Committee meetings		Special People, Safety and Remuneration Commitee meetings		Special Customer and Service Delivery Committee meetings	
	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held
John Thwaites (Chairman)	-	-	1	1	-	-	-	-
Michael Wandmaker (Managing Director)[a]	-	-	1	1	-	-	-	-
Merran Kelsall (Deputy Chairman)	-	-	1	1	-	-	-	-
Garry Smith	-	-	-	-	-	-	-	-
Kathleen Bailey-Lord	-	-	-	-	-	-	-	-
Hugh Gleeson	-	-	1	1	-	-	-	-
Robyn McLeod	-	-	-	-	-	-	-	-
Fiona Rowland	-	-	1	1	-	-	-	-
Russell Anderson	-	-	-	-	-	-	-	-

Director benefits

No director has received, or become entitled to receive, a benefit (other than a benefit included in Notes 7.2 and 7.4 in the Financial Statements) because of a contract that the director, a firm of which the director is a member, or an entity in which the director has a substantial financial interest, has made (during the period ended 30 June 2019 or at any other time) with:

a. the Corporation; or

b. an entity that the Corporation controlled, or a body corporate that was related to the Corporation, when the contract was made or when the director received, or became entitled to receive, the benefit.

Directors' and officers' liability insurance

During the financial year, the Corporation paid premiums to insure all directors and officers against certain liabilities. Disclosure of policy terms and the total amount of the premiums paid under this insurance policy is not permitted under the Confidentiality provisions of the insurance contract.

Interest in contracts

No contracts involving directors' interests were entered into since the end of the previous financial year, or existed at the end of the 2018/19 financial year, other than the transactions detailed in Notes 7.2 and 7.4 to the Financial Statements.

Principal activities

The Corporation is owned by the State of Victoria. The Corporation manages and maintains Melbourne's water supply catchments, removes and treats most of Melbourne's sewage, and manages rivers, creeks and major waterways and drainage systems in the Port Phillip and Westernport regions. The Corporation delivers innovative integrated planning to establish Melbourne as a water sensitive city.

The Corporation also provides water and sewerage services to Melbourne's three metropolitan retail water companies: City West Water, South East Water and Yarra Valley Water, and water services to Western Water and Gippsland Water. The Corporation also has the potential to provide water services to other entities including South Gippsland Water, Westernport Water and Barwon Water. The Corporation works with local government, developers and the community to provide waterways and drainage services.

Operating results

The Corporation's profit, after providing for income tax was $201 million.

Review of operations

The directors' review of the Corporation's operations during the financial year ended 30 June 2019 is set out in the Report from the Chair and Managing Director on pages 2 and 3 of this report.

State of affairs

There were no significant changes in the state of affairs of the Corporation during the financial period ended 30 June 2019.

Financial Management Compliance Attestation

I John Thwaites, on behalf of the Board, certify that Melbourne Water has complied with the applicable Standing Directions made under the *Financial Management Act 1994* and Instructions.

John Thwaites
Chairman

23 August 2019

Financial Report

How this Report is Structured

Melbourne Water Corporation ('the Corporation') presents its audited general purpose financial statements for the financial year ended 30 June 2019. The following structure provides users with information about the Corporation's stewardship of resources entrusted to it.

Notes to the financial statements (continued)

Melbourne Water Corporation
Statement by Directors and Chief Financial Officer

We certify the attached financial statements for Melbourne Water Corporation ('the Corporation') have been prepared in accordance with applicable *Financial Reporting Directions and Direction 5.2* of the Standing Directions of the Assistant Treasurer, both enforced by the *Financial Management Act 1994*, Australian Accounting Standards and Interpretations and other mandatory professional reporting requirements.

We further state that, in our opinion, the information set out in the Statement of Profit or Loss and Other Comprehensive Income, Statement of Financial Position, Statement of Changes in Equity, Statement of Cash Flows and accompanying notes, presents fairly the financial transactions during the year ended 30 June 2019 and the financial position of the Corporation as at 30 June 2019.

At the time of signing, we are not aware of any circumstance which would render any particulars included in the financial statements to be misleading or inaccurate.

The Financial Statements were authorised for issue by the Directors on 23 August 2019.

On behalf of the Board:

John Thwaites
Chairman

23 August 2019

Michael Wandmaker
Managing Director

23 August 2019

Anthony O'Shannessy
Chief Financial Officer

23 August 2019

Statement of Profit or Loss and Other Comprehensive Income

For the year ended 30 June 2019

($ thousands)

	Notes	2019	2018
Revenue[a]			
Revenue from contracts with customers	**2.1**	1,864,918	1,845,343
Other income	**2.2**	14,267	5,798
Net gain on revaluation of non-financial assets[a]	**4.1.2.2**	-	39,231
Refinancing gain on financial instruments	**5.1.2**	59,609	-
Total revenue		**1,938,794**	**1,890,372**
Expenses			
Depreciation and amortisation expenses	**4.1.3**	(408,091)	(392,137)
Operational expenses[b]	**3.1**	(217,979)	(203,118)
Employee benefits expenses	**3.2**	(134,762)	(126,769)
Repairs and maintenance expenses[b]	**3.3**	(91,987)	(84,065)
Administrative expenses	**3.4**	(48,528)	(49,377)
Finance expenses	**5.1**	(618,237)	(645,278)
Government rates and taxes	**3.5**	(27,560)	(27,675)
Asset transfers to Council	**3.6**	(33,530)	(26,294)
Other expenses	**3.7**	(14,980)	(7,946)
Net loss on revaluation of non-financial assets[a]	**4.1.2.2**	(25,801)	-
Total expenses		**(1,621,455)**	**(1,562,659)**
Net profit from operations before tax		**317,339**	**327,713**
Tax expense	**3.8.1**	(116,373)	(118,881)
Net profit for the period after tax		**200,966**	**208,832**
Other comprehensive income after tax			
Items that will not be reclassified to profit or loss			
Actuarial (loss)/gain on defined benefit superannuation plan asset[c]	**7.1**	(2,832)	2,202
Revaluation (decrease)/increase of land, buildings and infrastructure[d]	**4.1.2**	(160,800)	238,900
Decrease in asset revaluation reserve due to disposal of land, buildings and infrastructure[e]		(6,073)	(3,062)
Realised gain on disposal of land, buildings and infrastructure[e]		6,073	3,062
Other comprehensive (loss)/income for the period after tax		**(163,632)**	**241,102**
Total comprehensive income for the period after tax		**37,334**	**449,934**

The above Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes on pages 81 through to 136.

Note:

(a) Revenue categories in 2017/18 have been reclassified between revenue from contracts with customers, other income and net gain on revaluation of non-financial assets for consistency with 2018/19

(b) Expenditure categories in 2017/18 have been reclassified between operational expenses and repairs and maintenance for consistency with 2018/19

(c) Pre tax actuarial loss on defined benefit superannuation plan asset $4.0 million (2017/18: gain of $3.1 million)

(d) Pre tax revaluation decrease of land, buildings and infrastructure $171.0 million (2017/18: increase of $254.1 million)

(e) Pre tax decrease in asset revaluation reserve due to disposal of land, buildings and infrastructure $6.1 million (2017/18: $3.1 million).

Statement of Financial Position

As at 30 June 2019

	Notes	2019 ($ thousands)	2018 ($ thousands)
Assets			
Current assets			
Cash and cash equivalents		17,603	2,008
Receivables	**2.3**	97,797	83,283
Other current assets	**3.10**	16,422	13,736
Non-financial assets held for sale	**4.3**	21,619	16,651
Total current assets		**153,441**	**115,678**
Non-current assets			
Land, buildings, infrastructure, plant and equipment	**4.1**	15,053,474	15,135,900
Intangible assets	**4.2**	57,021	53,201
Defined benefit superannuation plan asset	**7.1**	14,993	23,765
Total non-current assets		**15,125,488**	**15,212,866**
Total assets		**15,278,929**	**15,328,544**
Liabilities			
Current liabilities			
Trade, other payables and unearned revenue	**3.9**	379,521	348,497
Interest bearing liabilities	**5.1**	710,837	816,418
Provisions	**3.11**	8,309	7,982
Current tax liability	**3.8.1**	24,981	9,422
Employee benefits provision	**3.2**	39,885	34,075
Total current liabilities		**1,163,533**	**1,216,394**
Non-current liabilities			
Trade, other payables and unearned revenue	**3.9**	1,431	892
Interest bearing liabilities	**5.1**	7,108,380	7,244,385
Provisions	**3.11**	728	914
Net deferred tax liabilities	**3.8.2**	1,246,337	1,238,064
Employee benefits provision	**3.2**	15,501	12,984
Total non-current liabilities		**8,372,377**	**8,497,239**
Total liabilities		**9,535,910**	**9,713,633**
Net assets		**5,743,019**	**5,614,911**
Equity			
Contributed equity		507,914	502,393
Reserves		2,943,844	3,110,717
Retained profits		2,291,261	2,001,801
Total equity		**5,743,019**	**5,614,911**

The above Statement of Financial Position should be read in conjunction with the accompanying notes on pages 81 through to 136.

Statement of Changes in Equity

For the year ended 30 June 2019

($ thousands)

	Notes	Contributed equity	Asset revaluation reserve	Retained profits	Total
Balance at 1 July 2018		502,393	3,110,717	2,001,801	**5,614,911**
Adjustment from *AASB 15 Revenue from contracts with customers* (net of tax)	7.9			(48,530)	**(48,530)**
Adjustment from *AASB 9 Financial instruments* (net of tax)	7.9			158,183	**158,183**
Restated total equity at 1 July 2018		**502,393**	**3,110,717**	**2,111,454**	**5,724,564**
Comprehensive income for the period after tax					
Net result for the period after tax		-	-	200,966	**200,966**
Other comprehensive (loss)/income for the period after tax		-	(166,873)	3,241	**(163,632)**
Total comprehensive income for the period after tax		-	(166,873)	204,207	**37,334**
Transactions with equity holders					
Dividends paid[(a)]		-	-	(24,400)	**(24,400)**
Net increase in contributed equity[(b)]		5,521	-	-	**5,521**
Total transactions with owners		5,521	-	(24,400)	**(18,879)**
Balance at 30 June 2019		**507,914**	**2,943,844**	**2,291,261**	**5,743,019**
Balance at 1 July 2017		530,425	2,874,879	1,864,805	**5,270,109**
Comprehensive income for the period after tax					
Net result for the period after tax		-	-	208,832	**208,832**
Other comprehensive income for the period after tax		-	235,838	5,264	**241,102**
Total comprehensive income for the period after tax		-	235,838	214,096	**449,934**
Transactions with equity holders					
Dividends paid[(a)]		-	-	(77,100)	**(77,100)**
Net decrease in contributed equity[(b)]		(28,032)	-	-	**(28,032)**
Total transactions with owners		(28,032)	-	(77,100)	**(105,132)**
Balance at 30 June 2018		**502,393**	**3,110,717**	**2,001,801**	**5,614,911**

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes on pages 81 through to 136.

Note:
(a) During 2018/19 the Corporation paid total dividends of $24.4 million (2017/18 $77.1 million). Dividends are determined by the Treasurer of Victoria after consultation with the Corporation's Board of Directors and the Minister for Water
(b) The net increase in 2018/19 contributed equity is in relation to contributed assets received $33.4 million (2017/18: transferred out $0.1 million) less payment of capital repatriations of $27.9 million (2017/18: $27.9 million).

Statement of Cash Flows

For the year ended 30 June 2019

	Notes	2019 ($ thousands)	2018 ($ thousands)
Cash flows from operating activities			
Receipts from contracts with customers (inclusive of Goods and Service Tax)[a]		1,966,569	1,894,165
Payments to suppliers and employees (inclusive of Goods and Service Tax)		(687,553)	(644,365)
Income tax paid		(127,434)	(134,226)
Interest received		70	27
Interest and other costs of finance paid		(621,645)	(655,556)
Other receipts		4,959	5,771
Net cash inflow from operating activities	**5.2**	**534,966**	**465,816**
Cash flows from investing activities			
Payments for property, plant and equipment and intangibles		(546,508)	(494,383)
Proceeds from sales of property, plant and equipment and intangibles		33,472	48,186
Net cash outflow from investing activities		**(513,036)**	**(446,197)**
Cash flows from financing activities			
Proceeds from borrowings[b]		110,021	140,879
Repayments for the Victorian Desalination Plant (VDP) finance lease liability		(64,046)	(57,100)
Dividends paid	**7.4**	(24,400)	(77,100)
Capital repatriation paid	**7.4**	(27,910)	(27,910)
Net cash outflow from financing activities		**(6,335)**	**(21,231)**
Net (decrease)/increase in cash and cash equivalents		15,595	(1,612)
Cash and cash equivalents at the beginning of the financial year		2,008	3,620
Cash and cash equivalents at the end of the financial year		**17,603**	**2,008**

The above Statement of Cash Flows should be read in conjunction with the accompanying notes on pages 81 through to 136.

Note:
(a) Receipts from contracts with customers now includes developer charges and other receipts from contracts with customers in line with the AASB 15 accounting standard. These amounts have also been re-classified for 2017/18
(b) Proceeds from borrowings exclude debt roll-overs and refinancing of existing debt and are shown on a net basis.

About this Report

Basis of preparation

This Annual Financial Report presents the audited general purpose financial statements of Melbourne Water Corporation ('the Corporation' or 'Melbourne Water') for the year ended 30 June 2019. This report informs users about the Corporation's stewardship of the resources entrusted to it.

The Corporation is classified as a for-profit entity for the purposes of reporting.

Accounting policies selected and applied ensure that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported.

The accrual basis of accounting has been applied, where assets, liabilities, equity, income and expenses are recognised in the reporting period to which they relate, regardless of when cash is received or paid.

These financial statements are in Australian dollars, the functional and presentation currency of Melbourne Water, and the historical cost convention is used except for the revaluation of certain classes of infrastructure, property, plant and equipment and financial instruments. Unless otherwise stated, amounts in the report have been rounded to the nearest thousand dollars.

In the determination of whether an asset or liability is current or non-current, consideration has been given to the time when each asset or liability is expected to be realised or paid. The asset or liability has been classified as current if it is expected to be turned over within the next 12 months, being the Corporation's operational cycle.

Judgements, estimates and assumptions are required to be made about carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on professional judgements derived from historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates. Revisions to accounting estimates are recognised in the period in which the estimate is revised and also in future periods that are affected by the revision. Judgements and assumptions made by management in applying Australian Accounting Standards that have significant effects on the financial statements and estimates relate to:

- the fair value of land, buildings, infrastructure, plant and equipment (refer to **4.1.2**)
- defined benefit superannuation asset/liability (refer to **7.1**)
- employee benefits expenses and provisions (refer to **3.2** and **3.11**)
- useful lives of plant, property and equipment (refer to **4.1.3**)
- recognition of deferred tax balances (refer to **3.8**)
- contingent liabilities (refer to **6.3**)
- VDP operating commitments (refer to **5.3**).

Compliance

These general purpose financial statements have been prepared in accordance with the *Financial Management Act 1994* and applicable Australian Accounting Standards (AAS) which include Interpretations, issued by the *Australian Accounting Standards Board* (AASB). They have also been prepared in compliance with applicable Financial Reporting Directions and Standing Directions issued by the Assistant Treasurer.

In particular, they are presented consistent with the requirements of *AASB 101 Presentation of Financial Statements*.

About this Report (continued)

Accounting policies

All accounting policies applied are consistent with those of the prior year, unless otherwise stated below.

Changes in accounting policy

This is the first set of the Corporation's annual financial statements in which the new accounting standards *AASB 15 Revenue from Contracts with Customers* and *AASB 9 Financial Instruments* have been applied. The new standards are both applicable from 1 July 2018 for the Corporation.

AASB 15 replaces previous revenue accounting standards (including *AASB 118 Revenue* and *AASB 111 Construction Contracts* and related interpretations) and is based on the principle that revenue is recognised when control of a good or service transfers to a customer, which requires greater judgement.

AASB 9 replaces the provisions of *AASB 139 (Financial Instruments: Recognition and Measurement)* that relate to the recognition, classification and measurement of financial assets and financial liabilities, de-recognition of financial instruments, impairment of financial assets and hedge accounting. It introduces a new impairment model for financial assets based on expected credit losses, simplifies hedge accounting and changes the accounting for loan/debt modifications.

A modified retrospective approach has been applied in applying the new standards. As a result, comparative information has not been restated.

In implementing the new accounting standards under the modified retrospective approach, an adjustment has been applied to the opening balance of retained earnings as at 1 July 2018 for:

- AASB 15: revenue contracts which have remaining obligations as of the effective date.
- AASB 9: previous refinancing gains or losses associated with the Victorian Desalination Plant.

Changes to significant accounting policies are described in further details under Note 7.9, including illustrative tables disclosing the financial impacts of the changes.

Funding Delivery of Our Services

Introduction

This section provides additional information about how the Corporation is funded and the accounting policies that are relevant for an understanding of the items recognised in the financial statements. The Corporation's vision is to enhance life and liveability within Melbourne and it achieves this through providing water, sewerage services, flood mitigation and environmental protection.

Structure

2.1 Revenue from contracts with customers[a]

($ thousands)

	2019	2018
Bulk water services	960,206	925,187
Bulk sewerage services	439,702	430,182
Waterways and drainage charges	243,024	245,182
Developer contributions	181,106	167,708
Developer contributed assets	18,683	48,068
Net gain on disposal of property, plant, equipment and intangibles	12,571	16,594
Other revenue	9,626	12,422
Total Revenue from contracts with customers	**1,864,918**	**1,845,343**

(a) Revenue categories in 2017/18 have been reclassified between Revenue from contracts with customers and other income following adoption of AASB 15
(b) Other revenue and net gain on disposals of property, plant, equipment and intangibles categories for 2017/18 have been reclassified ($1.8 million) for consistency with 2018/19.

The *Australian Accounting Standards Board* (AASB) has issued a new standard for the recognition of revenue, *AASB 15 Revenue from Contracts with Customers*. This replaces AASB 118 which covers contracts for goods and services. The new standard is based on the principle that revenue is recognised when control of a good or service transfers to a customer and is applicable from 1 July 2018 for the Corporation as a for-profit entity. The effect of initially applying AASB 15 on the Corporation's Revenue from contracts with customers is disclosed in Note 7.9. Due to the transition method chosen in applying AASB 15 comparative information has not been restated to reflect the new requirements.

The Corporation collects **bulk water and sewerage services** revenue for providing storage operator services and bulk water and sewerage services to retail metropolitan and regional water businesses.

Bulk water and sewerage services revenues consist of a variable metered component (based on volumes of usage) and a fixed fee (for service availability). The usage charge is invoiced weekly with payment required within 7 days. The availability charge is invoiced in advance monthly with payment required within 14 days.

Revenue is recognised in line with the Corporation meeting its performance obligations over time as the customer simultaneously receives and consumes the services provided. An estimate is made at the end of the accounting period for unbilled revenue (refer to receivables Note 2.3).

The Corporation provides **waterways and drainage services** to residential, non residential, rural and special area customers. The charges are recognised in the year for which the charge is levied and are billed either quarterly or annually in advance and are collected by various retail water businesses on behalf of the Corporation. A lien is held over each property to ensure that any outstanding amounts are recovered upon sale of the property.

Revenue is recognised in line with the Corporation meeting its performance obligations over time as the customer simultaneously receives and consumes the services provided. An estimate is made at the end of the accounting period for unbilled revenue (refer to receivables Note 2.3).

Funding Delivery of Our Services (continued)

Developer contributions are collected from developers in order to fund drainage scheme infrastructure (constructed catchment assets) and stormwater quality treatment works.

The Corporation has a performance obligation in relation to developer contributions, which is to assess whether all the requirements for the issuance of a Statement of Compliance (SOC) have been met and to provide consent to the local council to issue the SOC if the requirements have been met.

The Corporation recognises developer contribution revenue at a point in time as the performance obligation is satisfied (i.e. upon provision of consent to the local council to issue SOC). The transaction price is the total amount of cash contributions from the developer for the applicable contract, unless the transaction price is adjusted by differences between the assessed fair value of the constructed catchment assets and reimbursements to developer for construction of those assets (see developer contributed assets policy below).

Developer contributions received in advance of the performance obligation being satisfied are recorded as unearned revenue (contract liabilities) from contracts with customers (included in Trade, other payables and unearned revenue Note 3.9) and then recognised as revenue as the performance obligation is satisfied for each contract.

A significant financing component is deemed to exist within a contract when developer contributions revenue is received greater than 12 months before the performance obligation is satisfied. The Corporation assesses the balance of unearned revenue from developer contributions at balance date. If a significant financing component exists then the Corporation adjusts the revenue transaction price (within unearned revenue) and recognises an interest expense (see note 5.1) to reflect the time value of money using prevailing interest rates. When the performance obligation is satisfied the revenue is recognised based on the adjusted transaction price.

Developer contributed assets (DCA) consist of developer constructed catchment assets transferred to the Corporation to maintain in perpetuity. Under a drainage scheme, developers may be required to undertake capital works in relation to the construction of drainage infrastructure required for their stage of development and other developers in the drainage catchment. This will be included in contracts between the Corporation and the developer as a condition of consent for SOC. Upon completion of the works, these constructed catchment assets become the property of the Corporation. The developer will either be reimbursed by the Corporation for the construction costs at an agreed reimbursable amount (funded through developer contributions for that catchment) or the developer will fully fund the construction costs (in arrangements where there are no developer contributions).

The Corporation has a performance obligation in relation to DCAs, which is to assess whether all the requirements (including construction of catchment assets) for the issuance of a Statement of Compliance (SOC) have been met and to provide consent to the local council to issue the SOC if the requirements have been met.

The transaction price for DCA revenue is determined based on any difference between the assessed fair value of the constructed catchment assets and the reimbursements made to the developer (where reimbursements are applicable depending on the arrangement). The transaction price is uncertain until the date of practical completion of the assets, which usually occurs after the performance obligation is met. Therefore at the time the performance obligation is met any revenue associated with the constructed catchment assets to be received is considered to be variable consideration. DCA revenue (and associated infrastructure assets) are therefore recognised at the date of practical completion of the works (and their acceptance by the Corporation) when the uncertainty regarding the fair value of the assets is resolved.

Land parcels are also voluntarily transferred from developers to the Corporation (for nil consideration). These transfers relate to land set aside by developers as reserves at the point of subdivision. The transfers are made voluntarily on the basis of the Corporation being the relevant authority to hold and maintain such land for public benefit, rather than being transferred in the context of a contract with a customer. There is no exchange of goods or services from the Corporation to the developers for this land and contracts between the Corporation and the developers do not include these transfers of land. Accordingly, the transfer of land is not considered to form part of the transaction price for revenue recognition. As the transferred land satisfies the definition of property, plant and equipment under AASB 116, the initial measurement and subsequent measurement of such land is within the scope of AASB 116 (i.e. the land is recognised initially at cost (being nil) and subsequently revalued in accordance with the land class of assets).

The net gain on disposal of property, plant, equipment and intangibles from sales is recognised as revenue when control over the asset has been transferred to the customer at a point in time. This is the point when the Corporation has performed its performance obligation.

Revenue is measured at the transaction price agreed under the contract. For property sales the consideration is due when it settles.

Property sales are recognised in the Statement of Profit or Loss and Other Comprehensive Income on a net basis of sale proceeds less costs.

Other revenue includes fees and charges and other miscellaneous revenue which are all recognised at a point in time when the Corporation meets the required performance obligations under the contract.

2.2 Other income[a]

($ thousands)

	2019	2018
Interest revenue	70	27
Rental income	3,133	2,900
Government grants	11,064	2,871
Total other income	**14,267**	**5,798**

(a) Revenue categories in 2017/18 have been reclassified between revenue from contracts with customers and other income following adoption of AASB 15.

Interest revenue is recognised when earned and is accrued in accordance with the terms and conditions of the underlying financial instrument or other contract.

Rental income is recognised when earned and accrued in accordance with the terms and conditions implicit in the leasing contract.

Government grants are recognised as operating revenue when the Corporation obtains control of the contribution. Control is obtained when the Corporation receives the grant or contribution and they meet certain other criteria as outlined by *AASB 120 Accounting for Government Grants* and Disclosure of Government Assistance (i.e. when there is a reasonable assurance that the grant will be received and the Corporation will comply with all required conditions). All conditions attached to Government grants have been satisfied prior to their recognition in the Statement of Profit or Loss and Other Comprehensive Income. Government grants with unfulfilled conditions have been recognised as other unearned revenue (included in Trade and other payables Note 3.9) in the Statement of Financial Position. Any grants relating to assets that meet the conditions attached are recorded against the asset.

Funding Delivery of Our Services (continued)

2.3 Receivables

($ thousands)

	2019	2018
Trade debtors and accrued revenue	44,347	48,790
Other receivables	37,836	20,809
Less: allowance for expected credit losses	-	(91)
Net GST receivable from the ATO	15,614	13,775
Total current receivables	**97,797**	**83,283**

Trade debtors, accrued revenue and other receivables are recognised at the amounts receivable less any allowance for expected credit losses. Receivables are reviewed on an ongoing basis to identify any receivables which cannot be collected. Debts which cannot be collected are written-off when identified.

The Corporation applies the AASB 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for contractual receivables. On this basis, an assessment undertaken by management has identified that historical debt write-offs and future expected losses are immaterial. As such, there is no allowance for expected credit losses as at 30 June 2019. Last years balance was based on the assesment applied under *AASB 139 Financial instruments.*

Net Goods and Services Tax (GST) receivable from the Australian Taxation Office (ATO) is the gross amount of GST recoverable from the taxation authority and is included as part of the receivables balance. *AASB Interpretation 1031* provides that revenue, expenses and assets must be recognised, net of the amount of GST, except where GST relating to the expenditure items is not recoverable from the taxation authority, in which case the item is recognised as GST inclusive.

Ageing analysis of contractual receivables

($ thousands)

	Current	Past due but not impaired			Total
30 June 2019	**0-30 days**	**31-60 days**	**61-90 days**	**91 days +**	
Receivables					
Trade debtors and accrued revenue	30,805	3,721	1,434	8,387	**44,347**
Other receivables	37,836	-	-	-	**37,836**
Total contractual receivables	**68,641**	**3,721**	**1,434**	**8,387**	**82,183**

	Current	Past due but not impaired			Total
30 June 2018	**0-30 days**	**31-60 days**	**61-90 days**	**91 days +**	
Receivables					
Trade debtors and accrued revenue	37,344	4,130	1,430	5,886	**48,790**
Other receivables	20,809	-	-	-	**20,809**
Total contractual receivables	**58,153**	**4,130**	**1,430**	**5,886**	**69,599**

The Cost of Delivering Our Services

Introduction

This section provides additional information about the major components of expenditure incurred by the Corporation in relation to delivering our services during the year, as well as any related obligations outstanding as at 30 June 2019.

Structure

3.1 Operational expenses

($ thousands)

	2019	2018
VDP operating expenses	126,975	117,117
Energy expenses	36,980	30,522
External professional services expenses	19,382	21,816
Contract works[(a)]	7,433	6,392
Materials and chemicals[(a)]	11,129	10,222
Grants and contributions expenses	9,253	8,267
Transport expenses	3,877	4,059
Insurance expenses	2,612	3,622
Other expenses[(a)]	338	1,101
Total operational expenses[(a)]	**217,979**	**203,118**

(a) Expenditure categories in 2017/18 have been reclassified between operational expenses and repairs and maintenance ($17.6 million) for consistency with 2018/19.

Operational expenses represent the day-to-day running costs incurred in normal operations. Victorian Desalination Project (VDP) operating expenses include the costs of water security, labour, maintenance, chemicals and energy. They are expensed in the period in which they are incurred.

The Cost of Delivering Our Services (continued)

3.2 Employee benefits expenses and employee benefits provision

($ thousands)

	2019	2018
Salary and wages expenses[(b)]	102,212	98,246
Annual, long service and shift leave expenses	14,644	11,304
Defined contribution plans (superannuation accumulation fund) expense[(b)]	9,570	8,603
Defined benefit superannuation plan expense	1,254	1,710
Other employee expenses[(b)]	7,082	6,906
Total employee benefits expenses	**134,762**	**126,769**

(b) Expenditure categories in 2017/18 have been reclassified between salary and wages expenses (increase of $8.6 million), defined contribution plans (decrease of $1.8 million) and other employee expenses (decrease of $6.8 million) for consistency with 2018/19.

Employee benefits expenses include all expenses related to employment including; salary and wages expenses, defined contribution plans, annual, long service and shift leave expenses, defined benefit superannuation plan expense, and other employee expenses (including; payroll tax, Work Cover (post-1985), workers' compensation (pre-1985), rostered days off, redundancy payments). They are expensed in the period in which they are incurred.

Provision is made for benefits accruing to employees in respect of salaries and wages, annual leave and long service leave (LSL) up to the reporting date and recorded as an expense during the period the services are delivered.

Total employee benefits provision and on-costs at 30 June

($ thousands)

	2019	2018
Current		
Accrued salaries and wages		
Accrued salaries and wages	3,836	3,470
Annual leave		
Unconditional and expected to settle after 12 months	7,392	6,480
Long service leave		
Unconditional and expected to settle within 12 months	2,679	2,480
Unconditional and expected to settle after 12 months	17,121	14,735
On-costs		
Unconditional and expected to settle within 12 months	1,431	1,274
Unconditional and expected to settle after 12 months	2,536	2,182
Other employee benefits	4,890	3,454
Total current employee benefits and on-costs	**39,885**	**34,075**
Non-current		
Long service leave	5,060	3,764
On-costs on long service leave	749	558
Other employee benefits	9,692	8,662
Total non-current employee benefits and on-costs	**15,501**	**12,984**
Total employee benefits and on-costs	**55,386**	**47,059**

Reconciliation of movement in on-cost provision

($ thousands)

	2019	2018
Opening balance	4,014	4,645
Additional provisions recognised	2,465	1,040
Additions due to LSL transfers	7	8
Reductions arising from payments/other sacrifices of future economic benefits	(1,770)	(1,679)
Closing balance	**4,716**	**4,014**
Current	3,967	3,456
Non-current	749	558

Liabilities for **salaries, wages and annual leave** are all recognised in the provision for employee benefits as 'current liabilities' as per *AASB 119 Employee Benefits*, because the Corporation does not have an unconditional right to defer settlements of these liabilities. Liabilities for salaries, wages and annual leave are measured at:

- undiscounted value; if they will be wholly settled within 12 months; or
- present value; if not expected to be wholly settled within 12 months.

Sick leave payments are made in accordance with relevant awards, determinations and Corporation policy. No provision is made in the Financial Statements for unused sick leave entitlements as these are non-vesting benefits (i.e. can't be transferred or paid out when an employee leaves).

Long Service Leave (LSL) is recognised in the provision for employee benefits. LSL is recognised as a current liability when there is no unconditional right to defer settlement should an employee take LSL they are entitled to within the next 12 months, even when the Corporation does not expect to settle the liability within 12 months. The components of this current LSL liability are measured at:

- undiscounted value; if they expect to be wholly settled within 12 months; or
- present value; if not expected to be wholly settled within 12 months.

LSL is recognised as a non-current liability when there is an unconditional right to defer the settlement of the entitlement until the employee has completed 7 years of service. This non-current LSL liability is measured at present value. Expected future cash payments are discounted using market yields attached to the Reserve Bank of Australia's 10 year rate for semi-annual coupon bonds. Use of this discount rate is mandated by the Department of Treasury and Finance (DTF).

Other employee benefits current and non-current liabilities include amounts for shift leave, rostered days off, Work Cover, workers' compensation and termination benefits. The Work Cover and workers' compensation provisions are based on independent actuarial assessments. A provision of $11.8 million (2017/18: $10.8 million) has been made for outstanding claims incurred and not settled, and for claims incurred but not reported at 30 June 2019. The value of the bank guarantee to the Victorian Work Cover Authority (as part of the Corporation's Work Cover self insurance commitments) at 30 June 2019 is $8.4 million (2017/18: $9.2 million). The bank guarantee amount is not included in the provision.

Termination benefits include termination of employment payments, such as severance packages. They are payable when employment is terminated before the normal retirement date, or when an employee accepts an offer of benefits in exchange for the termination of employment. Termination benefits are recognised when the Corporation is demonstrably committed to terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or providing termination benefits as a result of offers made for voluntary redundancy.

The Cost of Delivering Our Services (continued)

3.3 Repairs and maintenance expenses

($ thousands)

	2019	2018
Repairs and maintenance[(c)]	84,905	77,963
Information technology maintenance	7,082	6,102
Total repairs and maintenance expenses[(c)]	**91,987**	**84,065**

(c) Expenditure categories in 2017/18 have been reclassified between operational expenses and repairs and maintenance ($17.6 million) for consistency with 2018/19.

Repairs and maintenance and minor renewal costs are expensed as incurred. Where the repair relates to the replacement of a component of an asset and the cost exceeds the capitalisation threshold of $500, the cost is capitalised and depreciated over the remaining life of the asset.

3.4 Administrative expenses

($ thousands)

	2019	2018
Waterways charges billings and collection	13,566	12,853
Information technology and telecommunication expenses	16,928	17,321
Rental and lease expenses	8,482	7,922
Education and training expenses	3,072	3,809
Legal expenses	794	397
Other expenses	5,686	7,075
Total administrative expenses	**48,528**	**49,377**

Administrative expenses are the day-to-day costs incurred in administration of the Corporation. They are expensed in the period in which they are incurred.

3.5 Government rates and taxes

($ thousands)

	2019	2018
Government rates and taxes	27,560	27,675
Total government rates and taxes	**27,560**	**27,675**

Government rates and taxes are made up of Land Tax, Fringe Benefits Tax, Local Government Rates Equivalent Tax (LGRE) and other minor government charges and fees. They are expensed in the period in which they are incurred.

3.6 Asset transfers to council

($ thousands)

	2019	2018
Asset transfers to council	33,530	26,294
Total asset transfers to council	**33,530**	**26,294**

Asset transfers to council relate to Drainage Developer Scheme works within a catchment size of less than 60 hectares that are transferred to councils for ongoing maintenance (and expensed by the Corporation at book value) upon reaching formal council acceptance to transfer.

3.7 Other expenses

($ thousands)

	2019	2018
Assets written off/written down	12,791	6,969
Allowance for expected credit loss	-	3
Other expenses	2,189	974
Total other expenses	**14,980**	**7,946**

Other expenses include all other miscellaneous expenses not included in operational and administrative expenses and are deemed relevant for the understanding of this financial report. They include written down assets and bad and doubtful debts. They are expensed in the period in which they are incurred.

3.8 Income and deferred tax

The Corporation is subject to the National Tax Equivalent Regime (NTER), which is administered by the Australian Taxation Office (ATO). The difference between the NTER and the Commonwealth tax legislation is that the tax liability is paid to the Victorian State Government rather than the Commonwealth Government.

The income tax expense for the period is the tax payable on the current period's taxable income based on the national corporate income tax rate of 30%, adjusted for current tax of prior periods and changes in deferred tax assets and liabilities attributable to temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements.

Deferred tax assets and liabilities are recognised as temporary differences at the tax rate expected to apply when the assets are recovered or liabilities settled, based on those tax rates which are enacted or substantially enacted. The relevant tax rates are applied to the cumulative amounts of deductible and taxable temporary differences when they arise in a transaction that at the time of the transaction did not affect either accounting or taxable profit or loss. Deferred tax assets are recognised as deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses. Current and deferred tax is recognised in the Statement of Profit or Loss, except to the extent that it relates to items recognised in Other Comprehensive Income or directly in equity. In this case, tax is also recognised in Other Comprehensive Income or directly in equity respectively.

The Cost of Delivering Our Services (continued)

3.8.1 Income Tax

Components of tax expense ($ thousands)

	2019	2018
Current tax	144,187	136,898
Deferred tax relating to temporary differences	(27,275)	(18,159)
Adjustments for current tax of prior periods	(539)	142
Total tax expense	**116,373**	**118,881**

Reconciliation of income tax to prima facie tax payable ($ thousands)

	2019	2018
Profit before income tax	317,339	327,713
Tax at the Australian tax rate of 30% (2017/18: 30%)	95,202	98,314
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:		
Adjustment in respect of income tax of previous year	(539)	142
Non assessable and non deductible for income tax purposes	17,057	18,525
Assessable income not booked	5,418	2,487
Research and development tax incentive	(765)	(587)
Income tax as reported in the Statement of Profit or Loss and Other Comprehensive Income	**116,373**	**118,881**

Income tax payable ($ thousands)

	2019	2018
Current tax payable	24,981	9,422
Total income tax payable	**24,981**	**9,422**

Income tax recognised in other comprehensive income ($ thousands)

	2019	2018
Deferred tax arising on items recognised in other comprehensive income		
(Decrement)/increment in deferred tax on land & buildings revalued	(10,201)	15,183
Reversal of deferred tax on disposal of land previously revalued	(61)	(37)
(Decrease)/increase in deferred tax on actuarial gain on the defined benefit plan	(1,214)	944
Total income tax recognised in other comprehensive income	**(11,476)**	**16,090**

3.8.2 Net deferred tax liabilities - non-current

($ thousands)

	2019	2018
Amounts recognised in Profit or Loss		
Property, plant and equipment	224,770	267,172
Employee entitlements	(11,090)	(9,441)
Developer contributions	1,147	1,894
Provisions	(1,814)	(4,000)
Revenue in advance	(21,704)	(66)
Lease liability	84,380	-
Other	(3,263)	(2,882)
Total recognised in Profit or Loss	**272,426**	**252,677**
Amounts recognised in Other Comprehensive Income		
Gain on revaluation of land and buildings	57,683	67,945
Net gain on revaluation of infrastructure assets	907,585	907,585
Actuarial gain on the defined benefit plan	8,643	9,857
Total recognised in Other Comprehensive Income	**973,911**	**985,387**
Net deferred tax liability	**1,246,337**	**1,238,064**

Movements

($ thousands)

	2019	2018
Opening balance	1,238,064	1,239,675
Credited to Profit or Loss	(27,275)	(18,159)
Debited to Other Comprehensive Income	(11,476)	16,089
Adjustment in respect of VDP lease liability - Accounting Standard change	67,793	-
Adjustment in respect of developer contributions - Accounting Standard change	(21,424)	-
Adjustment in respect of deferred tax of prior period	655	459
Closing balance	**1,246,337**	**1,238,064**
Net deferred tax liabilities to be recovered after more than 12 months	1,278,708	1,250,156
Net deferred tax liabilities to be recovered within 12 months	(32,371)	(12,092)
Total non-current liabilities - deferred tax liabilities	**1,246,337**	**1,238,064**

The Cost of Delivering Our Services (continued)

3.9 Trade, other payables and unearned revenue

($ thousands)

	2019	2018
Current trade and other payables and unearned revenue		
Trade creditors	71,191	70,778
Interest payable	45,062	47,301
Accruals	177,881	212,895
Unearned revenue from contracts with customers	71,036	-
Other unearned revenue	9,370	12,962
Other payables	4,981	4,561
Total current trade and other payables and unearned revenue	**379,521**	**348,497**
Non-current trade and other payables		
Other payables	1,431	892
Total non-current trade and other payables	**1,431**	**892**
Total trade and other payables and unearned revenue	**380,952**	**349,389**

Trade creditors represent liabilities for goods or services provided to the Corporation prior to the end of the financial year, where invoices have been received and processed but not yet paid. The amounts are unsecured and are usually paid within 30 days of recognition or in accordance with contract terms.

Interest payable is recognised as an expense in the reporting period in which it is payable and accrued in accordance with the terms and conditions of the underlying financial instruments or other contracts.

Accruals represent liabilities for goods or services provided to the Corporation prior to the end of the financial year, where invoices have not yet been received or processed and are not yet paid. The amounts are based on estimates, are unsecured and are usually paid within 30 days of recognition or in accordance with contract terms.

Unearned revenue from contracts with customers (on contract liabilities) represents consideration received in advance of the Corporation performing its contract obligations and will be recognised as revenue when the services are performed. This solely comprises of developer contributions revenue. Refer to Note 2.1.

Unearned revenue from contracts with customers

($ thousands)

	2019	2018[a]
Unearned revenue at the beginning of the financial year	70,380	N/A
Consideration received in the year before performance obligations are satisfied	171,477	N/A
Performance obligations satisfied during the period and recognised as revenue (net of interest)	(170,821)	N/A
Unearned revenue from contracts with customers	**71,036**	**N/A**

(a) New disclosure requirement under AASB 15. 2017/18 comparatives are not required.

Other unearned revenue represents revenue received in advance in relation to other income (i.e. grants) and will be recognised as revenue when the services are performed.

Other payables represent liabilities that are mostly made out of miscellaneous security deposits held.

3.10 Other current assets

($ thousands)

	2019	2018
Prepayments	7,358	5,564
Inventories	9,064	8,172
Total other current assets	**16,422**	**13,736**

Prepayments represent payments in advance of receipt of goods or services or that part of expenditure made in one accounting period covering a term extending beyond that period.

Inventories are used in the construction of new works and for the repair and maintenance of existing assets. All stores are valued at the lower of cost and net realisable value.

3.11 Provisions

($ thousands)

	2019	2018
Current		
Insurance claims	1,161	1,436
Other provisions	7,148	6,546
Total provisions - current	**8,309**	**7,982**
Non-current		
Insurance claims	728	914
Total provisions - non-current	**728**	**914**
Total provisions	**9,037**	**8,896**

Reconciliation of movement in provisions

($ thousands)

	Insurance claims	Other provisions	Total
Carrying amount at 1 July 2018	2,350	6,546	8,896
Provisions recognised/(de-recognised)	(298)	5,678	5,380
Amounts utilised during the year	(163)	(5,076)	(5,239)
Carrying amount at 30 June 2019	**1,889**	**7,148**	**9,037**
Carrying amount at 1 July 2017	2,177	6,317	8,494
Additional provisions recognised	942	4,925	5,867
Amounts utilised during the year	(769)	(4,696)	(5,465)
Carrying amount at 30 June 2018	**2,350**	**6,546**	**8,896**

Provisions are recognised when the Corporation has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is virtually certain that recovery will be received and the amount of the receivable can be measured reliably.

The **insurance claims** provision represents the amounts that are likely to be payable under claims but excluding amounts over the relevant insurance policy deductable. Insurance claims are independently assessed by loss adjusters, claims managers and legal practitioners. The insurance claims provision includes claims reported but not yet paid, claims incurred but not yet reported, and the anticipated costs of settling those claims. Due to the inherent uncertainty in the estimate of the outstanding insurance claims, a risk margin is included. The risk margin is set to ensure that the liability estimate will be sufficient to cover outstanding claims. The measurement of the liability for outstanding insurance claims is on the basis of estimated costs of future claims payments. Claims classified as current are expected to be settled within 12 months. The amount classified as non-current is expected to be settled later than 12 months. The provision amounts are based on an independent assessment of claim costs.

Other provisions satisfy the recognition requirements of *AASB 137 Provisions, Contingent Liabilities and Contingent Assets* and include primarily contractual provisions.

Assets Available to Support Output Delivery

Introduction

This section outlines those assets that the Corporation controls, reflecting investing activities in the current and prior years. The Corporation controls infrastructure and other assets that are utilised in fulfilling its objectives and conducting its activities. They represent the key resources that have been entrusted to the Corporation to be utilised for delivery of those objectives.

Structure

4.1 Land, buildings, infrastructure, plant and equipment

4.1.1 Reconciliation of movements in carrying values of infrastructure, property, plant and equipment

($ thousands)

	Total (a)	Crown land	Freehold land	Buildings	Leasehold improvements	Plant and equipment	Fleet vehicles (a)	Infrastructure	VDP infrastructure	Capital works in progress (a)
Year ended 30 June 2018										
Opening balance	14,706,832	103,716	1,268,823	26,904	10,150	21,756	10,427	8,442,548	4,304,550	517,958
Purchased additions	6,209	-	-	-	-	-	6,209	-	-	-
Developer contributed assets	48,068	-	-	-	-	-	-	48,068	-	-
Disposals and write-offs	(36,536)	(108)	(6,384)	-	-	(46)	(1,344)	(26,484)	-	(2,170)
Depreciation and amortisation	(377,738)	-	-	(1,249)	(1,102)	(9,468)	(2,805)	(285,562)	(77,552)	-
Transfers between classes (b)	-	-	-	-	-	1	-	(1)	-	-
Assets classified as held for sale	(10,151)	-	(10,151)	-	-	-	-	-	-	-
Revaluation increments	293,277	23,249	270,028	-	-	-	-	-	-	-
Revaluation decrements	(3,737)	(133)	(3,604)	-	-	-	-	-	-	-
Capital expenditure (c)	509,676	-	-	-	-	-	-	-	-	509,676
Capitalisation of works in progress	-	1,011	26,699	2,512	352	7,506	-	378,274	-	(416,354)
Closing carrying amount	**15,135,900**	**127,735**	**1,545,411**	**28,167**	**9,400**	**19,749**	**12,487**	**8,556,843**	**4,226,998**	**609,110**
At 30 June 2018										
Gross carrying amount	16,142,684	127,735	1,545,411	30,382	15,551	86,440	20,068	9,045,194	4,662,793	609,110
Accumulated depreciation	(1,006,784)	-	-	(2,215)	(6,151)	(66,691)	(7,581)	(488,351)	(435,795)	-
Carrying amount	**15,135,900**	**127,735**	**1,545,411**	**28,167**	**9,400**	**19,749**	**12,487**	**8,556,843**	**4,226,998**	**609,110**
Year ended 30 June 2019										
Opening balance	15,135,900	127,735	1,545,411	28,167	9,400	19,749	12,487	8,556,843	4,226,998	609,110
Purchased additions	2,936	-	-	-	-	-	2,936	-	-	-
Developer contributed assets	18,683	-	-	-	-	-	-	18,683	-	-
Disposals and write-offs	(35,066)	(908)	(8,603)	-	-	(73)	(933)	(24,272)	-	(277)
Depreciation and amortisation	(389,602)	-	-	(1,097)	(1,164)	(8,960)	(2,054)	(298,777)	(77,550)	-
Transfers between classes (b)	(1,139)	-	-	-	35	(13)	-	(1,161)	-	-
Assets classified as held for sale	(4,968)	-	125	(5,093)	-	-	-	-	-	-
Revaluation increments	-	-	-	-	-	-	-	-	-	-
Revaluation decrements (d)	(208,250)	(15,287)	(192,963)	-	-	-	-	-	-	-
Capital expenditure (c)	500,939	-	-	-	-	-	-	-	-	500,939
Capital contributions	34,041	-	-	-	-	-	-	34,041	-	-
Capitalisation of works in progress	-	-	30,388	88	59	4,278	-	515,761	-	(550,574)
Closing carrying amount	**15,053,474**	**111,540**	**1,374,358**	**22,065**	**8,330**	**14,981**	**12,436**	**8,801,118**	**4,149,448**	**559,198**
At 30 June 2019										
Gross carrying amount	16,407,750	111,540	1,374,358	25,086	15,648	85,174	20,366	9,553,587	4,662,793	559,198
Accumulated depreciation	(1,354,276)	-	-	(3,021)	(7,318)	(70,193)	(7,930)	(752,469)	(513,345)	-
Carrying amount	**15,053,474**	**111,540**	**1,374,358**	**22,065**	**8,330**	**14,981**	**12,436**	**8,801,118**	**4,149,448**	**559,198**

Note:
(a) 2017/18 balances for fleet vehicles and capital expenditure have been reclassified between categories
(b) Includes transfers to intangible assets, refer to 4.2
(c) Represents total capital expenditure, exclusive of intangibles $25.4 million (refer to 4.2) and fleet vehicles $2.9 million
(d) Pre tax revaluation decrements are recognised in the income statement as other expenses $11.5 million (2017/18 decrement of $3.7 million), net loss on revaluation of non-financial assets $25.8 million (2017/18 increment of $39.2 million) and other comprehensive income $171.0 million (2017/18 increment of $254.1 million). Decrements are expensed in the profit and loss when the reserve balance is exhausted.

Assets Available to Support Output Delivery (continued)

If land, buildings and infrastructure were measured at historical cost, the carrying amounts would be as follows:

	($ thousands)	
	2019	2018
Land	858,657	837,317
Buildings	31,227	32,094
Infrastructure assets - owned	6,422,371	6,170,756
Infrastructure assets - under finance lease	4,149,448	4,226,998
Total	**11,461,703**	**11,267,165**

Initial recognition

All non-financial physical assets are measured and recognised initially at cost. Where an asset is acquired for no or nominal cost, the cost is its fair value at the date of acquisition. The cost of constructed non-financial physical assets includes the cost of all materials used in construction and direct labour on the project. The cost of leasehold improvements is capitalised when incurred. The initial cost for non-financial physical assets under a finance lease is measured at amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. Capital Works In Progress are recorded at cost.

Items with a cost or value in excess of $500 (2017/18: $500) and a useful life of more than 1 year are recognised as assets, with the exception of lifecycle costs (total of all recurring and one-time costs over the full life span of a good, service, structure or system) for the VDP which are expensed. All items with a cost or value less than $500 (2017/18: $500) are expensed.

Subsequent measurement

All non-financial physical assets, with the exception of capital works in progress, are subsequently measured at fair value less accumulated depreciation and impairment. Non-financial physical assets are measured at fair value with regard to the asset's highest and best use after due consideration is made for any legal or physical restrictions imposed on the asset, public announcements or commitments made in relation to the intended use of the asset. Theoretical opportunities that may be available in relation to the asset are not taken into account until it is virtually certain that the restrictions will no longer apply. Therefore, unless otherwise disclosed, the current use of these non-financial physical assets will be their highest and best use.

Revaluation of infrastructure, property, plant and equipment

Revaluations are conducted either independently (as required under *FRD 103H Non-Financial Physical Assets*) or using management expertise and classified as a managerial revaluation. The Corporation uses land indices (provided by the Valuer General Victoria VGV) to perform managerial valuations and will only book movements if they are material. Fair value assessment is performed annually for all other property plant and equipment as a managerial valuation, utilising external experts to conduct the infrastructure valuation, with formal independent valuations being completed every 5 years. The Corporation also considers more frequent revaluations in regards to infrastructure during price determination years as valuations are closely linked to income. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. The last independent formal revaluation was conducted at 30 June 2016.

Any revaluation increase is recognised in other comprehensive income, except to the extent that it reverses a revaluation decrease for the same asset (or asset class when specifically related to infrastructure) previously recognised in net profit in the Statement of Profit or Loss and Other Comprehensive Income, in which case the increase is credited to profit to the extent of the decrease previously expensed. A decrease in the carrying amount arising on the revaluation is recognised in net profit in the Statement of Profit or Loss and Other Comprehensive Income to the extent that it exceeds the balance, if any, held in the asset revaluation reserve relating to a previous revaluation of that asset, otherwise decreases are recognised in other comprehensive income.

4.1.2 Fair value determination of non-financial physical assets

The fair values of non-financial physical assets are determined (in accordance with the fair value hierarchy) as follows:

- Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

4.1.2.1 Non-financial physical assets

($ thousands)

		Fair value measurements		
	2019	Level 1[a]	Level 2[a]	Level 3[a]
Non-financial assets held for sale	16,526	-	16,526	-
Non-specialised land	57,382	-	57,382	-
Specialised land	1,428,516	-	-	1,428,516
Total land	**1,502,424**	**-**	**73,908**	**1,428,516**
Non-financial assets held for sale	5,093	-	5,093	-
Non-specialised buildings	635	-	635	-
Specialised buildings	21,430	-	-	21,430
Total buildings	**27,158**	**-**	**5,728**	**21,430**
Leasehold improvements	8,330	-	-	8,330
Plant and equipment	14,981	-	-	14,981
Fleet vehicles	12,436	-	-	12,436
Infrastructure assets	8,801,118	-	-	8,801,118
Infrastructure assets under finance lease	4,149,448	-	-	4,149,448
Total other	**12,986,313**	**-**	**-**	**12,986,313**
Total land, buildings, infrastructure, plant and equipment	**14,515,895**	**-**	**79,636**	**14,436,259**

($ thousands)

		Fair value measurements		
	2018	Level 1[a]	Level 2[a]	Level 3[a]
Non-financial assets held for sale	16,651	-	16,651	-
Non-specialised land	72,221	-	72,221	-
Specialised land	1,600,925	-	-	1,600,925
Total land	**1,689,797**	**-**	**88,872**	**1,600,925**
Non-specialised buildings	692	-	692	-
Specialised buildings	27,475	-	-	27,475
Total buildings	**28,167**	**-**	**692**	**27,475**
Leasehold improvements	9,400	-	-	9,400
Plant and equipment	19,749	-	-	19,749
Fleet vehicles[b]	12,487	-	-	12,487
Infrastructure assets	8,556,843	-	-	8,556,843
Infrastructure assets under finance lease	4,226,998	-	-	4,226,998
Total other[b]	**12,825,477**	**-**	**-**	**12,825,477**
Total land, buildings, infrastructure, plant and equipment[b]	**14,543,441**	**-**	**89,564**	**14,453,877**

Note:
(a) Classified in accordance with the fair value determination of non-financial physical assets
(b) 2017/18 balances for fleet vehicles and capital expenditure have been reclassified between categories.

Assets Available to Support Output Delivery (continued)

Non-financial assets held for sale are treated as current and classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use.

This condition is regarded as met only when:

- the asset is available for immediate use in the current condition; and
- the sale is highly probable and the asset's sale is expected to be completed within 12 months from the date of classification.

These non-financial assets are measured at the lower of carrying amount and fair value less costs to sell, and are not subject to depreciation or amortisation.

Non-specialised land (other than held for sale) and buildings are valued using the market/direct comparison approach with key inputs used being sales evidence and unit of value by comparative basis. To the extent that non-specialised land and buildings do not contain significant, unobservable adjustments, the assets are classified as Level 2 under the market approach.

The market approach is used for **specialised land** adjusted for the Community Service Obligation (CSO) to reflect the specialised nature of the land being valued. A CSO adjustment is a reflection of the valuer's assessment of the impact of restrictions associated with an asset to the extent that is also equally applicable to market participants. This approach is in light of the highest and best use consideration required for fair value measurement, and takes into account the use of the asset that is physically possible, legally permissible, and financially feasible. As adjustments of CSO are considered as significant unobservable inputs, specialised land would be classified as Level 3 assets.

2018/19 was not a formal valuation year and as such an interim managerial valuation was conducted using Valuer-General Victoria (VGV) postcode indices. The managerial valuation resulted in a $196.8 million decrease in asset values (2017/18: $293.3 million increase). Revaluation decrease is recognised in the income statement as other economic flow $25.8 million (pre-tax) and other comprehensive income $171.0 million (pre-tax).

For the majority of the Corporation's **specialised buildings**, the depreciated replacement cost method is used adjusting for the associated depreciation. As depreciation adjustments are considered as significant, unobservable inputs in nature, specialised buildings are classified as Level 3 fair value measurements.

For **Leasehold improvements**, fair value is determined using the depreciated replacement cost method. As depreciation adjustments are considered as significant, unobservable inputs in nature, leasehold improvements are classified as Level 3 fair value measurements.

Plant and equipment is specialised in use, such that it is rarely sold, fair value is determined using the depreciated replacement cost method. As depreciation adjustments are considered as significant, unobservable inputs in nature, plant and equipment are classified as Level 3 fair value measurements.

Fleet vehicles are valued using appropriate market or other fair value indicators as determined by management. The Corporation acquires new vehicles and at times disposes of them before the end of their economic life. The process of acquisition, use and disposal in the market is managed by experienced fleet managers who set relevant depreciation rates during use to reflect the utilisation of the vehicles. As depreciation adjustments are considered as significant, unobservable inputs in nature, fleet vehicles are classified as Level 3 fair value measurements.

The fair value of **Infrastructure** was assessed by an independent valuation in 2018/19 to determine if it materially differed from the carrying value recorded by the Corporation. The income approach was used for the fair value assessment by discounting reliable estimates of the Corporation's future cash flows (projected forecast and terminal value) to their present value and arriving at an enterprise value range. A discounted tax amortisation benefit (TAB) is added to the enterprise value to represent the tax benefits available to a hypothetical purchaser in resetting the tax cost base. Non-infrastructure assets and liabilities are deducted from the enterprise value range to obtain the infrastructure value. In order to assess reasonableness of the enterprise valuation, cross checks are performed by comparing the earnings before interest, tax and depreciation/amortisation (EBITDA) and regulated asset value multiples implied by the value determined under the income approach against multiples implied by share prices at which comparable organisations are trading and recent transactions in comparable assets which have occurred. Such approaches are often referred to as market approaches or relative value approaches. Melbourne Water's policy is to use a midpoint valuation in assessing the fair value.

As there was not a material difference between the carrying amount of infrastructure versus the fair value assessment, the infrastructure balance has not been adjusted and the carrying amount is deemed to be the fair value. The significant assumptions used in determining fair value under the income approach at 30 June 2019 are summarised below:

- Nominal after tax discount rate in the range of 5.0% to 5.6% (2017/18: 5.0% to 5.6%) - representing the rate that market participants would expect to use in determining the fair market value of the Corporation after taking into account the market cost of debt and equity
- Operating expenditure and revenue growth (excluding developer contributions) applied post initial five year pricing period 3.0% (2017/18: 3.0%)
- Developer contributions growth at 2.5% (2017/18: 2.5%) applied post initial five year pricing
- Long term growth rate of 3.25% (2017/18: 3.25%) - representing inflation and volume growth
- A 10 year explicit cash flow projection period (reflecting one actual and one estimated price determination), with cash flows beyond the projection period reflected in the terminal value (2017/18 10 years)
- Normalised terminal capex used for steady state $470.0 million (2017/18 $447.8 million).

4.1.2.2 Net (loss)/gain on revaluation of non-financial assets

($ thousands)

	2019	2018
Total net (loss)/gain on revaluation of non-financial assets	(25,801)	39,231

Net (loss)/gain on revaluation of non-financial assets relates to revaluation increments/decrements recognised through profit and loss for land and buildings. Revaluation decreases are initially recognised through profit and loss as expenses to the extent that they exceed the balance, if any, held in the asset revaluation reserve relating to a previous revaluation of that asset.

Assets Available to Support Output Delivery (continued)

4.1.2.3 Description of significant unobservable inputs to Level 3 valuations

Asset Category	Valuation	Significant unobservable inputs	Range/weighted average		Sensitivity of fair value measurement to changes in significant unobservable inputs
2018 and 2019	2018 and 2019	2018 and 2019	2019	2018	2018 and 2019
Specialised land	Market approach	Community Service Obligation (CSO) adjustment	20-90% (47% weighted average)	20-90% (47% weighted average)	A significant increase or decrease in the CSO adjustment would result in a significantly lower or higher fair value
Specialised buildings	Depreciated replacement cost	Direct cost per square metre	$11-$8,600	$16-$8,400	A significant increase or decrease in direct cost per square metre would result in a significantly higher or lower fair value
		Useful life of specialised buildings	5-150 years (71 years weighted average)	5-150 years (68 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a significantly higher or lower fair value
Leasehold improvements	Depreciated replacement cost	Cost per unit	$500-$4.2M per unit	$600-$4.7M per unit	A significant increase or decrease in cost per unit would result in a significantly higher or lower fair value
		Useful life of plant and equipment	3-15 years (15 years weighted average)	3-15 years (15 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a significantly higher or lower fair value
Plant and equipment	Depreciated replacement cost	Cost per unit	$500-$1.0M per unit	$500-$1.1M per unit	A significant increase or decrease in cost per unit would result in a significantly higher or lower fair value
		Useful life of plant and equipment	3-50 years (8 years weighted average)	3-50 years (7 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a significantly higher or lower fair value
Fleet vehicles	Depreciated replacement cost	Cost per unit	$5,600-$242,000 per unit	$5,600-$261,000 per unit	A significant increase or decrease in cost per unit would result in a significantly higher or lower fair value
		Useful life of vehicles	1-15 years (6 years weighted average)	1-15 years (5 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a significantly higher or lower fair value

4.1.2.3 Description of significant unobservable inputs to Level 3 valuations (continued)

Asset Category	Valuation	Significant unobservable inputs	Range/weighted average		Sensitivity of fair value measurement to changes in significant unobservable inputs
2018 and 2019	2018 and 2019	2018 and 2019	2019	2018	2018 and 2019
Infrastructure assets (owned and VDP finance lease)	Income approach	Terminal value growth rate	3.25%	3.25%	If the terminal growth rate had changed by +/-.25% from the year end valuation, the impact to the valuation would have been a increase of $1,698.3 million in 2018/19 (2017/18: $1,630.8 million) and decrease by $1,329.2 million in 2018/19 (2017/18: $1,276.2 million)
		Terminal value capital expenditure (excluding growth)	$470.0 million	$447.8 million	If the quantum of the terminal value capital expenditure had changed by +/- $50 million that would result in a $1,292.4 million decrease in fair value in 2018/19 (2017/18: $1,291 million) or $1,292 million increase in fair value in 2018/19 (2017/18: $1,291.0 million)
		Weighted average cost of capital (WACC)	5.0-5.6%	5.0-5.6%	If the WACC had changed by +/-.25% from the year end valuation, the impact to the valuation would have been a decrease of $1,252.1 million in 2018/19 (2017/18: $1,731.0 million) and increase by $2,441.2 in 2018/19 (2017/18: $1,480.3 million)
		Useful life	2-245 years (77 years weighted average)	2-200 years (77 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a higher or lower fair value

Assets Available to Support Output Delivery (continued)

4.1.2.4 Reconciliation of Level 3 fair value

($ thousands)

	Specialised land	Specialised buildings	Leasehold improvements	Plant and equipment	Fleet vehicles[a]	Infrastructure	VDP infrastructure
Opening balance 1 July 2017	1,297,000	26,097	10,150	21,756	10,427	8,442,548	4,304,550
Purchased additions	-	-	-	-	6,209	-	-
Developer contributed assets	-	-	-	-	-	48,068	-
Disposals and write-offs	(3,423)	-	-	(46)	(1,344)	(26,484)	-
Depreciation and amortisation	-	(1,107)	(1,102)	(9,468)	(2,805)	(285,562)	(77,552)
Transfers between classes	-	-	-	1	-	(1)	-
Transfers in/(out) of Level 3	500	-	-	-	-	-	-
Revaluation increments	282,873	-	-	-	-	-	-
Revaluation decrements	(3,737)	-	-	-	-	-	-
Capitalisation of works in progress	27,711	2,485	352	7,506	-	378,274	-
At 30 June 2018	**1,600,924**	**27,475**	**9,400**	**19,749**	**12,487**	**8,556,843**	**4,226,998**
Opening balance 1 July 2018	1,600,924	27,475	9,400	19,749	12,487	8,556,843	4,226,998
Purchased additions	-	-	-	-	2,936	-	-
Developer contributed assets	-	-	-	-	-	18,683	-
Disposals and write-offs	(1,884)	-	-	(73)	(933)	(24,272)	-
Depreciation and amortisation	-	(1,040)	(1,164)	(8,960)	(2,054)	(298,777)	(77,550)
Transfers between classes	-	(5,093)	35	(13)	-	(1,161)	-
Transfers in/(out) of Level 3	(1,375)	-	-	-	-	-	-
Revaluation increments	-	-	-	-	-	-	-
Revaluation decrements	(199,537)	-	-	-	-	-	-
Capital Contributions	-	-	-	-	-	34,041	-
Capitalisation of works in progress	30,388	88	59	4,278	-	515,761	-
At 30 June 2019	**1,428,516**	**21,430**	**8,330**	**14,981**	**12,436**	**8,801,118**	**4,149,448**

(a) 2017/18 balances for fleet vehicles and capital expenditure have been classified between categories.

4.1.3 Depreciation, amortisation and impairment

($ thousands)

		2019	2018
Depreciation			
Buildings	**4.1.1**	1,097	1,249
Leasehold improvements	**4.1.1**	1,164	1,102
Plant and equipment	**4.1.1**	8,960	9,468
Fleet vehicles	**4.1.1**	2,054	2,805
Infrastructure assets	**4.1.1**	298,777	285,562
Total depreciation		**312,052**	**300,186**
Amortisation			
VDP infrastructure assets under finance lease	**4.1.1**	77,550	77,552
Intangible assets	**4.2**	18,489	14,399
Total amortisation		**96,039**	**91,951**
Total depreciation and amortisation		**408,091**	**392,137**

Depreciation and amortisation

Where assets have separate identifiable components that have distinct useful lives and/or residual values, a separate depreciation rate is determined for each component.

Depreciation on other assets is calculated using the straight line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives, commencing from the time the asset is held ready for use. The assets' residual values and useful lives are reviewed annually, and adjusted if appropriate, at the end of each reporting period. Land is not depreciated. Impacts resulting from changes in depreciation rates have been incorporated in the current year's results and have not been separately disclosed as the overall amount was not material.

Major depreciation and amortisation periods used are listed below:

Buildings	5 to 150 years (2017/18: 5 to 150 years)
Leasehold improvements	3 to 15 years (2017/18: 3 to 15 years)
Plant and equipment	3 to 50 years (2017/18: 3 to 50 years)
Infrastructure assets	2 to 245 years (2017/18: 2 to 200 years)
Fleet vehicles	1 to 15 years (2017/18: 1 to 15 years)
Intangible assets	2 to 25 years (2017/18: 2 to 25 years)
VDP under finance lease	9 to 100 years (2017/18: 9 to 100 years)

Indefinite life assets

Land, which is considered to have an indefinite life, is not depreciated. Depreciation is not recognised in respect of these assets because their service potential has not, in any material sense, been consumed during the reporting period.

Assets Available to Support Output Delivery (continued)

Impairment

Intangible assets with indefinite useful lives (and intangible assets not yet available for use) are tested annually for impairment and whenever there is an indication that the asset may be impaired.

All other assets are assessed annually for indications of impairment, except for:

- Inventories (refer to 3.10)
- Non-financial assets held for sale (refer 4.1.2.1 and 4.3)

If there is an indication of impairment, the assets concerned are tested as to whether their carrying value exceeds their recoverable amount. Where an asset's carrying value exceeds its recoverable amount, the difference is written off to the Statement of Profit or Loss and Other Comprehensive Income, except to the extent that the write down can be debited to an asset revaluation reserve amount applicable to that asset.

It is deemed that, in the event of the loss or destruction of an asset, the future economic benefits arising from the use of the asset will be replaced unless a specific decision to the contrary has been made. The recoverable amount for most assets are measured at the higher of the present value of future cash flows expected to be obtained from the asset or fair value less costs to sell.

4.2 Intangible assets

($ thousands)

	2019	2018
Intangible assets	169,911	152,713
Less: accumulated amortisation and impairment	(112,890)	(99,512)
Total intangible assets	**57,021**	**53,201**

Reconciliation of movements in intangible assets

($ thousands)

	Total	RECs[b]	Other
Carrying amount at 1 July 2018	53,201	7,700	45,501
Additions	5,248	5,248	-
Disposals	(9,520)	(9,520)	
Amortisation	(18,489)	-	(18,489)
Transfers between classes [a]	1,139	-	1,139
Capital expenditure	25,442	-	25,442
Carrying amount at 30 June 2019	**57,021**	**3,428**	**53,593**
Carrying amount at 1 July 2017	57,088	17,103	39,985
Additions	14,524	14,524	-
Disposals	(23,927)	(23,927)	
Amortisation	(14,399)	-	(14,399)
Capital expenditure	19,915	-	19,915
Carrying amount at 30 June 2018	**53,201**	**7,700**	**45,501**

Note:
(a) Includes transfers to physical assets, refer to 4.1.1
(b) Renewable Energy Certificates (RECs).

Intangible assets consist primarily of information technology software and Renewable Energy Certificates (RECs). They represent identifiable non-monetary assets without physical substance. Intangible assets are measured at cost less accumulated amortisation (RECs are not amortised) and impairment. Costs incurred subsequent to initial acquisition are capitalised when it is expected that additional future economic benefits will flow to the Corporation.

The Corporation amortises intangible assets with a limited useful life using the straight line method over the estimated useful lives. Amortisation begins when the asset is available for use, that is, when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. The useful life and amortisation method is reviewed at the envd of each annual reporting period. In addition, an assessment is made at the end of each reporting period to determine whether there are indicators that the intangible asset concerned is impaired. If so, the assets concerned are tested as to whether their carrying value exceeds their recoverable amount.

4.3 Non-financial assets held for sale

($ thousands)

	2019	2018
Land	16,526	16,651
Buildings	5,093	-
Total non-financial assets held for sale	**21,619**	**16,651**

The Corporation currently holds land for sale mainly as part of the Riverwalk Estate (Werribee) development and also surplus office space at the Western Treatment Plant. As at 30 June 2019, the Corporation has a joint arrangement with Development Victoria to actively market Riverwalk Estate lots for private sale.

Riverwalk, Werribee, Victoria is a 197 hectare site which was previously part of the Werribee Treatment Plant. The land is owned by the Corporation. The Corporation has entered a Partnering Deed with Development Victoria to develop the land with an estimated 2,260 homes at the completion of the project. Development Victoria is responsible for all development costs and the profit share percentage.

The Corporation has accounted for all assets, liabilities, revenues and expenses relating to its interest in the joint operation in accordance with the AASB 11 Joint arrangements.

Refer to **4.1.2** for further details on fair value measurement of non-financial assets held for sale.

Financing Our Operations

Introduction

The Corporation's operations are financed through a variety of means. Recurrent operations are generally financed from cash flows from operating activities (see Statement of Cash Flows). Asset investment operations are generally financed from a combination of surplus cash flows from operating activities, asset sales and borrowings.

This section provides information on the balances related to the financing of the Corporation's operations, including financial commitments (inclusive of lessor receivables) at year-end.

Structure

5.1.1 Interest bearing liabilities

($ thousands)

	2019	2018
Current interest bearing liabilities		
VDP finance lease	74,737	70,339
Borrowings	636,100	746,079
Total current interest bearing liabilities	**710,837**	**816,418**
Non-current interest bearing liabilities		
VDP finance lease	3,643,380	3,999,385
Borrowings	3,465,000	3,245,000
Total non-current interest bearing liabilities	**7,108,380**	**7,244,385**
Total interest bearing liabilities	**7,819,217**	**8,060,803**

Interest bearing liabilities come from borrowings raised through the Treasury Corporation of Victoria (TCV), along with finance leases for the VDP. They are classified as financial instruments. All interest bearing liabilities are initially recognised at the fair value of the consideration received less directly attributable transaction costs. Interest bearing liabilities are subsequently measured at amortised cost using the constant interest rate method, with interest expense recognised on an effective yield basis.

Where the Corporation has an unconditional right to defer settlement of the liability for at least 12 months after the balance date, interest bearing liabilities are classified as non-current liabilities. Otherwise interest bearing liabilities are classified as current liabilities.

Breakdown of finance costs

($ thousands)

	2019	2018
Interest expense	149,578	169,712
VDP finance lease interest	426,842	431,574
Financial Accommodation Levy	40,534	43,992
Significant financing component - contracts with customers	1,283	-
Total	**618,237**	**645,278**

Finance costs include interest on short-term and long-term borrowings, finance lease charges associated with the VDP, the Victorian Government's Financial Accommodation Levy and significant financing component on contracts with customers.

Finance costs are recognised as expenses in the period in which they are incurred. Finance costs directly attributable to the acquisition, construction or production of these qualifying assets are not required to be capitalised and will continue to be expensed in the period in which they are incurred. All qualifying assets (being assets that necessarily take a substantial period of time to get ready for their intended use or sale) are measured at fair value.

5.1.2 Refinancing gain on financial instruments

($ thousands)

	2019	2018
Total refinancing gain on financial instruments	**59,609**	**-**

The *Australian Accounting Standards Board* (AASB) has issued a new standard AASB 9 Financial Instruments which replaces the modification of debt guidance previously applied under AASB 139. The new standard is applicable from 1 July 2018 for the Corporation as a for-profit entity. Under AASB 9, gains or losses on refinancing of the VDP are now recognised in the Statement of Profit or Loss immediately, with previous refinancing gains or losses recognised in retained earnings on transition to the new standard at 1 July 2018. Refer to Note 7.8 for disclosure on any VDP refinancing gains or losses (included within other economic flows). Refer to Note 7.9 for full disclosure of the adoption of AASB 9 for the Corporation. Due to the transition method chosen in applying AASB 9 comparative information has not been restated to reflect the new requirements.

5.2 Cash flow information and balances

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term and highly liquid investments with original maturities of 3 months or less, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

Deposits held and advances received are categorised as financial liabilities at amortised cost.

Reconciliation of net profit to net cash flows from operating activities

($ thousands)

	2019	2018
Profit for the period after tax	200,966	208,832
Plus/(less) non cash items:		
Depreciation and amortisation	408,091	392,137
Net gain on sale of non-current assets (including RECs)	(12,571)	(16,592)
Assets written off/written down and asset transfers to Council	36,537	33,263
Developer contributed assets received	(18,683)	(48,068)
Defined benefit superannuation plan expense	1,254	1,710
Defined contribution superannuation plan expense	3,733	260
RECs received	(5,108)	(14,140)
Net loss/(gain) on revaluation of non-financial assets	25,801	(39,231)
Refinancing (gain)/loss) on financial instruments	(59,609)	-
Changes in operating assets and liabilities (net of investing items):		
(Increase)/Decrease in trade and other receivables	(16,481)	(9,413)
Decrease/(Increase) in other assets	23,924	(2,152)
(Decrease)/Increase in trade and other payables (excluding AASB 15 and ASSB 9 opening balance adjustments)	(38,817)	(16,144)
Increase/(Decrease) in provisions and employee benefits provisions	8,327	(602)
Increase/(Decrease) in other liabilities	141	(8,699)
Increase/(Decrease) in current tax liability	15,559	2,356
(Decrease)/Increase in deferred tax liabilities (excluding AASB 15 and AASB 9 opening balance adjustments)	(38,098)	(17,701)
Net cash provided by operating activities	**534,966**	**465,816**

Financing Our Operations (continued)

5.3 Commitments

Commitments for future expenditure include capital, operating and financing commitments arising from contracts.

These commitments are not recognised in the financial statements, but are disclosed at their nominal value and inclusive of the GST payable, except for finance lease liabilities which are disclosed at present value.

	($ thousands)	
	2019	2018
Capital expenditure commitments		
Total capital expenditure contracted for the construction of water, sewerage and waterways and drainage infrastructure:		
Less than 1 year	234,777	239,191
1 year but less than 5 years	94,696	219,575
Total capital expenditure commitments	**329,473**	**458,766**

The Corporation as lessee		
Operating and lease commitments		
The Corporation leases buildings and motor vehicles under non-cancellable operating leases. The building lease agreements have varying terms, escalation clauses and renewal rights. On renewal, the terms of the leases are renegotiated. Commitments for minimum lease payments in relation to non-cancellable operating leases are payable as follows:		
Less than 1 year	10,401	9,484
1 year but less than 5 years	46,470	41,210
5 years or more	39,406	46,626
Total operating and lease commitments	**96,277**	**97,320**

Other operating commitments		
Other operating commitments relate to operating contracts including energy, IT, research and development etc (excluding leases). Total other operating expenditure contracted for at balance date are as follows:		
Less than 1 year	32,095	29,838
1 year but less than 5 years	71,410	57,211
Later than 5 years	64,881	80,243
Total other operating commitments	**168,386**	**167,292**

Build, Own and Operate (BOO) commitment		
The Corporation has allocated a parcel of land at the Western Treatment Plant (WTP) for the operation of a 9.9 Megawatts biogas electricity generation plant, managed under a BOO contract with AGL. The Corporation delivers biogas extracted from the treatment process to AGL, who in turn provides this generated electricity exclusively to the Corporation. The arrangement expires on 31 December 2020.		
Less than 1 year	4,580	4,526
1 year but less than 5 years	2,318	6,987
Total Build, Own and Operate commitment	**6,898**	**11,513**

	($ thousands) 2019	2018
The Corporation as lessor		
Operating lease receivable		
Operating leases primarily relate to land owned by the Corporation. All operating lease contracts contain market review clauses. The lessee does not have an option to purchase the land at the expiry of the lease period. Commitments for minimum lease receipts in relation to non-cancellable operating leases are as follows:		
Less than 1 year	2,005	1,786
1 year but less than 5 years	6,035	4,037
5 years or more	3,154	3,374
Total operating and lease commitments	**11,194**	**9,197**

Victorian Desalination Plant (VDP) finance lease and other commitments

On 30 July 2009, the State of Victoria ('the State') through the Department of Environment, Land, Water and Planning (DELWP) entered into a 30 year Project Deed with the AquaSure consortium to build and operate the desalination plant in Wonthaggi under a Public Private Partnership (PPP) arrangement, with a connection to the Melbourne water system. Construction of the desalination plant began in September 2009. The project operation term commenced from the date of commercial acceptance which occurred on 17 November 2012, triggering the recognition of the finance lease payable.

The Minister for Environment, Climate Change and Water issued a Statement of Obligations (SoO) to the Corporation under section 4I of the Water Industry Act 1994 on 26 June 2009. The SoO requires the Corporation to pay all monies payable by the State under the Project Deed with AquaSure.

The Corporation also entered into a Victorian Desalination Project 'Water Interface Agreement' (WIA) and a Supplementary Water Interface Agreement with the State to record the terms of the interface and financial arrangements between the Project and the Corporation.

Under the arrangement, the Corporation has an obligation to make Project Deed payments to DELWP, who are managing the contract with AquaSure on behalf of the State. The portions of the Project Deed Payments that relate to the right to use the project assets are accounted for as a finance lease as disclosed below. In addition, the Project Deed Payments also include other commitments for operating, maintenance and life cycle costs. The desalination plant assets will transfer from DELWP to the Corporation at the end of the project contract term (presently planned for 2039). The Corporation will also make water usage payments for any water that is ordered and delivered to the required standards. Water can be ordered annually for flexible amounts from 0 to 150 gigalitres (in set increments).

In May 2017, the Minister for Water announced Melbourne households will not face additional charges on their water bills for the 2016/17 50 GL water order and the subsequent three minimum water orders. These orders will instead be funded from the sale of surplus banked Renewable Energy Certificates, which were previously purchased to offset power used by the plant with green energy, and were not fully utilised as no water orders were made until 2016. As at 30 June 2019 Aquasure had produced the 15 gigalitres (GL) for the 2018/19 water order.

AquaSure has produced 6.9 GL of the 2019-20 water order prior to 30 June 2019. Under the provisions in the project deed AquaSure are permitted to bring forward the delivery of a water order if there has been an increase over and above the order for the previous year or where water orders are at 150 GL. The costs associated with this additional volume have been accrued in 2018/19 but DELWP is not liable to make payment to AquaSure until it is invoiced for this water in 2019/20. The Corporation will pay DELWP in accordance with the contract terms.

On 18 March 2019 the Minister for Water issued the 2019/20 Supply Notice with a Required Annual Water Volume for 125GL in 2019/20 and non-binding forecasts of 100GL for 2020/21 and 125GL for 2021/22.

In October 2018, the State approved that AquaSure refinance its external debt. The refinancing resulted in the State being entitled to a refinancing benefit of $125 million (nominal value) over the life of the Project Deed, recognised by the Corporation as $59.6 million (present value) for 2018/19 in the Statement of Profit and Loss. The Victorian Desalination Plant Project Deed entitles the state to an adjustment to the water service payments in the original financial model to reflect the changes in refinancing costs incurred by AquaSure as per AASB 9. The refinancing gain is recognised upfront and reduces the future lease liability and interest expense profile. Previously the gain had been recognised over the remaining of the lease. Refer to note 7.9 for adjustments relating to the adoption of AASB 9.

Financing Our Operations (continued)

As per information provided by DELWP (in accordance with the WIA), the Corporation has recognised the following finance lease liability:

	($ thousands)			
	Minimum future lease payments		Present value of minimum future lease payments	
	2019	2018	2019	2018
VDP finance lease liability				
Less than 1 year	490,202	492,863	74,737	70,339
1 year but less than 5 years	1,768,468	1,840,452	151,817	212,869
Later than 5 years	7,414,049	7,957,147	3,491,563	3,786,516
Minimum future lease payments	**9,672,719**	**10,290,462**	**3,718,117**	**4,069,724**
Less: Future finance charges	(5,954,602)	(6,220,738)	-	-
Total finance lease liability	**3,718,117**	**4,069,724**	**3,718,117**	**4,069,724**

Representing finance lease liability:

Current (refer to 5.1)[a]	74,737	70,339
Non-current (refer to 5.1)[a]	3,643,380	3,999,385
Total finance lease liability	**3,718,117**	**4,069,724**

Note:
(a) The present value of the minimum future lease payments have been discounted to 30 June of the respective financial years using the weighted average interest rate of 11.28% (2017/18: 10.45%). These payments exclude finance charges.

Other commitments payable

Under the PPP arrangement that the state entered into with AquaSure, the State is required to make base water security payments, provided the plant is maintained to the appropriate standard. This payments is for costs related to the VDP's operation, maintenance and life cycle costs. The nominal amounts for the other commitments below represent the charges payable under the agreement at the end of the reporting period for these costs.

The Project Deed requires a minimum number of Renewable Energy Certificates (RECs) to be purchased to offset the electricity used by the plant. The number of RECs that are consumed will vary based on the volume of water produced by the plant. The number of banked RECs that remain at the end of the supply period will be controlled by the Department.

The other commitments payable are disclosed based on information provided by DELWP (in accordance with the WIA):

	($ thousands)	
	2019	2018
Less than 1 year	235,020	136,762
1 year but less than 5 years	610,662	595,729
Later than 5 years	3,413,353	3,597,462
Total other commitments (inclusive of GST)[b]	**4,259,035**	**4,329,953**
Less GST recoverable from the Australian Taxation Office	(387,185)	(393,632)
Total other commitments (exclusive of GST)	**3,871,850**	**3,936,321**
Present value of other commitments[c]	**1,659,903**	**1,565,824**

Note:
(b) The 'Other commitments' have been updated to reflect indexation factors, such as Consumer Price Index, Producer Price Index, Chemical Index, and Average Weekly Earnings Index. Commitments are updated for the change in actual amounts paid, and forecast percentage increases are based on the original forecasted indices and applied to the adjusted actual payments. This methodology has been applied to reduce volatility in the forecast 'Other commitments'

(c) The present value of the 'Other commitments' have been discounted to 30 June of the respective financial years. The basis for discounting has been to take each 12 month period of cash flows and discount these cash flows at the end of the period using the annual discount rate. The discount rate used to calculate the present value the commitment is 9.99% (2017/18: 9.99%) which is the nominal pre-tax discount rate representative of the overall risk of the project at inception. The present value for 2017/18 has been restated (increase of $142.3 million) as it did not include GST.

Risk management

Introduction

The Corporation is exposed to financial risks from both its activities and outside factors. In addition, it is often necessary to make judgements and estimates associated with recognition and measurement of items in the financial statements.

This section presents information on financial instruments, contingent assets and liabilities, and fair value determinations regarding the Corporation's financial assets and liabilities.

Structure

6.1 Financial instruments

Financial instruments arise out of contractual agreements that give rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Due to the nature of the Corporation's activities, certain financial assets and financial liabilities arise under statute rather than a contract (for example taxes). Such assets and liabilities do not meet the definition of financial instruments.

The Corporation's principle financial instruments are contractual in nature and comprise:

- Cash and cash equivalents
- Trade debtors and other receivables
- Trade creditors, accruals and interest payable
- VDP lease liabilities
- Other payables
- Borrowings (including short term, floating rate notes and fixed interest).

This is the first set of the Corporation's annual financial statements in which the new accounting standard *AASB 9 Financial Instruments* has been applied. AASB 9 replaces the provisions of *AASB 139 (Financial Instruments: Recognition and Measurement)* that relate to the recognition, classification and measurement of financial assets and financial liabilities, de-recognition of financial instruments, impairment of financial assets and hedge accounting. It introduces a new impairment model for financial assets based on expected credit losses, simplifies hedge accounting and changes the accounting for loan/debt modifications. The Corporations policy on financial instruments is noted below.

Classification and measurement of financial instruments

Receivables and cash are financial instruments with fixed and determinable payments that are not quoted on an active market. Financial assets are initially measured at fair value plus or minus any direct transaction costs. Subsequent to initial measurement, receivables are measured at amortised cost as the objective is to collect the contractual cash flows.

The following assets are held with the objective to collect the contractual cash flows:

- Cash and cash equivalents
- Trade debtors and other receivables.

Financial liabilities are initially recognised at fair value. These financial instruments are measured at amortised cost with any difference between the initial recognised amount and the redemption value being recognised in the profit and loss, over the period of the interest bearing liability using the effective interest rate method. The Corporation recognises the following liabilities:

- Trade creditors, accruals and interest payable
- VDP lease liabilities
- Other payables
- Borrowings (including short term, floating rate notes and fixed interest).

Risk management (continued)

6.1 Financial instruments (continued)

Derecognition of financial assets

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Corporation has transferred substantially all the risks and rewards of ownership.

Impairment of financial assets

The Corporation applies the AASB 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for contractual receivables. On this basis, an assessment undertaken by management has identified that historical debt write-offs and future expected losses are immaterial. As such, there is no allowance for expected credit losses as at 30 June 2019. Last years balance was based on the assessment applied under *AASB 139 Financial instruments*.

Categories of financial instruments

($ thousands)

	2019	2018
Financial assets		
Cash and cash equivalents	17,603	2,008
Trade debtors	44,347	48,790
Other receivables	37,836	20,718
Total financial assets	**99,786**	**71,516**
Financial liabilities		
Trade and other payables	380,952	349,389
VDP finance lease liabilities	3,718,117	4,069,724
Short term borrowings	206,100	571,079
Floating rate notes	400,000	400,000
Fixed interest	3,495,000	3,020,000
Total financial liabilities	**8,200,169**	**8,410,192**

Financial risk management - The objectives of the Corporation's Treasury Management Policy are to:

- Manage the Corporation's cost of borrowings through effective control and management of interest rate risk
- Manage the Corporation's cost of borrowings in line with the revenue provided in the 2016 Pricing Determination to cover the cost of debt
- Manage working capital requirements by ensuring sufficient cash resources and funds are available to meet daily and long-term liquidity needs within approved parameters, while utilising excess cash to reduce debt balances
- Ensure that adequate financial accommodation facilities are in place to meet the short and long-term liquidity needs
- Ensure that all financial and operational risk exposures are identified and managed
- Ensure adequate internal controls and staffing
- Maintain an indicative investment grade corporate credit rating and credit metrics.

These objectives are consistent with the Corporate Risk Management Policy and Framework of the Corporation, the Corporation's Financial Sustainability Strategy, Standing Directions issued by the Assistant Treasurer and the Victorian Public Sector Debt Management Objectives.

The Corporation's Treasury Management Policy manages financial risk by:

- Managing the financial risks arising from the regulatory price determination process, specifically the mismatch between the regulator's revenue allowance for debt costs and actual debt costs throughout the regulatory period
- Actively managing liquidity and funding risk.

The following are the key measures used to manage financial risk:

Portfolio composition (i.e. fixed and floating) - During the 2018/19 financial year, the Corporation reviewed its Treasury Management Policy and have made no changes from the prior year bands by which it manages its debt portfolio:

Floating interest rate borrowings	0-30%
Fixed interest rate borrowings	70-100%

Physical maturity profile - Debt maturity of fixed and floating rate notes is not to exceed 15% of the total debt portfolio in any financial year.

Interest rate risk profile - Interest Rate Swaps and Forward Rate Agreements are used to mitigate the risk from adverse interest rate increases where the actual interest rates paid to finance debt are at risk of being higher than the debt allowance received in revenue to finance debt. The Corporation's goal is to align the actual interest rate risk profile to the profile used by the Essential Services Commission (ESC) in setting our revenue.

Aligning the interest rate re-pricing profile of the debt portfolio with the annual regulatory weighted average cost of capital (WACC) re-set based on the 10-year trailing average approach used by the ESC to determine revenue aims to reduce the regulatory interest rate mismatch risk. The Corporation also aims to align the modified duration of its debt portfolio in line with the regulatory benchmark portfolio.

Financing arrangements - The capacity to borrow funds and manage the associated risks is subject to the provisions of the *Borrowing and Investment Powers Act 1987*. In accordance with this Act, the Treasurer of Victoria issues an annual approval, permitting new borrowings and the refinancing of all loan maturities for that year and non-maturing loans upon request. All funding is sourced from the Treasury Corporation of Victoria (TCV).

The Corporation's total approved maximum borrowing limit for 2018/19 of $4,208.4 million (2017/18: $4,157.7 million) was not exceeded at any stage throughout the financial year.

Capital management - The Corporation manages its finances in order to maintain a stable and appropriate capital structure given the financial risk profile and the regulated nature of its business. The Corporation's aim is to maintain credit metrics consistent with an investment grade long-term corporate credit rating.

The Corporation has the following externally imposed limits in relation to capital management:

- Financial Accommodation cannot exceed the approval limits set by the Treasurer of Victoria pursuant to the *Borrowing and Investment Powers Act 1987*
- The Corporation, with the exception of working capital accounts with overdraft facilities, is required to borrow and invest exclusively with TCV.

The Corporation's gearing ratio (Total Debt/Total Assets) at 30 June 2019 was 51.2% (2017/18: 52.6%) and interest cover cash ratio was 2.1 times (2017/18: 1.9 times).

Gearing and Interest Cover ratios are some of a number of benchmarks that are considered by the Board when considering an appropriate capital structure. These ratios are approved via the Corporate Plan.

Interest rate risk is the risk that over the regulatory period the actual cost of debt is higher than the regulatory cost of debt allowance that the Corporation receives as part of the regulatory determination.

Interest rate risk is managed by:

- Strategic management of the mix of floating and fixed rate debt within a range of Board approved parameters, in order to minimise exposure to fluctuations in variable rates and to minimise the long-term net cost of funding
- Aligning the Corporation's modified duration with the regulatory benchmark portfolio modified duration
- The utilisation of interest Rate Swaps to align the re-pricing of the actual costs of debt with the timing of the setting of the regulatory cost of debt allowance.

At 30 June 2019, the Corporation did not have any interest Rate Swaps (30 June 2018: Nil).

The interest rate exposure table provides details of the carrying amounts of financial assets and liabilities that expose the Corporation to either interest rate fair value risk or interest rate cash flow risk.

Risk management (continued)

6.1.1 Interest rate risk

Interest rate exposure as at 30 June 2019 ($ thousands)

	Weighted average	Floating interest	Fixed interest	Non-interest bearing	Total carrying amount
Financial assets					
Cash and cash equivalents	1.43%	17,603	-	-	17,603
Trade debtors	-	-	-	44,347	44,347
Other receivables	-	-	-	37,836	37,836
Total financial assets		**17,603**	**-**	**82,183**	**99,786**
Financial liabilities					
Trade and other payables	-	-	-	380,952	380,952
VDP lease liabilities[(a)]	11.28%	-	3,718,117	-	3,718,117
Short term borrowings	1.64%	206,100	-	-	206,100
Floating rate notes	2.25%	400,000	-	-	400,000
Fixed interest	4.08%	-	3,495,000	-	3,495,000
Total financial liabilities		**606,100**	**7,213,117**	**380,952**	**8,200,169**

Interest rate exposure as at 30 June 2018 ($ thousands)

	Weighted average	Floating interest	Fixed interest	Non-interest bearing	Total carrying amount
Financial assets					
Cash and cash equivalents	1.45%	2,008	-	-	2,008
Trade debtors	-	-	-	48,790	48,790
Other receivables	-	-	-	20,718	20,718
Total financial assets		**2,008**	**-**	**69,508**	**71,516**
Financial liabilities					
Trade and other payables	-	-	-	349,389	349,389
VDP lease liabilities[(a)]	10.45%	-	4,069,724	-	4,069,724
Short term borrowings	1.67%	571,079	-	-	571,079
Floating rate notes	2.25%	400,000	-	-	400,000
Fixed interest	4.62%	-	3,020,000	-	3,020,000
Total financial liabilities		**971,079**	**7,089,724**	**349,389**	**8,410,192**

Note:
(a) The weighted average interest rate for VDP lease liabilities is the interest rate implicit in the lease. Following the adoption of AASB 9 Financial Instruments, gains or losses from VDP refinancing activities are now required to be recognised immediately through profit and loss. The gains or losses reflect the difference between the original contractual cash flows and the modified cash flows discounted at the original 'effective interest rate'. Previously these gains (or losses) would have been recognised over the remaining life of the borrowing by adjusting the effective interest rate, on the basis that the terms and conditions of the facility remained largely unchanged. The equivalent weighted average interest rate as at 30 June 2019 without adoption of AASB 9 is 10.23%. Comparative figures have not been restated as per the transitional provisions in AASB 9.

Interest rate risk sensitivity analysis ($ thousands)

2019	Profit or Loss		Equity	
	-50 basis points	+50 basis points	-50 basis points	+50 basis points
Cash and cash equivalents	(13)	13	(13)	13
Interest Bearing Liabilities	3,031	(3,031)	3,031	(3,031)
Total	**3,018**	**(3,018)**	**3,018**	**(3,018)**

($ thousands)

2018	Profit or Loss		Equity	
	-50 basis points	+50 basis points	-50 basis points	+50 basis points
Cash and cash equivalents	(8)	8	(6)	6
Interest Bearing Liabilities	4,855	(4,855)	3,399	(3,399)
Total	**4,847**	**(4,847)**	**3,393**	**(3,393)**

Exposures arise predominately from liabilities bearing variable interest rates as the Corporation intends to hold fixed rate liabilities to maturity. At 30 June 2018 and 30 June 2019, if interest rates had changed by +/- 50 basis points from the year end rates with all other variables held constant, the net profit before tax and the impact on equity would have changed by the amounts shown above.

6.1.2 Foreign exchange risk

Foreign exchange risk arises when future commercial transactions and recognised assets and liabilities are denominated in a currency that is not the entity's functional currency.

It is the Corporation's policy to hedge the effect of foreign currency exchange rate movements on the fair values of any transactions in excess of AUD $1.0 million. The Corporation's policy requires all hedging to be undertaken through TCV in the form of Forward Foreign Exchange Contracts.

At 30 June 2019, the Corporation did not have any Forward Foreign Exchange Contracts (30 June 2018: Nil).

6.1.3 Price risk

Price risk is the risk that the Corporation will suffer financial loss due to adverse movements in the price of commodity inputs and/or outputs related to its business operations.

The main price risk exposure to the Corporation is the potential decline in market value of the Renewable Energy Certificates (RECs). This may impact on the realisable value of RECs the Corporation currently holds and future RECs it will be receiving. The current strategy is to realise on an ongoing basis the value of the RECs given they are no longer required by the Corporation. Other lower level exposures will exist with supply and service contracts mitigating this risk where possible.

Risk management (continued)

6.1.4 Credit risk

Credit risk is the risk of financial loss to the Corporation as a result of a customer or counterparty to a financial instrument failing to meet its contractual obligations in full and on the due date. The Corporation's exposure to credit risk is influenced by the individual characteristics of each customer or counterparty.

All receivables are recognised at the amounts receivable less any expected credit loss. Receivables are reviewed on an ongoing basis to identify amounts which cannot be collected. Debts which cannot be collected are written off. The Corporation applies the AASB 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all receivables. Refer to note 2.3 (Receivables).

The major exposure to credit risk arises from Trade Debtors and Other Receivables.

Trade Debtors are comprised predominantly of metropolitan retail water businesses with minimal credit risk exposure to the Corporation. These debtors are invoiced in two parts. The first part is a usage charge that is invoiced weekly and paid within 7 days. The second part is an availability charge that is invoiced monthly and paid within 14 days.

Other Receivables primarily consist of a large number of residential and business customers across a diverse range of industries to which the Corporation provides waterways and drainage services. These receivable balances are monitored on an ongoing basis to ensure that exposure to bad debts is not significant. The collection of payments and overdue receivables is managed by the metropolitan retail water businesses as part of billings and collection agreements with the Corporation. In addition any unpaid debt is allocated against the property title and will be extinguished if there is a change in property ownership.

All financial risk management instruments are transacted with TCV, whose liabilities are guaranteed by the Victorian Government. The Corporation potentially has a concentration of credit risk with TCV as the central borrowing authority of Victoria. This risk is considered minimal.

6.1.5 Liquidity risk

Liquidity risk is the risk that the Corporation won't be able to meet its short-term financial obligations. The Corporation manages liquidity risk by maintaining and conducting efficient banking practices and account structures, sound cash management practices and regular monitoring of the maturity profile of assets and liabilities, together with anticipated cash flows.

The objective of the Corporation's financial risk management policies is the optimal utilisation of cash with all surplus funds used to repay borrowings.

Undiscounted maturity analysis of financial liabilities

($ thousands)

2019	Total carrying amount	Total contractual cash flows	1 year or less	1 to 5 years	Over 5 years
Non-interest bearing	380,952	380,952	379,521	1,431	-
Variable rate	606,100	620,507	290,403	330,104	-
Fixed rate	7,213,117	14,695,909	1,024,819	3,702,699	9,968,391
Total	**8,200,169**	**15,697,368**	**1,694,743**	**4,034,234**	**9,968,391**

2018	Total carrying amount	Total contractual cash flows	1 year or less	1 to 5 years	Over 5 years
Non-interest bearing	349,389	349,389	348,497	892	-
Variable rate	971,079	1,008,064	590,303	417,761	-
Fixed rate	7,089,724	14,810,482	1,229,991	3,568,801	10,011,690
Total	**8,410,192**	**16,167,935**	**2,168,791**	**3,987,454**	**10,011,690**

6.1.6 Other matters

Net holding gain/(loss) on financial instruments by category

($ thousands)

	2019	2018
Interest revenue/(expense)		
Financial assets	70	27
Financial liabilities at amortised cost	(618,237)	(645,278)
Total	**(618,167)**	**(645,251)**

Risk management (continued)

6.2 Fair value determination of financial assets and liabilities

The fair values and net fair values of financial instrument assets and liabilities are determined as follows:

- Level 1 – the fair value of financial instrument with standard terms and conditions and traded in active liquid markets are determined with reference to quoted market prices
- Level 2 – the fair value is determined using inputs other than quoted prices that are observable for the financial asset or liability, either directly or indirectly
- Level 3 – the fair value is determined in accordance with generally accepted pricing models based on discounted cash flow analysis using unobservable market inputs.

The following table shows the carrying amounts and fair values of financial assets and financial liabilities. The fair values are classified as level 2 within the fair value hierarchy with the exception of cash and cash equivalents (classified as level 1).

Carrying amounts, fair values and fair value hierarchy ($ thousands)

	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Cash and cash equivalents	17,603	17,603	2,008	2,008
Trade debtors	44,347	44,347	48,790	48,790
Other receivables	37,836	37,836	20,718	20,718
Total financial assets	**99,786**	**99,786**	**71,516**	**71,516**
Financial liabilities				
Trade and other payables	380,952	380,952	349,389	349,389
VDP lease liabilities	3,718,117	3,718,117	4,069,724	4,069,724
Short term borrowings	206,100	206,100	571,079	571,079
Floating rate notes	400,000	401,224	400,000	402,546
Fixed interest	3,495,000	3,796,836	3,020,000	3,174,886
Total financial liabilities	**8,200,169**	**8,503,229**	**8,410,192**	**8,567,624**

6.3 Contingent assets and liabilities

Contingent assets are possible assets that arise from past events, whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

Contingent liabilities are:

- possible obligations that arise from past events, whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity
- present obligations that arise from past events but are not recognised because:
  - it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligations
  - the amount of the obligations cannot be measured with sufficient reliability.

Contingent assets and liabilities are not recognised in the Statement of Financial Position, but if quantifiable are disclosed below.

	($ thousands)	
	2019	2018
Contingent assets	19,345	10,045
Contingent liabilities	30,410	32,060

Note:
(a) Contingent liabilities are primarily for compulsory land acquisitions where the Corporation will receive an equivalent land asset, which has not been disclosed separately. Total compulsory land acquisitions for 2018/19 are $30.3 million (2017/18: $30.0 million). Compulsory land acquisitions are considered assets due to the Corporation receiving equivalent land. Given the significant estimation uncertainty, these are not treated as provisions. The Corporation only recognises assets and liabilities once the Notice of Acquisition has been issued to the landowner.

Other Disclosures

Introduction

This section includes those additional disclosures required by Australian Accounting Standards or otherwise, that are material, for the understanding of this financial report.

Structure

7.1 Superannuation - defined benefit plan

The Defined benefit plan within Equipsuper (the Plan) provides lump sum benefits based on length of service and final superannuable salary for employees engaged prior to 31 December 1993. Employees contribute at rates between 0% to 7.5% of their superannuable salary. The Corporation contributes to the Plan based on the Corporation's commitments under the Employee Participation Agreement and Contribution Policy with the Trustee of the Plan.

Defined benefit members receive lump sum benefits on retirement, death, disablement and withdrawal. Some defined benefit members are also eligible for pension benefits in some cases. The defined benefit section of the Plan is closed to new members. At each reporting date, a liability or asset in respect of defined benefit superannuation obligations is recognised. This is measured as the difference between the present value of the defined benefit obligations at the reporting date and the net market value of the Plan's assets.

The present value of defined benefit obligations is based upon future payments, which are expected to arise due to membership of the Plan to date, taking into account the taxes payable by the Plan.

Consideration is given to expected future salary levels and employee departures. Expected future payments are discounted to present values using yields applying to long-term Commonwealth Government Bonds. Furthermore, the inflation assumption is based upon the relationship between nominal and index linked bond yields of similar duration.

This approach ensures that the inflation assumption reflects market expectations and is compatible with the market-based discount rate that is used to value the outstanding liability.

Remeasurements of the net defined liability or asset, which comprise actuarial gains and losses, return on the Plan assets (excluding interest) and effect of the asset ceiling (if any, excluding interest), are recognised immediately in Other Comprehensive Income. The Corporation determines the net interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability or asset taking into account contributions and benefit payments during the period. Net interest expense and other expenses related to defined benefit plans are recognised in the Statement of Profit or Loss and Other Comprehensive Income.

When the benefits of the Plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in the Statement of Profit or Loss and Other Comprehensive Income. The Corporation recognises gains and losses on settlement when it occurs.

The Superannuation Industry Supervision (SIS) legislation governs the superannuation industry and provides the framework within which superannuation plans operate. The SIS regulations require an actuarial valuation to be performed for each defined benefit superannuation plan every 3 years, or every year if the plan pays defined benefit pensions.

The Plan's Trustee is responsible for the governance of the Plan. The Trustee has a legal obligation to act solely in the best interests of Plan beneficiaries. The Trustee has the following roles:

- Administration of the Plan and payment to the beneficiaries from Plan assets when required in accordance with the Plan rules
- Management and investment of the Plan assets
- Compliance with superannuation law and other applicable regulations.

The prudential regulator, the Australian Prudential Regulation Authority (APRA), licenses and supervises regulated superannuation plans.

There are a number of risks to which the Plan exposes the Corporation. The more significant risks relating to the defined benefits are:

Investment risk - The risk that investment returns will be lower than assumed and the Corporation will need to increase contributions to offset this shortfall.

Salary growth risk - The risk that wages/salaries (on which future benefit amounts will be based) will rise more rapidly than assumed, increasing defined benefit amounts and thereby requiring additional employer contributions.

Legislative risk - The risk that legislative changes could be made which could increase the cost of providing the defined benefits.

Pension risk - The risk is firstly that pensioner mortality will be higher than expected, resulting in pensions being paid for a longer period. Secondly, the risk that a greater proportion of eligible members will elect to take a pension benefit, which is generally more valuable than the corresponding lump sum benefit.

The Plan assets are invested by the Trustee in a pool of assets with plans providing defined benefits for other employers. The allocation both globally and across sectors is diversified.

Other Disclosures (continued)

7.1 Superannuation - defined benefit plan (continued)

Reconciliation of the present value of the defined benefit superannuation obligation

($ thousands)

	2019	2018
Present value of defined benefit obligation at beginning of the year	61,265	69,610
Current service cost	5,502	2,397
Interest cost	1,481	1,469
Contributions by Plan participants	616	523
Benefits paid	(8,772)	(14,173)
Taxes and premiums paid	(293)	(270)
Actuarial losses/(gains) arising from changes in financial assumptions	4,162	(1,627)
Actuarial losses arising from liability experience	1,891	3,336
Contributions to accumulation section[a]	(3,211)	-
Contributions to accumulation section in relation to prior year[a]	(260)	-
Present value of the defined benefit obligation at year end	**62,381**	**61,265**

Reconciliation of the fair value of Plan assets

($ thousands)

	2019	2018
Fair value of plan assets at beginning of the year	85,030	92,199
Contributions by Plan participants	616	523
Benefits paid	(8,772)	(14,173)
Taxes and premiums paid	(293)	(270)
Interest Income	1,996	1,896
Actual return on Plan assets less interest income	2,008	4,855
Contributions to accumulation section[a]	(3,211)	-
Fair value of Plan assets at year end[b]	**77,374**	**85,030**

Reconciliation of the assets and liabilities recognised in the Statement of Financial Position

($ thousands)

	2019	2018
Net defined benefit (asset)/liability at start of year	(23,765)	(22,589)
Current service cost	5,502	2,397
Net interest	(515)	(427)
Actual return on Plan assets less interest income[c]	(2,008)	(4,855)
Actuarial losses/(gains) arising from changes in financial assumptions[c]	4,162	(1,627)
Actuarial losses/(gains) arising from liability experience[c]	1,891	3,336
Contributions to accumulation section in relation to prior year[a]	(260)	
Net defined benefit asset at year end	**(14,993)**	**(23,765)**

(a) Includes contributions of $3.5 million (current and prior year) to accumulation section of the Plan financed from defined benefit assets
(b) Fair value based on level 2 inputs using observable market data (either directly using prices or indirectly derived from prices)
(c) Net actuarial losses before tax were $4.0 million (2017/18: gains of $3.1 million) and after tax losses of $2.1 million (2017/18: gains of $2.2 million).

The Corporation has recognised an asset in the Statement of Financial Position in respect of its defined benefit superannuation Plan arrangements at 30 June 2019 (2017/18: asset). If the Plan is in surplus, the Corporation may reduce the required contribution rate, depending on the advice of the Plan's actuary. If a deficit exists in the Plan the Corporation may be required to increase the contribution rate, depending on the advice of the Plan's actuary consistent with the Plan's deed.

During 2018/19, the contributions rate continued to be zero due to sufficient surplus in the Plan (2017/18: zero).

Reconciliation of the present value of the defined benefit superannuation obligation ($ thousands)

	2019	2018
Assumptions to determine defined benefit cost		
Discount rate	2.50%	2.20%
Expected salary increase rate	3.25%	3.25%
Expected pension increase rate	2.50%	2.50%
Assumptions to determine defined benefit obligation		
Discount rate	1.20%	2.50%
Expected salary increase rate	2.60%	3.25%
Expected pension increase rate	2.50%	2.50%

Other Disclosures (continued)

7.2 Responsible persons

The relevant Portfolio Minister and directors of the Corporation are deemed to be the responsible persons by Ministerial Direction pursuant to the provisions of the *Financial Management Act 1994*. In accordance with those Directions, the following disclosures are made regarding responsible persons for the reporting period.

The names of persons who were responsible persons at any time during the financial year were:

Minister for Water	Hon Lisa Neville, MP	1 July 2018 to 30 June 2019
Chairman	John Thwaites	1 July 2018 to 30 June 2019
Managing Director	Michael Wandmaker	1 July 2018 to 30 June 2019
Deputy Chairman	Merran Kelsall	1 July 2018 to 30 June 2019
Director	Kathleen Bailey-Lord	1 July 2018 to 30 June 2019
Director	Hugh Gleeson	1 July 2018 to 30 June 2019
Director	Robyn McLeod	1 July 2018 to 30 June 2019
Director	Garry Smith	1 July 2018 to 30 June 2019
Director	Russell Anderson	1 July 2018 to 30 June 2019
Director	Fiona Rowland	1 July 2018 to 30 June 2019

Remuneration

The Minister's remuneration and allowances is set by the Parliamentary *Salaries and Superannuation Act 1968* and is reported within the Department of Parliamentary Services Financial Report. Other relevant interests are declared in the Register of Members' Interests which each Member of Parliament completes.

The number of responsible persons whose remuneration from the Corporation was within the specified bands were as follows:

	Total Remuneration	
	2019	2018
Income Band ($)	Number	Number
10,000 - 19,999	-	2
30,000 - 39,999	-	2
40,000 - 49,999	2	2
50,000 - 59,999	5	3
90,000 - 99,999	1	1
510,000 - 519,999	-	1
530,000 - 539,000	1	-
Total numbers	**9**	**11**
Total remuneration ($000)	**976**	**952**

7.3 Remuneration of executives

The number of executives, other than ministers, and their total remuneration during the reporting period are shown in the table below. Total annualised employee equivalents provides a measure of full time equivalent executive officers over the reporting period. Remuneration comprises employee benefits in all forms of consideration paid, payable or provided by the entity, or on behalf of the entity, in exchange for services rendered, and is disclosed in the following categories.

Short-term employee benefits include amounts such as wages, salaries, annual leave or sick leave that are usually paid or payable on a regular basis, as well as non-monetary benefits such as allowances and free or subsidised goods or services and previously accrued long service leave taken during the period.

Post-employment benefits include pensions and other retirement benefits paid or payable when employment has ceased.

Other long-term benefits include long service leave, other long-service benefit or deferred compensation.

Termination benefits include termination of employment payments, such as severance packages.

Remuneration of executive officers (including executives defined as Key Management Personnel in note 7.4)	($ thousands) 2019	2018
Short-term employment benefits	3,487	3,493
Post-employment benefits	228	199
Other long-term benefits	79	82
Termination benefits	-	-
Total remuneration[a]	**3,794**	**3,774**
Total number of executives	**13**	**12**
Total annualised employee equivalent[b]	**11**	**11**

Note:
(a) The total number of executive officers includes people who meet the definition of Key Management Personnel (KMP) of the entity under *AASB 124 Related Party Disclosures* and are also reported within the related parties note disclosure.
(b) Annualised employee equivalent is based on the time fraction worked over the reporting period.

7.4 Related parties

The Corporation is a wholly owned and controlled entity of the State of Victoria. Related parties of the Corporation include:

- All Key Management Personnel (KMP) and their close family members and personal business interests (i.e. controlled entities, joint ventures and entities they have significant influence over).
- All Cabinet Ministers and their close family members and all departments and public sector entities that are controlled and consolidated into the whole of State consolidated financial statements.

All related party transactions have been entered into on an arm's length basis.

KMPs of the Corporation include the Portfolio Minister and all Directors or executives who have the authority and responsibility for planning, directing and controlling the activities of the Corporation, directly or indirectly, during the financial year.

The compensation detailed below excludes the salaries and benefits the Portfolio Minister receives. The Minister's remuneration and allowances is set by the Parliamentary *Salaries and Superannuation Act 1968* and is reported within the Department of Parliamentary Services' Financial Report.

Other Disclosures (continued)

	($ thousands)	
Compensation of KMP	**2019**	**2018**
Short-term employment benefits	1,336	1,276
Post-employment benefits	79	78
Other long-term benefits	21	20
Termination benefits	-	-
Total[a]	**1,436**	**1,374**

Note:
(a) Note that executives that meet the definition of KMPs are also reported in the disclosure of remuneration of executives.

Transactions with KMPs and other related parties

During the year, related parties of KMPs were awarded contracts on terms and conditions equivalent for those that prevail in arm's length transactions under the Corporation's procurement process. The Corporation has prepared the related party disclosures for the year based on reasonable enquiries made by management in relation to the Portfolio Minister and their close family members and the information available to the organisation.

Significant related party transactions include transactions between the Corporation, a KMP or a KMP related-party and a Department or a public body. Transactions have been assessed on an arms length basis with a materiality threshold set at $0.1 million.

These transactions are as follows:	($ thousands)	
	2019	**2018**
Lisa Neville MP - Minister for Water		
The Honourable Lisa Neville is one of the Ministers responsible for the Department of Environment, Land, Water and Planning (DELWP). All dealings with this entity were on normal terms and conditions during the reporting period.		
Total payments made to DELWP were (including VDP payments):	675,538	672,571
Robyn McLeod - Director		
Robyn McLeod is a Director of the Victorian Water Industry Association. All dealings with this agency were on normal terms and conditions during the reporting period.		
Total payments made to Victorian Water Industry Association were:	227	92

All other transactions that have occurred with KMPs and their related parties have been trivial or civil in nature. In this context, transactions are only disclosed when they are considered of interest to users of the financial report in making and evaluating decisions about the allocation of scarce resources and to better understand the effects of related party transactions on the financial statements.

Related parties with significant transactions

Entities that have significant influence, the same controlling entity as the Corporation or where a KMP, or their close family member, has significant influence or control over those entities, are considered to be related parties of the Corporation. The following entities are considered to be related parties of the Corporation:

Department of Environment, Land, Water and Planning (DELWP)

DELWP leads and directs the Corporation in the implementation of the framework for achieving the Victorian Government's responsibilities for sustainability of the natural and built environment. DELWP monitors the Corporation's compliance with the *Water Act 1989*, Water Interface Agreement and the Supplementary Agreement to the Water Interface Agreement for the Victorian Desalination Plan. The Corporation makes Victorian Desalination Plant payments directly to DELWP, who are managing the contract with AquaSure on behalf of the State.

Department of Treasury and Finance (DTF)

DTF monitors the Corporation's compliance with the *Financial Management Act 1994*. DTF is responsible for protecting the shareholder's interest in respect of corporate business plans and capital project approvals above $50 million (2017/18: $50 million). DTF also collects income taxes, the Financial Accommodation Levy, Local Government Rates Equivalent and dividend payments from the Corporation.

City West Water, South East Water, Yarra Valley Water, Western Water and Barwon Water

City West Water, South East Water, Yarra Valley Water, Western Water and Barwon Water are Government owned water corporations with agreements with the Corporation that include bulk water and sewerage, bulk recycled water supply, billings collections and biosolids storage arrangements. These agreements operated on normal terms and conditions during the reporting period.

Treasury Corporation of Victoria

TCV provides financial accommodation (loans to the Corporation), executes financial arrangements (derivatives) and provides/arranges the provision of financial services to the Corporation. Any investments above $2 million are also required to be invested with TCV.

Development Victoria

Development Victoria creates and delivers economic and social value to Victoria. Development Victoria will deliver property and precinct development projects to meet Government's policy objectives and application of its experience and expertise to the delivery of civic projects.

Other related parties

- Environment Protection Agency Victoria
- Level Crossing Removal Authority
- Melbourne Metro Railway Authority
- Goulburn Murray Water
- Westernport Region Water Corporation
- Southern Rural Water
- Gippsland Water
- South Gippsland Region Water Corporation
- Department of Health and Human Services
- Parks Victoria
- Southern Rural Water Corporation
- Victoria State Emergency Service
- Victorian Water Industry Association
- Victorian Workcover Authority
- Department of Jobs, Precincts and Regions.

Other related parties with arms-length transactions greater than $0.1 million have been disclosed above.

Other Disclosures (continued)

In the below summaries, all other related parties transactions and payable balances below $0.1 million have also been included.

Material transactions with related parties

($ thousands)

	2019	2018
Receipts from related parties (inclusive of GST)		
DELWP	3,736	3,279
City West Water	408,898	405,461
South East Water	602,042	588,110
Yarra Valley Water	605,545	589,318
Western Water	9,354	8,682
Barwon Water	214	-
TCV	15	178
Development Victoria	14,132	4,691
Other related parties	4,401	3,378
Receipt of contributed assets		
DELWP	34,040	-

($ thousands)

	2019	2018
Payments to related parties (inclusive of GST)		
DELWP	675,538	672,571
DTF	196,248	216,387
City West Water	5,240	4,950
South East Water	5,393	5,494
Yarra Valley Water	5,596	5,726
Western Water	192	151
Barwon Water	3	-
TCV	151,816	177,127
Development Victoria	-	394
Other related parties	16,005	4,590
Dividend paid		
DTF	24,400	77,100
Repayment of equity contributions		
DTF	27,910	27,910
Transfer of contributed assets		
DELWP	610	122

Material transactions with related parties (continued)

Outstanding balances arising from sales/purchases of goods and services

($ thousands)

	2019	2018
Receivables		
City West Water	9,390	8,203
South East Water	8,611	8,579
Yarra Valley Water	10,555	11,510
Barwon Water	122	-
Other related parties	207	354
Payables		
DELWP	3,718,117	4,069,975
DTF	33,974	20,607
City West Water	6	-
South East Water	406	-
Yarra Valley Water	92	-
Western Water	3	-
TCV	4,146,162	4,038,380
Other related parties	187	4,259

Transactions relating to dividends are subject to final determination by the Treasurer after consultation with the Corporation's Board of Directors and the Minister for Water. Transactions relating to equity contributions are determined by the Minister for Water in consultation with the Corporation. Transactions relating to trading activities of the Corporation including sale of bulk water, sale of sewerage services and collection of drainage rates are based on normal commercial terms and conditions.

Outstanding balances are unsecured and are receivable/payable in cash under normal trading terms. There are no guarantees given or received for the current and non-current payables, current receivables and borrowings.

7.5 Remuneration of auditors

($ thousands)

	2019	2018
Audit of financial report by the Victorian Auditor-General's Office	179	175
Total amount paid/payable	**179**	**175**

7.6 Ex-gratia expenses

In accordance with *FRD 11A Disclosure of Ex-Gratia Expenses* the Corporation must disclose in aggregate the total amount of material (greater than $5,000) expenses.

For 2018/19, the Corporation incurred no ex-gratia expenses (2017/18: $0).

7.7 Subsequent events

No matters or circumstances have arisen since the end of the reporting period which significantly affected or may significantly affect the operations of the Corporation, or the results of those operations.

Other Disclosures (continued)

7.8 Prospective accounting and reporting changes

Certain new accounting standards and interpretations that are deemed relevant to the Corporation have been published, but are not mandatory for the 30 June 2019 reporting period. The Corporation has not adopted these standards early in accordance with DTF guidance.

The Corporation's assessment of the impact of these new standards and interpretations is set out below:

AASB 16 *Leases*

This Standard will primarily affect accounting by lessees and will result in the recognition of almost all leases on the Statement of Financial Position and is effective 1 January 2019. The Standard removes the current distinction between operating and financing leases and requires recognition of an asset (the right to use the leased item) and a financial liability to pay rentals for almost all lease contracts. There is also a change to the classification, nature and timing of previously classified operating lease expenditures in the profit and loss previously classified as operating lease expenditure now split into depreciation, finance charges and in the cash flow statement as principal repayments. Existing finance lease assets will need to be reclassified as 'right of use assets'. Accounting by lessors will not significantly change.

Management has conducted an initial assessment over current operating leases and its unlikely the new standard will have a material impact on its financial statements. In line with recommendations from DTF, the Corporation is planning to apply a retrospective modified approach and will recognise an asset and liability predominantly for two leased office buildings and a parking area (approximately $57 million additional assets and liabilities, with an immaterial impact to the profit and loss statement). The Victorian Desalination plant finance lease will also be re-classified as a right to use asset and liability (no changes to valuation expected).

7.9 Change in accounting standards

This note explains the impact of the adoption of *AASB 15 Revenue* from Contracts with Customers and *AASB 9 Financial Instruments* on the Corporations financial statements.

AASB 15 *Revenue from Contracts with Customers*

The Corporation has adopted AASB 15 from 1 July 2018 which resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. AASB 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces AASB 118 Revenue, AASB 111 Construction Contracts and related interpretations. Under AASB 15, revenue is recognised when a customer obtains control of the goods or services. Determining the timing of the transfer of control – at a point in time or over time – requires judgement. The Corporation has applied AASB 15 as at 1 July 2018 using the modified retrospective method. As a result, comparative information has not been restated. In implementing AASB 15 under the modified retrospective approach, an adjustment has been applied to the opening balance of retained earnings as at 1 July 2018 for:

– contracts which have remaining obligations as of the effective date.

The Corporation's revenue sources impacted by adoption of AASB 15 include Developer contributions, Developer Contributed Assets (DCA) and Property sales:

- **Developer contributions** are now recognised at a point in time when all the contract's performance obligations have been met (deemed to be provision of consent by the Corporation to Council to issue a Statement of Compliance (SOC) to developers). Prior to adopting AASB 15 the Corporation previously recognised developer contributions revenue when cash was received. The impact of this change at 1 July 2018 was an increase in total assets $4.7 million, increase in trade, other payables and unearned revenue of $70.4 million, reduction in net deferred tax liabilities of $21.4 million and a reduction to retained earnings of $44.3 million (refer to notes a,b,c in below table of impacts on financial statements and disclosures).
- **Developer contributed assets revenue** is no longer recognised for land parcels voluntarily transferred from developers to the Corporation (for nil consideration). These transfers relate to land set aside by developers as reserves at the point of subdivision. The transfers are made voluntarily on the basis of the Corporation being the relevant authority to hold and maintain such land for public benefit, rather than being transferred in the context of a contract with a customer. There is no exchange of goods or services from the Corporation to the developers for this land and contracts between Melbourne Water and the developers do not include these transfers of land. Accordingly, the transfer of land is not considered to form part of the transaction price for revenue recognition. As the transferred land satisfies the definition of property, plant and equipment under AASB 116, the initial measurement and subsequent measurement of such land is within the scope of AASB 116 (i.e. the land is now recognised initially at cost (being nil) and subsequently revalued in accordance with the land class of assets. These land parcels were previously recognised as revenue (and assets) at fair value in the year that title was received based on Valuer General Victoria external valuation. There was no financial impact of this change as at 1 July 2018. There are no other financial impacts to remaining DCA revenue (constructed catchment assets) as a result of adoption of AASB 15. Under AASB 15, the transaction price for developer contributed constructed catchment assets revenue will still be determined based on any difference between the fair value of the constructed catchment assets and the reimbursements made to the developer (where reimbursements are applicable depending on the arrangement). The transaction price is uncertain until the date of practical completion of the assets, which usually occurs after the performance obligation (being consent to issue SOC) is met. Therefore at the time the performance obligation is met any revenue associated with the constructed catchment assets to be received is considered to be variable consideration. DCA revenue (and associated infrastructure assets) will therefore continue to be recognised at the date of practical completion of the works (and their acceptance by the Corporation) when the uncertainty regarding the fair value of the assets is resolved.
- **Property sales** are now all recognised when control has passed on to the customer, which is deemed to be at settlement. Prior to adopting AASB 15 property sales were already recognised on settlement for Development Victoria property sales but were recognised upon signing of an unconditional contract for all other property sales. All other property sales will now align with the existing treatment for Development Victoria property sales. The impact of this change at 1 July 2018 was a $4.2 million reduction to assets and retained earnings (refer to notes a and c in below table of impacts on financial statements and disclosures).

There are no other significant impacts to other revenue sources from adoption of AASB 15. The tables below show the adjustment recognised for each individual financial statements line item as a result of the adoption of AASB 15. Line items that were not affected by the changes have not been included. Revised accounting policies are set out in Note 2.

Other Disclosures (continued)

AASB 9 *Financial Instruments*

The Corporation has adopted AASB 9 from 1 July 2018 which resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. AASB 9 Financial Instruments, which replaces *AASB 139 Financial Instruments: Recognition and Measurement*, introduces new requirements for recognition, classification and measurement of financial instruments; a new impairment model for financial assets based on expected credit losses; and simplified hedge accounting. AASB 9 also changes recognition of loan modifications that are less than 10%. The Corporation has applied AASB 9 as at 1 July 2018 using the modified retrospective method. The adjustment was a decrease in interest bearing liabilities of $226.0 million (current and non-current), increase in net deferred tax liabilities of $67.8 million and increase in retained earnings of $158.2 million (refer to notes b and c in below table of impacts on financial statements and disclosures). The adjustment have been made in accordance with the transitional provisions in AASB 9 (7.2.15) and (7.2.26), comparative figures have not been restated.

There are no significant impacts identified from adoption of AASB 9, other than in relation to loan modifications (where the modification is less than 10%). The only loans affected by this change are in relation to the VDP refinancing activities. Gains or losses from these loan modifications are now required to be recognised immediately through profit and loss. The gains or losses reflect the difference between the original contractual cash flows and the modified cash flows discounted at the original 'effective interest rate'. Previously these gains (or losses) would have been recognised over the remaining life of the borrowing by adjusting the effective interest rate, on the basis that the terms and conditions of the facility remained largely unchanged. Adjustments have been made to reflect the new policy as at 1 July 2018 through retained earnings and lease liabilities.

An assessment has been undertaken by management around expected credit losses. Historical and expected future debt write offs are not material. As such the Corporation did not need to raise an allowance for expected credit losses (previously called doubtful debts) for the 2018/19 financial year. This will be assessed on an annual basis.

The tables below show the adjustments recognised for each individual financial statement line item as a result of the adoption of AASB 9. Line items that were not affected by the changes have not been included. There is an additional table below that shows the impact of adoption of AASB 9 to classification and measurement of the Corporations financial instruments. Revised accounting policies are set out in note 5 and 6.

Impact on financial statements and disclosures - AASB 15 and AASB 9

The following tables show the adjustments recognised for each individual line for both AASB 15 and AASB 9. Line items that were not affected by the changes have not been included. As a result, the sub-totals and totals disclosed cannot be recalculated from the numbers provided in the table.

Statement of Profit or Loss and Other Comprehensive Income (extract)

($ thousands)

	30 June 2019 as reported	AASB 15 adjustment	AASB 9 adjustment	30 June 2019 result without adoption of AASB 15 and AASB 9
Revenue				
Revenue from contracts with customers	1,864,918	(7,679)	-	1,857,239
Refinancing gains on financial instruments	59,609	-	(59,609)	-
Total revenue	**1,938,794**	**(7,679)**	**(59,609)**	**1,871,506**
Expenses				
Finance expenses	(618,237)	(1,283)	(4,319)	(612,635)
Total expenses	**(1,621,455)**	**(1,283)**	**(4,319)**	**(1,615,853)**
Net profit from operations before tax	**317,339**	**(6,396)**	**(55,290)**	**255,653**
Tax expense	(116,373)	(2,167)	(16,587)	(97,619)
Net profit for the period after tax	200,966	(4,229)	(38,703)	158,034
Total comprehensive income/(loss) for the period after tax	**37,334**	**(4,229)**	**(38,703)**	**(5,598)**

Statement of Financial Position (extract)

($ thousands)

	Note	30 June 2018	AASB 15 adjustment	AASB 9 adjustment	1 July 2018 restated	30 June 2019 as reported	AASB 15 adjustment	AASB 9 adjustment	30 June 2019 result without adoption of AASB 15 and AASB 9
Current assets									
Receivables		83,283	(1,968)	-	81,315	97,797	(10,031)	-	87,766
Total current assets		**115,678**	**(1,968)**	**-**	**113,710**	**153,441**	**(10,031)**	**-**	**143,410**
Non-current assets									
Land and buildings		15,135,900	2,394	-	15,138,294	15,053,474	2,555	-	15,056,029
Total non-current assets		**15,212,866**	**2,394**	**-**	**15,215,260**	**15,125,488**	**2,555**	**-**	**15,128,043**
Total assets	**(a)**	**15,328,544**	**426**	**-**	**15,328,970**	**15,278,929**	**(7,476)**	**-**	**15,271,453**
Current liabilities									
Trade, other payables and unearned revenue		348,497	70,380	-	418,877	379,521	(71,036)	-	308,485
Interest bearing liabilities		816,418	-	(4,378)	812,040	710,837	-	840	711,677
Current tax liability		9,422	-	-	9,422	24,981	788	-	25,769
Total current liabilities	**(b)**	**1,216,394**	**70,380**	**(4,378)**	**1,282,396**	**1,163,533**	**(70,246)**	**840**	**1,094,125**
Non-current liabilities									
Interest bearing liabilities		7,244,385	-	(221,599)	7,022,786	7,108,380	-	280,427	7,388,807
Net deferred tax liabilities		1,238,064	(21,424)	67,794	1,284,434	1,246,337	18,470	(84,380)	1,180,427
Total non-current liabilities		**8,497,239**	**(21,424)**	**(153,805)**	**8,322,010**	**8,372,377**	**18,470**	**196,047**	**8,586,894**
Total liabilities		**9,713,633**	**48,956**	**(158,183)**	**9,604,406**	**9,535,910**	**(51,778)**	**196,887**	**9,681,019**
Net assets	**(b)**	**5,614,911**	**(48,530)**	**158,183**	**5,724,564**	**5,743,019**	**44,302**	**(196,887)**	**5,590,434**
Equity									
Retained profits		2,001,801	(48,530)	158,183	2,111,454	2,291,261	44,302	(196,887)	2,138,676
Total equity	**(c)**	**5,614,911**	**(48,530)**	**158,183**	**5,724,564**	**5,743,019**	**44,302**	**(196,887)**	**5,590,434**

The Statement of Cash Flows required one category reclassification as a result of AASB 15. Receipts from customers (inclusive of Goods and Service Tax) has been renamed to Receipts from contracts with customers (inclusive of Goods and Service Tax). No changes were required from adoption of AASB 9.

Other Disclosures (continued)

Impact on classification and measurement of financial instruments - AASB 9

On 1 July 2018 (the date of initial application of AASB 9), management has assessed which business models apply to the financial instruments held by the Corporation and has classified its financial instruments into the appropriate AASB 9 categories summarised below:

Carrying amounts and measurement categories

($ thousands)

	Measurement Category		Carrying Amount	
	Classification under AASB 139	Classification under AASB 9	Original under AASB 139	New Under AASB 9
Financial assets				
Cash and cash equivalents	Amortised cost	Amortised cost	2,008	2,008
Trade debtors	Amortised cost	Amortised cost	48,790	48,790
Other receivables	Amortised cost	Amortised cost	20,718	20,718
Total financial assets			**71,516**	**71,516**
Financial liabilities				
Trade, other payables and unearned revenue	Amortised cost	Amortised cost	349,389	349,389
VDP lease liabilities	Amortised cost	Amortised cost	4,069,724	3,843,748
Short term borrowings	Amortised cost	Amortised cost	571,079	571,079
Floating rate notes	Amortised cost	Amortised cost	400,000	400,000
Fixed interest	Amortised cost	Amortised cost	3,020,000	3,020,000
Total financial liabilities			**8,410,192**	**8,184,216**

There were no changes in the carrying amounts of the above financial instruments due to a change in measurement category on transition to AASB 9.

Independent Auditor's Report

Victorian Auditor-General's Office

To the Board of the Melbourne Water Corporation

Opinion

I have audited the financial report of the Melbourne Water Corporation (the corporation) which comprises the:

- statement of financial position as at 30 June 2019
- statement of profit or loss and other comprehensive income for the year then ended
- statement of changes in equity for the year then ended
- statement of cash flows for the year then ended
- notes to the financial statements, including significant accounting policies
- statement by Directors and Chief Financial Officer.

In my opinion, the financial report presents fairly, in all material respects, the financial position of the corporation as at 30 June 2019 and their financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Part 7 of the *Financial Management Act 1994* and applicable Australian Accounting Standards.

Basis for Opinion

I have conducted my audit in accordance with the *Audit Act 1994* which incorporates the Australian Auditing Standards. I further describe my responsibilities under that Act and those standards in the *Auditor's Responsibilities for the Audit of the Financial Report* section of my report.

My independence is established by the *Constitution Act 1975*. My staff and I are independent of the corporation in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the financial report in Victoria. My staff and I have also fulfilled our other ethical responsibilities in accordance with the Code.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key audit matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial report of the current period. These matters were addressed in the context of my audit of the financial report as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

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Key audit matter	How I addressed the matter
Long term procurement of the Victorian Desalination Plant (VDP) using a private public partnership (PPP) agreement and Department of Environment, Land, Water and Planning (DELWP) contracts *Note 5.1 – Interest bearing liabilities and Note 5.3 – Commitments*	
VDP finance lease liability: $3.718 billion **VDP commitment disclosures:** → minimum future lease repayments: $3.718 billion → other expense commitments: $4.259 billion. I considered this to be a key audit matter because: → the finance lease liability and future VDP commitments are financially significant → the contractual rights and obligations are complex → the corporation places significant reliance on DELWP for information to account for and disclose its financial liability and commitments → the finance lease and commitments model is highly complex, involves significant management judgement and is underpinned by various subjective assumptions → the accounting for, and disclosures related to the VDP are inherently complex with limited authoritative accounting guidance available → small changes to the contractual terms and conditions (for example—refinancing requirements) significantly impact the liability carrying value → the VDP's commitment disclosures involve significant management judgements and estimates, and amendments were required in prior years.	My key procedures included: → gaining an understanding of the key contractual changes for the current year → engaging a subject matter expert to assist in obtaining sufficient, appropriate audit evidence for the finance lease liability and commitment disclosures, including the: – appropriateness of re-financing adjustments – reasonableness and consistency of the finance lease model assumptions – identification of any model or assumption changes – reasonableness of model inputs, with specific reference to underlying data and supporting documentation (i.e. contracts, water orders) – model's computational accuracy – appropriateness of all VDP related financial report disclosures as required by AASB 117 *Leases.* → evaluating the subject matter expert's report, including assessing it for consistency with other audit evidence obtained, and the relevance and reasonableness of their workings and concluding the work was adequate for the purposes of our audit → obtaining the corporation's representation from DELWP relating to the underlying data for the accounting and disclosures.

Key audit matter	How I addressed the matter
The fair value estimate of the infrastructure assets is derived from an income-based valuation approach that uses a complex discounted cashflow model ('DCF model') *Note 4 - Assets available to support delivery output*	
Fair value estimate of infrastructure assets: $8.801 billion. I considered this to be a key audit matter because: → the infrastructure assets are financially significant to the corporation → the fair value estimate relies on management's use of an external valuation expert → the DCF model is highly complex and involves significant management judgements, underpinned by various subjective assumptions → the calculated value is sensitive to small changes in key assumptions used in the DCF model → the model's forecast period is long, and includes a terminal value, which increases the difficulty in accurately estimating the fair value → the applicable accounting standard AASB 13 *Fair Value Measurement* (AASB 13), and the Assistant Treasurer issued Financial Reporting Direction 103H *Non-financial physical assets* (FRD 103H) both require extensive financial report disclosures.	My key procedures included: → obtaining an understanding of management's approach to estimating the fair value of infrastructure assets → assessing the competence and capability of management's expert engaged to assist with the valuation process → engaging a subject matter expert to assist us in obtaining sufficient appropriate audit evidence, including: – the appropriateness of using an income-based valuation approach – the reasonableness and consistency of all the assumptions used in the DCF model – identify any changes to the DCF model and/or assumptions. – the reasonableness of all inputs used in the model, with specific reference to underlying data and supporting documentation – the DCF model's computational accuracy – the appropriateness of all infrastructure asset related financial report disclosures with regard to AASB 13 and FRD 103H, including the significant observable and unobservable inputs utilised in the model and the sensitivity analysis. → evaluating our subject matter expert's findings and concluding the work was adequate for the purposes of our audit.

Board's responsibilities for the financial report	The Board of the corporation is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the *Financial Management Act 1994,* and for such internal control as the Board determines is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error. In preparing the financial report, the Board is responsible for assessing the corporation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is inappropriate to do so.

Auditor's responsibilities for the audit of the financial report

As required by the *Audit Act 1994*, my responsibility is to express an opinion on the financial report based on the audit. My objectives for the audit are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

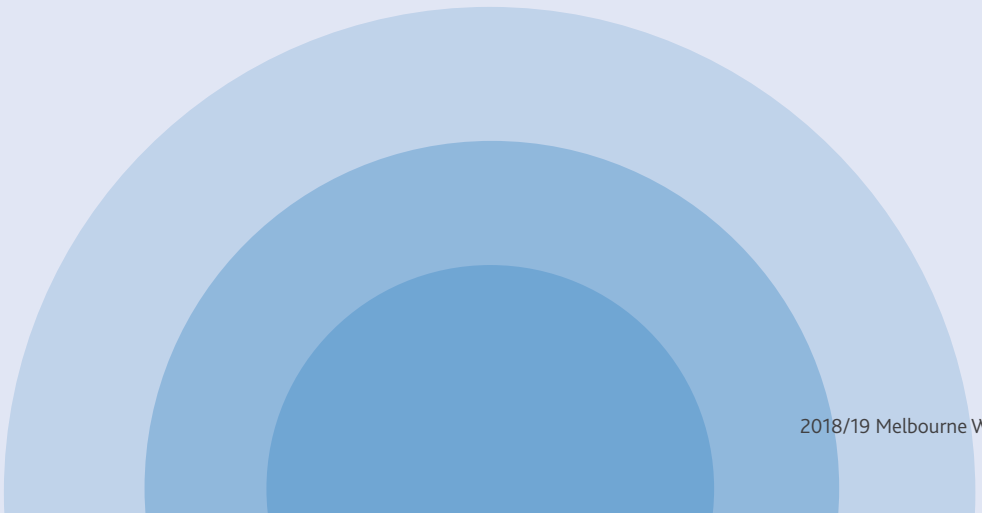
As part of an audit in accordance with the Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the corporation's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board
- conclude on the appropriateness of the Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the corporation's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the corporation to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit. From the matters communicated with the Board, I determine those matters that were of most significance in the audit of the financial report of the current period and are therefore key audit matters. I describe these matters in the auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in the auditor's report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

MELBOURNE
28 August 2019

Paul Martin
as delegate for the Auditor-General of Victoria



Performance Reporting

Contents

Performance Report

Financial Performance Indicators

KPI Number [1]	Key Performance Indicator	2017/18 Result	2018/19 Result	2018/19 Target	Variance to prior year	Notes	Variance to target	Notes
F1	**Cash Interest Cover** Net operating cash flows before net interest and tax / net interest payments	1.9	2.1	1.9	10.5%	[2]	10.5%	[2]
F2	**Gearing Ratio** Total Debt (including finance leases) / total assets * 100	52.6%	51.2%	54.3%	2.7%		5.8%	
F3	**Internal Financing Ratio** Net operating cash flow less dividends / net capital expenditure * 100	78.6%	93.4%	73.4%	18.8%	[3]	27.2%	[3]
F4	**Current Ratio** Current assets / current liabilities (excluding long-term employee provisions and revenue in advance)	0.10 times	0.15 times	0.07 times	50.0%	[4]	114.3%	[5]
F5	**Return on Assets** Earnings before net interest and tax / average assets * 100	6.4%	6.1%	5.4%	-4.7%		13.0%	[6]
F6	**Return on Equity** Net profit after tax / average total equity * 100	3.8%	3.5%	1.8%	-7.9%	[7]	94.4%	[8]
F7	**EBITDA Margin** Earnings before Interest, Tax, Depreciation and Amortisation / total revenue * 100	72.2%	69.3%	71.0%	-4.0%		-2.4%	

Notes — to Performance Report:

[1] Performance indicators as mandated in Ministerial Reporting Direction 01 - Performance Reporting (MRD 01) have been marked with their MRD 01 reference numbers. As required by MRD 01 any variances of more than 10% for financial performance indicators and 5% for non financial performance indicators have been further explained within these notes.

[2] The favourable variance to prior year is as a result of higher cash receipts from contracts with customers ($72.4 million) and lower interest and other costs of finance ($33.9 million), partially offset by higher payments to suppliers and employees ($43.2 million). The 2018/19 result is above the target range and in line with business expectations.

[3] The favourable variance to prior year is as a result of higher cash receipts from contracts with customers ($72.4 million), lower interest and other costs of finance ($33.9 million), lower dividend payments ($52.7 million), partially offset by higher payments to suppliers and employees ($43.2 million) and higher payments for property, plant and equipment and intangibles ($52.1 million) compared to prior year. The 2018/19 result is above the target range and in line with business expectations. It's anticipated that future year on year variances will fluctuate in line with expected revenue as per the 2016 Pricing Determination and capital expenditure profile.

[4] The favourable variance to prior year is due to an increase in current assets due to higher cash balances ($15.6 million), trade and other receivables of ($14.5 million) and assets held for sale ($5.0 million) in addition to lower current liabilities being lower accrued expenses ($35.0 million) and interest bearing liabilities ($105.6 million) and at the end of June 2018.

[5] The favourable variance to target is due to higher current assets being cash balance ($17.6 million), trade and other receivables ($39.4 million) and assets held for sale ($21.6 million).

[6] The favourable variance to target is due to higher Earnings Before Net Interest and Tax during the year of ($124.7 million) due to higher revenue partially offset by higher expenditure.

[7] The unfavourable variance to prior year is due to lower Net Profit After tax of ($7.9 million) due to higher expenditure partially offset by higher revenue.

[8] The favourable variance to target is due to higher Net Profit After Tax of ($103.7 million) compared to plan. Improved performance is mainly due to higher than anticipated revenue predominantly from developer contributions.

Performance Report (continued)

Water, sewerage and other service performance indicators

KPI Number [1]	Key Performance Indicator	2017/18 Result	2018/19 Result	2018/19 Target	Variance to prior year	Notes	Variance to target	Notes
WQ1	**Water Quality** Compliance with Bulk Water Service Agreement (BWSA): Microbiological Standards — *E. coli*	100.0%	100.0%	100.0%	0.0%		0.0%	
WQ2	**Water Quality** Compliance with BWSA: Aesthetics — Turbidity	98.9%	95.9%	91.5%	-3.1%		4.8%	
CRM1	**Customer Responsiveness** Complaints referred to Energy and Water Ombudsman Victoria (EWOV) responded to within EWOV established time	100.0%	100.0%	100.0%	0.0%		0.0%	
EM1	**Non-Compliance with other EPA Victoria License and SEPP parameters — Sewerage system failure** Zero spills due to sewerage system failure	0.0	2.0	0.0	-100%	[9]	-100%	[9]
EM2	**Compliance with EPA Victoria discharge licence requirements**							
EM2.1	Western Treatment Plant	100.0%	100.0%	100.0%	0.0%		0.0%	
EM2.2	Eastern Treatment Plant	100.0%	100.0%	100.0%	0.0%		0.0%	
E2	**Total net CO2 emissions** Net tonnes CO2 equivalent	453,477	431,346	403,829	4.9%	[10]	-6.8%	[11]
WW1	**Waterways — Drainage and Flood protection** 15% reduction in flood effects, achieved by projects in delivery by Melbourne Water by 2021	0.0%	0.0%	0.0%	0.0%		0.0%	
WW2	**Waterways condition** Waterways that have undergone active management will be maintained or improved against an established baseline by 2021	90.0%	95.0%	80.0%	5.6%	[12]	18.8%	[12]

Notes — to Performance Report:

[1] Performance indicators as mandated in Ministerial Reporting Direction 01 - Performance Reporting (MRD 01) have been marked with their MRD 01 reference numbers. As required by MRD 01 any variances of more than 10% for financial performance indicators and 5% for non financial performance indicators have been further explained within these notes.

[9] The unfavourable variance to prior year and to target is due to the following two sewerage spills that occurred in 2018/19 due to system failure:

The first minor sewerage spill occurred at Chute Street, Mordialloc near Mordialloc No.1 Pump Station. The small leak was caused by a 3 cm long hairline crack in the pipe. It was estimated from site inspections that approximately 200L was spilt during the event. The pipe was repaired and the Environmental Protection Agency (EPA) was notified. There was no impact on public health or the environment. The full length of pipe has been inspected and is in order with no further repairs required.

The second sewerage spill was due to an air valve on the Mordialloc No. 1 Pump Station Rising Main failing causing sewage to spill from the valve pit. The spill was contained to the adjacent concrete drainage channels with sand bags and did not enter a waterway. Sewage was educted from the contained area and the air valve was repaired. The EPA was notified and there was no impact to the environment or public health.

[10] The favourable variance to prior year is mainly due to a reduction in diesel use, increased electricity production at WTP and ETP reducing the use of electricity from the grid and no fugitive emissions from anaerobic digesters.

[11] Melbourne Water has pledged to reduce its greenhouse gas emission and energy use by 50% by 2025 (with yearly targets being progressive toward this overall goal). A range of measures have been undertaken to reduce long term impacts including transitioning to zero emissions vehicle fleet and capturing biogas and generating hydroelectricity to generate renewable energy. Melbourne Water manages large public infrastructure assets that are expensive to replace or change to different technologies. Investigations are underway to identify solutions to reduce emissions from wastewater treatment plants.

[12] The favourable variance is due to 95% of waterways that have undergone active management being on track to achieve condition improvement trajectories compared to the monitoring target of 80%.

Water, sewerage and other service performance indicators (continued)

KPI Number [1]	Key Performance Indicator	2017/18 Result	2018/19 Result	2018/19 Target	Variance to prior year	Notes	Variance to target	Notes
RW1	**Recycled Water** WTP recycled water schemes fully compliant with regulatory obligations and their contractual requirements, as outlined in the relevant Bulk Recycled Water Service Agreements (BRWSAs)							
RW1.1	Volume demands	100.0%	100.0%	100.0%	0.0%		0.0%	
RW1.2	Reliability	100.0%	97.2%	100.0%	-2.8%		-2.8%	
RW1.3	Quality	100.0%	100.0%	100.0%	0.0%		0.0%	
RW2	**Recycled Water** ETP recycled water schemes fully compliant with regulatory obligations and their contractual requirements, as outlined in the relevant BRWSAs							
RW2.1	Volume demands	100.0%	100.0%	100.0%	0.0%		0.0%	
RW2.2	Reliability	N/A	N/A	100.0%	N/A	[13]	N/A	[13]
RW2.3	Quality	100.0%	100.0%	100.0%	0.0%		0.0%	

Notes — to Performance Report:

[1] Performance indicators as mandated in Ministerial Reporting Direction 01 - Performance Reporting (MRD 01) have been marked with their MRD 01 reference numbers. As required by MRD 01 any variances of more than 10% for financial performance indicators and 5% for non financial performance indicators have been further explained within these notes.

[13] ETP - Recycled Water (Reliability) metric is not applicable as the retailer has not specified any contractual service or regulatory obligation based on their customer requirements. Communication protocols have been established between the plant and retailer regarding any scheduled or unexpected outages.

Certification of Performance Report for 2018/19

We certify that the accompanying Performance Report of Melbourne Water Corporation in respect of the 2018/19 financial year is presented fairly in accordance with the *Financial Management Act 1994*.

The Performance Report outlines the relevant performance indicators for the financial year as determined by the Minister for Water and as set out in the *2018/19 Corporate Plan*, the actual and comparative results achieved for the financial year against predetermined performance targets and these indicators, and an explanation of any significant variance between the actual results and performance targets and/or between the actual results in the current year and the previous year.

As at the date of signing, we are not aware of any circumstances which would render any particulars in the Performance Report to be misleading or inaccurate.

John Thwaites
Chairman

23 August 2019

Michael Wandmaker
Managing Director

23 August 2019

Anthony O'Shannessy
Chief Financial Officer

23 August 2019

Dated this 23 day of August 2019

Independent Auditor's Report

Victorian Auditor-General's Office

To the Board of the Melbourne Water Corporation

Opinion	I have audited the accompanying performance report of the Melbourne Water Corporation (the corporation) for the year ended 30 June 2019, which comprises the: • financial performance indicators • water and sewerage and other service performance indicators • the certification of performance report. In my opinion, the performance report of the Melbourne Water Corporation in respect of the year ended 30 June 2019 presents fairly, in all material respects, in accordance with the performance reporting requirements of Part 7 of the *Financial Management Act 1994*.
Basis for Opinion	I have conducted my audit in accordance with the *Audit Act 1994* which incorporates the Australian Standards on Assurance Engagements. I further describe my responsibilities under that Act and those standards in the *Auditor's Responsibilities for the Audit of the performance report* section of my report. My independence is established by the *Constitution Act 1975*. My staff and I are independent of the corporation in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the performance report in Victoria and have also fulfilled our other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.
Board's responsibilities for the performance report	The Board is responsible for the preparation and fair presentation of the performance report in accordance with the performance reporting requirements of the *Financial Management Act 1994*, and for such internal control as the Board determines is necessary to enable the preparation and fair presentation of the performance report that is free from material misstatement, whether due to fraud or error.
Auditor's responsibilities for the audit of the performance report	As required by the Audit Act 1994, my responsibility is to express an opinion on the performance report based on the audit. My objectives for the audit are to obtain reasonable assurance about whether the performance report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the Australian Standards on Assurance Engagements will always detect a material misstatement when it exists.

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3 8601 7000 enquiries@audit.vic.gov.au www.audit.vic.gov.au

Auditor's responsibilities for the audit of the performance report (continued)

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of this performance report.

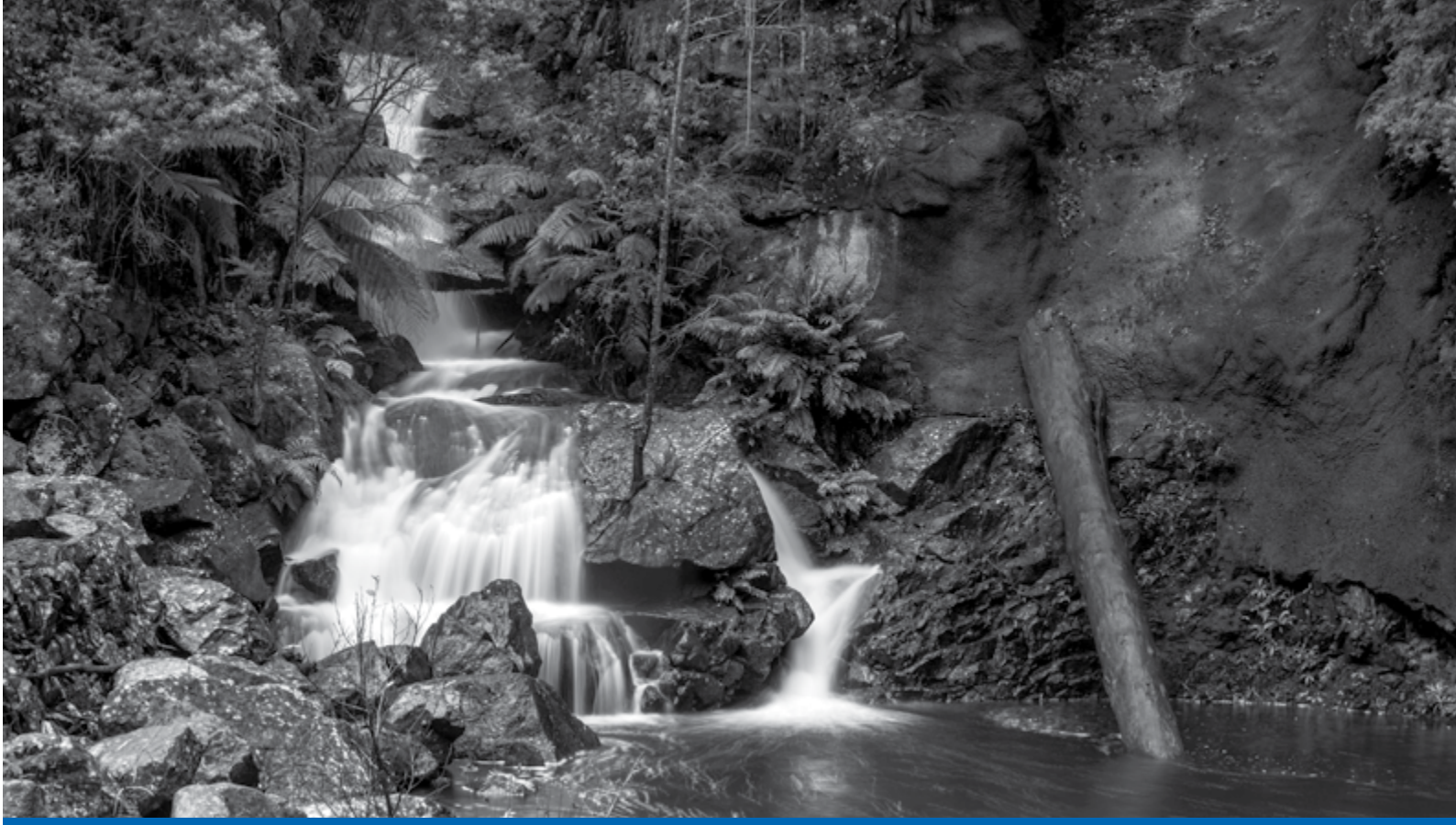
As part of an audit in accordance with the Australian Standards on Assurance Engagements, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of performance report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the corporation's internal control
- evaluate the overall presentation, structure and content of the performance report, including the disclosures, and whether performance report represents the underlying events and results in a manner that achieves fair presentation.

I communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

MELBOURNE
28 August 2019

Paul Martin
as delegate for the Auditor-General of Victoria



Appendices

Contents

Appendix A – Disclosure index

The *Melbourne Water Annual Report 2018/19* is prepared in accordance with all relevant Victorian legislation and pronouncements. This index has been prepared to facilitate identification of Melbourne Water's compliance with statutory disclosure requirements.

Legislation	Requirement	Page reference
Report of operations		
Charter and purpose		
FRD 22H	Manner of establishment and the relevant Ministers	64
FRD 22H	Objectives, functions, powers and duties	inside cover
FRD 22H	Nature and range of services provided	inside cover
Governance and organisational structure		
FRD 22H	Organisational structure & corporate governance	68
FRD 22H	Governing board	66-67
FRD 22H	Audit committee membership	65, 68
Financial and other information		
FRD 10A	Disclosure Index	150-151
FRD 12B	Disclosure of major contracts	152
FRD 22H	Employment and conduct principles	47-50, 64
FRD 22H	Occupational health and safety policy and performance	44-46, 164
FRD 22H	Environmental performance	59-63, 163
FRD 22H	Summary of the financial results for the year	55-57
FRD 22H	Significant changes in financial position during the year	55-57
FRD 22H	Significant changes or factors affecting performance	55-57, 143-145
FRD 22H	Subsequent events	131
FRD 22H	Application and operation of *Freedom of Information Act 1982*	152-153
FRD 22H	*Building Act 1993*	154
FRD 22H	Competitive Neutrality Policy	152
FRD 22H	*Protected Disclosure Act 2013*	155
FRD 22H	Statement of availability of other information	154
FRD 22H	Government advertising expenditure	152
FRD 22H	Consultancy expenditure	152
FRD 22H	Disclosure of ICT expenditure	152
FRD 22H	Workforce Inclusion Policy	47-50
FRD 25D	Local Jobs First	168
FRD 27C	Presentation and reporting of performance information	143-146
FRD 29C	Workforce data	164-168
FRD 30D	Standard requirements for the design and print of annual reports	Entire report
SD 5.2	Specific Information Requirements	1-72
SD 5.1.4	Attestation in report of operations	72
SD 5.2.3	Declaration in report of operations	3

Legislation	Requirement	Page reference
Disability Act	*Disability Act 2006*	50
Ministerial Reporting Directions		
MRD 01	Performance Reporting	143-148
MRD 02	Reporting on Water Consumption and Drought Response	15
MRD 03	Environmental and Social Sustainability Reporting	8-35
MRD 04	Disclosure of Information on Bulk Entitlements, Transfers of Water Entitlements, Allocations and Licences, irrigation Water Usage and Licence Entitlements	156-161
MRD 05	Annual Reporting of Major Non-Residential Water Users	15
MRD 06	Greenhouse Gas and Energy Reporting	163
MRD 07	Disclosure of Information on Letter of Expectation	175
Financial Report		
Financial statements required under Part 7 of the FMA		
SD 5.2.2(b)	Income Statement	77
SD 5.2.2(b)	Balance sheet	78
SD 5.2.2(b)	Cash flow statement	80
SD 5.2.2(b)	Notes to the Financial Statements	81-136
Other requirements under Standing Direction 5.2		
SD 5.2.1 (a)	Compliance with Australian accounting standards and other authoritative pronouncements	81
SD 5.2.1 (a)	Compliance with Ministerial Directions	81
S.D 5.2.2	Accountable officer's declaration	76
Other disclosures as required by FRDs in Notes to the Financial Statements		
FRD 03A	Accounting for Dividends	79, 80, 130
FRD 07B	Early Adoption of Authoritative Accounting Pronouncements	132
FRD 11A	Disclosure of Ex Gratia Expenses	131
FRD 17B	Long Service Leave Wage inflation and discount rates for Employee Benefits	88-89, 126-128
FRD 21C	Disclosures of Responsible Persons, Executive Officers and other Personnel (Contractors with Significant Management Responsibilities) in the Financial Report	70-72, 126-128
FRD 102A	Inventories	94
FRD 103H	Non-Financial Physical Assets	97-105, 107
FRD 105B	Borrowing Costs	108-109
FRD 106B	Impairment of Assets	98, 105, 107
FRD 108C	Classification of Entities as For-Profit	81
FRD 109A	Intangible Assets	106-107
FRD 110A	Cash Flow Statements	80
FRD 112D	Defined Benefit Superannuation Obligations	122-125
FRD 113A	Investments in Subsidiaries, Joint Venture and Associates in the Separate financial statements	107
FRD 114C	Financial Instruments – General Government Entities and Public Non-Financial Corporations	114-120
FRD 119A	Transfers through Contributed Capital	79
FRD 120M	Accounting and Reporting Pronouncements	132

Appendix B – Corporate Information

Consultancy Expenditure

The following is a summary of consultancy expenditure by Melbourne Water over the 2018/19 year. Details of individual consultancies are outlined on Melbourne Water's website at www.melbournewater.com.au

Consultancies valued at $10,000 or greater

In 2018/19, there were 34 consultancies engaged during the year where the total fees payable to the consultants were $10,000 or greater. The total expenditure incurred during 2018/19 in relation to these consultancies was $1,268,460 (2017/18: $1,090,992) (excl. GST).

Consultancies valued at less than $10,000

In 2018/19, there were four consultancies engaged during the year where the total fees payable to the consultants were less than $10,000. The total expenditure incurred during 2018/19 in relation to these consultancies was $25,314 (2017/18: $12,100) (excl. GST).

Advertising Campaigns

Melbourne Water had no advertising campaigns with a value greater than $100,000.

ICT Expenditure

For the 2018/19 reporting period, Melbourne Water had a total ICT expenditure of $55,207,118 (2017/18: $57,284,417) with the details shown below.

Business as usual (BAU) ICT expenditure ($000)	Non-business as usual (non-BAU) ICT expenditure (operational and capital expenditure) ($000)	Non-BAU ICT expenditure (operational expenditure) ($000)	Non-BAU ICT expenditure (capital expenditure) ($000)
32,257	22,950	-	22,950

Disclosure of Major Contracts

Melbourne Water has disclosed, in accordance with the requirements of government policy and accompanying guidelines, all contracts greater than $10 million in value entered into during the year ended 30 June 2019. Details of contracts can be viewed on Melbourne Water's website at www.melbournewater.com.au

Competitive Neutrality Policy

Melbourne Water is corporatised and therefore has an independent Board, with independent and objective performance monitoring. We face equivalent tax treatment, borrowing requirements and regulations as a private business. As outlined above, we also operate in an environment where the Essential Services Commission determines cost-based pricing. In this regard our processes are consistent with the requirements of the Victorian Competitive Neutrality Policy.

Melbourne Water has had no actions for anti-competitive behaviour.

Pricing

Following an 11 per cent decrease (plus inflation) in 2016/17, Melbourne Water's wholesale water and sewerage prices will increase approximately in line with inflation for the remaining four years of the Essential Service Commission Price Determination (until 2020-21), which increases an average household water bill by approximately $25 per annum (depending on inflation and cost of debt). The annual waterways and drainage charge of $100.75 for 2018/19 will also increase by inflation.

Freedom of Information

Melbourne Water is subject to the *Freedom of Information Act 1982* (FOI Act) and is committed to releasing documents in our possession unless exempt. We also welcome enquiries about the broad range of documents we provide outside the FOI Act.

The designated persons for the purpose of the FOI Act are:

Principal Officer	Authorised Officer	Acting Authorised Officer
Mr J Thwaites	Mr M Keough	Ms J Cowley
Chair, Melbourne Water Board	FOI and Privacy Advisor and Government Liaison	Records Coordinator

Information Management Coordinator Requests

We received 16 requests for documents. We finalised ten. Of the remaining requests, two did not proceed, one was not processed and three were still in progress.

Five requests were from members of the public, four from law firms, three from a planning consultant, two from a journalist, and one from an interest group. No requests were for personal information.

We released 143 documents, 127 of them in full. Exemptions applied where disclosure of personal affairs would be unreasonable or disclosure of information of a business, commercial or financial nature would unreasonably disadvantage an undertaking.

Finalised requests 10	Other requests 6
Access outcomes: • Access in full: 6 • Access in part: 1 • No documents: 3 • Access denied: 0	**Outcomes:** • Not proceeded with: 2 • Not processed: 1 • Not yet finalised: 3
Related to: • Environment and Planning: 4 • Water quality: 2 • Asset Management: 1 • Property development: 1 • Flooding: 1 • Property damage: 1	**Related to:** • Environment and Planning: 4 • Property damage: 2

Reviews and complaints

No notifications were received from the Information Commissioner or the Victorian Civil and Administrative Tribunal in relation to reviews of decisions or complaints made by applicants.

Access to documents

People wanting access to Melbourne Water documents under the FOI Act may use our online FOI application on our website at: melbournewater.com.au

We also accept applications made in writing to:

Freedom of Information Officer
Melbourne Water
PO Box 4342
Melbourne VIC 3001

Each application must clearly identify the documents sought and be accompanied by the required application fee ($29.60 from 1 July 2019).

General enquiries about FOI may be made by contacting the Freedom of Information Officer on (03) 9679 7111 between 9am and 5pm Monday to Friday or via email to foi@melbournewater.com.au

Information required under Part II of the FOI Act is available on our website, melbournewater.com.au

The statement includes information about Melbourne Water functions, decision making, consultation arrangements and publications. It also outlines how to make an FOI request and how to request information outside the scope of the FOI Act.

Categories of documents

Melbourne Water uses a computerised records management system to manage our correspondence and documents. We use online computer systems to manage our financial, human resource and other operational activities and plans relating to water supply, waterways, drainage and sewerage responsibilities. Historical archives of our activities are available through the Public Records Office Victoria. More information is in the Part II Information Statement on our website at melbournewater.com.au

Appendix B – Corporate Information (continued)

Building Compliance

Melbourne Water continues to work toward compliance with the Building Act 1993 across our substantial property and building portfolio. A compliance program is in place which we continue to action.

Melbourne Water has developed and is implementing an ongoing compliance program to obtain Maintenance Determinations and is working to update its Asset Management System to ensure the Essential Safety Measures are identified and have maintenance regimes specified and executed. Melbourne Water engages Building Practitioners to conduct Annual Essential Safety Measure Reports for buildings as part of the Compliance Program. Rectification works are initiated by maintenance coordinators and asset managers depending whether the works require maintenance or renewal/replacement respectively. The corporation's Asset Management System is used to schedule works and record activity undertaken.

In 2018/19:

number of major works projects undertaken by (greater than $50 000)	9
number of building permits, occupancy permits or certificate of final inspection issued in relation to buildings owned by the entity	9 building permits 2 occupancy permits 2 certificates of final inspection
number of emergency orders and building orders issued in relation to buildings	0 emergency orders 0 building orders
number of buildings that have been brought into conformity with building standards during the reporting period	0 buildings brought into conformity

Privacy Legislation

Melbourne Water is subject to the *Privacy and Data Protection Act 2014* (Vic), the *Health Records Act 2001* (Vic) and, in relation to Tax File Numbers, the *Privacy Act 1988* (Cth) and is committed to protecting the privacy of personal and health information it collects and handles. Melbourne Water collects and handles personal and health information only to carry out its functions and activities.

Melbourne Water received no privacy complaints or notifications of complaints received by the Victorian Information Commissioner, the Health Complaints Commissioner or the Australian Information Commissioner.

Melbourne Water is committed to openness and transparency and welcomes queries and suggestions about its approach to privacy. We endeavour to resolve any privacy complaints quickly and effectively.

People may access their personal and health information at Melbourne Water. People wanting to access their information, seek a copy of our Privacy Policy or make a privacy complaint, should call 131 722 (within Victoria) or 9679 7100 (within the rest of Australia) or write to:

Privacy Advisor
Melbourne Water
PO Box 4342
Melbourne VIC 3001

Financial Management

Other information as required under the *Financial Management Act 1994*, but not specifically referred to, has been retained by the Accountable Officer and is available to the Minister, Members of Parliament and the public on request.

Other Information Available on Request

In compliance with the requirements of the Standing Directions of the Assistant Treasurer, details in respect of the items listed below have been retained by Melbourne Water and are available on request, subject to the provisions of the Freedom of Information Act 1982:

Further information is available on request about:

- pecuniary interests of relevant officers
- details of shares held by a senior officer as nominee or held beneficially in a statutory authority or subsidiary
- details of changes in prices, fees, charges, rates and levies charged if relevant
- details of Melbourne Water publications
- committees chaired by Melbourne Water
- major external reviews carried out on Melbourne Water
- research and development activities
- overseas visits
- major promotional, public relationship and marketing activities
- Melbourne Water's Code of Conduct.
- assessments and measures to improve the occupational health and safety of employees
- statement of industrial relations
- details of time lost through industrial accidents and disputes
- major sponsorships.

Phone 131 7822 or (03) 9679 7100 (within the rest of Australia) or visit www.melbournewater.com.au

Protected Disclosure

The *Protected Disclosure Act 2012* (the Act) assists people to expose wrongdoing in public life and protects them from any reprisals. The Act applies to Melbourne Water and members of our community must be able to have confidence that Melbourne Water and its people are conducting themselves properly.

Melbourne Water does not tolerate improper conduct by employees nor reprisals against those who come forward to disclosure such conduct. Melbourne Water is committed to ensuring transparency and accountability in our administrative and management practices and support the making of disclosures that reveal corrupt conduct, conduct involving a substantial mismanagement of public resources or conduct involving a substantial risk to public health and safety or the environment. Our commitment is incorporated in our Code of Conduct and our Protected Disclosure Procedures.

Where a disclosure is brought to Melbourne Water's attention by an investigative body, we will take all reasonable steps to protect people who make such disclosures from any detrimental action in reprisal for making the disclosure. We will also afford natural justice to the person who is the subject of the disclosure to the extent it is legally possible.

How do I make a 'protected disclosure'?

You can make a protected disclosure about Melbourne Water or its Board members, officers or employees by contacting the Independent Broad-based Anti-corruption Commission (IBAC) Victoria using the contact details provided below. Please note that Melbourne Water is not able to receive protected disclosures. Melbourne Water has had no incidents of corruption in 2017/18.

How can I access Melbourne Water's procedures for the protection of persons from detrimental action?

Melbourne Water has procedures in place for the protection of persons from detrimental action for making a protected disclosure about Melbourne Water or its employees. You can access our procedures at melbournewater.com.au

Contacts

Bernadette Doyle, General Counsel
Melbourne Water
PO Box 4342
Melbourne VIC 3001
Phone (03) 9679 7111

Independent Broad-based Anti-corruption Commission
Victoria
Level 1, North Tower, 459 Collins Street
Melbourne VIC 3000

GPO Box 24234
Melbourne VIC 3000

www.ibac.vic.gov.au
Phone: 1300 735 135

See the IBAC website for the secure email disclosure process which also provides for anonymous disclosures.

Industry Memberships

Melbourne Water maintains several industry memberships and associations, particularly those associated with the Australian water industry and provision of infrastructure. We often serve on committees from both a governance perspective and on issue specific initiatives. We engage frequently with the following organisations:

- Water Services Association of Australia
- VicWater
- Stormwater Victoria
- Water Research Australia
- Australian Water Association
- Climate Research Centre for Water Sensitive Cities
- Institute of Water Administration
- Committee for Melbourne
- Global Compact Network
- CEDA – Committee for the Economic Development of Australia
- Urban Development Institute of Australia (EnviroDevelopment)
- Association of Land Development Engineers Australia
- Engineers Australia
- Water Stewardship Australia.

As a State Government-owned entity, Melbourne Water does not make any political donations or contributions

Appendix C – Bulk Entitlements

The Victorian Government introduced bulk water reforms on 1 July 2014. These reforms introduced a 'source' and 'delivery' bulk entitlements model for Melbourne with a seasonal determination process and rights to carry over unused water allocations from year to year. The four systems currently supplying Melbourne (Thomson River, Yarra River, Silver and Wallaby creeks and Tarago and Bunyip rivers) are collectively known as the Greater Yarra System – Thomson River Pool.

Melbourne Water was assigned the source bulk entitlements to the Greater Yarra System – Thomson River Pool. The delivery bulk entitlements to the Greater Yarra System – Thomson River Pool were assigned to Barwon Water, City West Water, South East Water, South Gippsland Water, Western Water, Westernport Water and Yarra Valley Water (the 'primary entitlement holders' -PEHs).

As the Resource Manager for the Melbourne headworks system, Melbourne Water allocates water to the primary entitlement holders by making seasonal determinations to them. Melbourne Water is also the Storage Manager (under section 171B of the *Water Act 1989*) for water sources in the Melbourne headworks system. The following table fulfils the reporting requirements in Melbourne Water's bulk entitlements.

Melbourne Water reporting obligation	Combined Yarra River, Silver and Wallaby creeks, Thomson River	Yarra River[2] (WSE000185)	Silver and Wallaby creeks[5] (WSE000018)	Thomson River[7] (WSE000168)	Tarago and Bunyip rivers[9] (WSE000041)
The amount of water taken by PEHs in 2018/19 (i) Total inflows[(a)]; (ii)Total storage volumes[(b)]; and (iii)Total outflows[(c)]	N/A	Clause 15.1 (a) (i). 242,739 ML (ii). 381,456 ML (iii). 256, 058 ML	Clause 14.1 (a) (i). 356 ML (ii). No storage is available in Silver & Wallaby (iii). 356 ML	Clause 15.1 (a) (i). 78,488 ML (ii). 445,567 ML (iii). 198,850 ML	Clause 15.1 (a) (i). 10,885 ML (Tarago) 2,190 ML (Bunyip) (ii). 20,087 ML (Tarago) No storage is available in Bunyip (iii). 18,096 ML (Tarago) 2,190 ML (Bunyip)
Compliance with the diversion limit	412,237 ML[1]	Clause 15.1 (b) 213,031 ML[3]	Clause 14.1 (b) 5,230 ML[6]	Clause 15.1 (b) 198,850 ML[8]	Clause 15.1 (b) 13,980 ML (Tarago)[10] 2,191 ML (Bunyip)[11]
Any temporary/permanent transfer of this bulk entitlement	N/A	Clause 15.1 (c) Nil	Clause 14.1 (c) Nil	Clause 15.1 (c) Nil	Clause 15.1 (c) Nil
Any temporary/permanent transfer of a bulk entitlement which may alter the flow in the waterway	N/A	Clause 15.1 (d) Nil	Clause 14.1 (d) Nil	Clause 15.1 (d) Nil	Clause 15.1 (d) Nil

Melbourne Water reporting obligation	Combined Yarra River, Silver and Wallaby creeks, Thomson River	Yarra River[2] (WSE000185)	Silver and Wallaby creeks[5] (WSE000018)	Thomson River[7] (WSE000168)	Tarago and Bunyip rivers[9] (WSE000041)
Any amendment to this bulk entitlement	N/A	Clause 15.1 (e) Nil	Clause 14.1 (e) Nil	Clause 15.1 (e) Nil	Clause 15.1 (e) Nil
Volume of water made available to PEHs from seasonal determinations (on 1 June 2019)	N/A	Clause 15.1 (f)	Clause 14.1 (f)	Clause 15.1 (f)	Clause 15.1 (f)
	N/A	Greater Yarra System – Thomson River Pool[4] 77,707 ML (City West Water) 104,907 ML (South East Water) 111,771 ML (Yarra Valley Water) 8,137 ML (Barwon Water) 509 ML (South Gippsland Water) 509 ML (Westernport Water) 9,281 ML (Western Water)	N/A	N/A	N/A
Any new bulk entitlement of water granted	N/A	Clause 15.1 (g) Nil	Clause 14.1 (g) Nil	Clause 15.1 (g) Nil	Clause 15.1 (g) Nil
Any failures to comply with this bulk entitlement and any remedial action	N/A	Clause 15.1 (h) Nil	Clause 14.1 (h) Nil	Clause 15.1 (h) Nil	Clause 15.1 (h) Nil
Any difficulties experienced in complying with this bulk entitlement and any remedial action	N/A	Clause 15.1 (i) Nil	Clause 14.1 (i) Nil	Clause 15.1 (i) Nil	Clause 15.1 (i) Nil
Any other matters as required by the Minister	N/A	Clause 15.1 (j) Nil	Clause 13.1 (j) Nil	Clause 15.1 (j) Nil	Clause 15.1 (j) Nil

(a). Total inflows for each of Melbourne Water's bulk entitlements include inflows to reservoir(s) and diversions from weirs available to Melbourne Water under its bulk entitlements.

(b). Total storage volumes are as at 30 June 2019 for all reservoirs defined in each of Melbourne Water's bulk entitlements.

(c). Total outflows are the volume of water diverted or released under each of Melbourne Water's bulk entitlements for consumptive and operational purposes. It excludes spills from reservoirs.

Notes for compliance with Bulk Entitlements

Combined Yarra River, Silver and Wallaby creeks, Thomson River

1 This is the volume diverted in 2018/19. As noted in the *Melbourne Water Annual Report 2017/18*, the 2017/18 annual diversion (389,614 ML) was recalculated using the method approved by the Minister for Water in February 2018 for showing compliance with diversion limits for the Yarra River, Thomson River and Silver and Wallaby Creeks bulk entitlements and confirmed to be compliant with this method.

Yarra River

2 Melbourne Water holds the Bulk Entitlement (Yarra River – Melbourne Water) Order 2014 – WSE000185.

3 This is the volume diverted in 2018/19. As noted in the *Melbourne Water Annual Report 2017/18*, the 2017/18 annual diversion (255,317 ML) was recalculated using the method approved by the Minister for Water in February 2018 for showing compliance with diversion limits for the Yarra River, Thomson River and Silver and Wallaby Creeks bulk entitlements and confirmed to be compliant with this method.

Appendix C – Bulk Entitlements (continued)

Notes for compliance with Bulk Entitlements (continued)

Greater Yarra System – Thomson River Pool

4 The Greater Yarra System – Thomson River Pool includes the following Bulk Entitlements held by Melbourne Water:

- Bulk Entitlement (Yarra River – Melbourne Water) Order 2014 – WSE000185
- Bulk Entitlement (Silver and Wallaby creeks – Melbourne Water) Order 2014 – WSE000018
- Bulk Entitlement (Tarago and Bunyip Rivers – Melbourne Water) Order 2014 – WSE000041
- Bulk Entitlement (Thomson River – Melbourne Water) Order 2014 – WSE000168

Silver and Wallaby creeks (Goulburn Basin)

5 Melbourne Water holds the Bulk Entitlement (Silver and Wallaby creeks – Melbourne Water) Order 2014 – WSE000018.

6 Compliance with the three-year total diversion limit of 66,000 ML was assessed and confirmed using a three-year rolling total diversion.

Thomson River

7 Melbourne Water holds the Bulk Entitlement (Thomson River – Melbourne Water) Order 2014 – WSE000168.

8 This is the volume diverted in 2018/19. As noted in the *Melbourne Water Annual Report 2017/18*, the 2017/18 annual diversion (133,540 ML) was recalculated using the method approved by the Minister for Water in February 2018 for showing compliance with diversion limits for the Yarra River, Thomson River and Silver and Wallaby Creeks bulk entitlements and confirmed to be compliant with this method.

Tarago and Bunyip rivers

9 Melbourne Water holds the Bulk Entitlement (Tarago and Bunyip Rivers – Melbourne Water) Order 2014 – WSE000041.

10 Compliance with the Tarago River long-term average diversion limit of 24,950 ML was assessed and confirmed using a five-year rolling average annual diversion.

11 Compliance with the Bunyip River long-term average diversion limit of 5,560 ML was assessed and confirmed using a five-year rolling average annual diversion.

Melbourne Water's Maribyrnong Bulk Entitlement

Melbourne Water holds a Bulk Entitlement (WSE000117) to the water resources of the Maribyrnong Basin to supply irrigators diverting water from Jacksons Creek, downstream of Rosslynne Reservoir, and the Maribyrnong River between its confluence with Jacksons Creek and Shepherd Bridge.

Compliance with the Maribyrnong River Bulk Entitlement held by Melbourne Water

The volume of water taken by Melbourne Water to supply licence holders in 2018/19	Clause 19.1 (b), 557 ML
Compliance with the five-year rolling average annual bulk entitlement diversion limit of 1,096 ML	342 ML
Melbourne Water's share of flow into Rosslynne Reservoir in 2018/19	Clause 19.1 (a.iii), 237 ML
Melbourne Water's share of storage volume in Rosslynne Reservoir at 30 June 2019	Clause 19.1 (a,ii), 162 ML
Transfer and operating losses within the system	Clause 19.1 (a,iv), 0 ML
Releases made from Rosslynne Reservoir to supply licence holders in 2018/19	Clause 19.1 (a,i), 230 ML
Releases from Melbourne Water's share of flow to meet minimum flows	Clause 19.1 (a,v), 40 ML
Any temporary or permanent transfers of the bulk entitlement	Clause 19.1 (c), nil
Any temporary or permanent transfer of the bulk entitlement which may alter the flow in the waterway	Clause 19.1 (d), nil
Alteration to volume of water under licences issued by Melbourne Water	Clause 19.1 (e), nil
Alteration to security of supply of entitlements under licences	Clause 19.1 (e), nil
Transfer of licences (number, amount and places)	Clause 19.1 (f), Yes[1]
Any amendment to the bulk entitlement	Clause 19.1 (g), nil
Any new bulk entitlement granted to Melbourne Water	Clause 19.1 (h), nil
Implementation of metering program	Clause 19.1 (i), Yes
Any failures to comply with any provision of the bulk entitlement	Clause 19.1 (j), nil
Any difficulty experienced in complying with the bulk entitlement and if so, any remedial action taken or proposed	Clause 19.1 (k), nil

[1] In total 29 transfers of licences were made: 1) one licence transferred; 3) 28 licence transfers to Victorian Environmental Water Holder with 300 ML.

Appendix D – Private Diversion Licences

Melbourne Water manages 1819 licences to use water from farm dams and waterways in the Yarra River, Maribyrnong River, Stony Creek, Kororoit Creek, Laverton Creek, Mordialloc Creek and Skeleton Creek catchments. Water is mainly used for agricultural, industrial, commercial, domestic and stock purposes. The total number of 'take and use' licences (that is, licences for uses such as irrigation) is 1206 with a combined volume of 40,613.4 ML.

Melbourne Water applies permanent management trigger and restriction conditions enacted under the Diversions Drought Response Plan (A Water Sharing Plan for all Licenced Water Users) and licence conditions. Melbourne Water has not invoked any additional drought response measures outside of the plan during 2018/19.

Licence Totals	No. Licences	Volume (ML)	Metered Usage (ML)
Farm Dam Registrations	523	6811.5	15.9
Farm Dam Licences	44	1009.5	208.6
Take & Use Licences Yarra	1158	39847.4[1]	7199.4
Take & Use Licences Maribyrnong	48	1126.0	192.5
Stormwater Licences	46	3026.7	973.4
Environmental Water Licence	7	1514.0	0

Risk-Based Compliance Priorities 2018/19

	No of Investigations
Major Risk - Still Under investigation	8
Moderate Risk - Still Under investigation	10
Minor Risk - Still Under investigation	0
No. Resolved 2018/19	53
Total Number Still Under investigation	**18**
Total number of suspected compliance breaches	**71**

Activities undertaken in response to these priorities

For those 53 investigations resolved, Melbourne Water has taken the following actions :

Dismissed - not enough evidence	1
Referred	0
Advisory Letter issued	5
Warning notice issued	16
Statutory notice issued	0
Customer restriction	0
No further action required	31

Risk-Based Compliance and Enforcement Policy

Melbourne Water have an existing Waterways Enforcement Policy supplemented with a Risk Enforcement Matrix and Compliance Procedure Manual. All these documents were finalized according to our delegation policy in 2014. Once DELWP have finalized the Statewide Compliance and Enforcement-Policy, Melbourne Water will update our policy and other documents by the end of 2019.

[1] Includes new 7000ML non-consumptive licence BEE075688

Information on Compliance and Enforcement on Corporation's Webpage

There is currently no information on Melbourne Water's webpage in regards to compliance and enforcement. However as part of the recent Funding Agreement between DELWP and Melbourne Water for Non-Urban Water Compliance & Enforcement Strategies, our webpage will be updated as part of this communication strategy.

Public Information and Education Campaigns on Enforcement during 2018/19

None undertaken in 2018/19 but this is planned as per Funding Agreement between DELWP and Melbourne Water for Non-Urban Water Compliance & Enforcement Strategies by the end of 2019.

However, during drought or low flow conditions, licenced diverters' access to water may be restricted or banned to protect the environment. Our Drought Response Plan is active at all times, and specifies how water is shared when there is not enough to meet all users' needs. It states river flow levels which trigger restrictions or bans, and how these are applied to different licence types. These trigger points have been developed together with stream flow management plans or local management rules/plans.

The status of restrictions and bans for individual catchments is posted daily on Melbourne Water's website at www.melbournewater.com.au/diverters and be available by calling Melbourne Water on 131 722 at any time or via an automated SMS services to subscribed customers. During 2018/19, we sent out 4782 text messages to 235 subscribed customers advising them on waterway pumping restrictions and/or bans.

Summary of bans and restrictions 2018/19

Catchment	Restriction Days	Ban Days	Days Available
Arundel Creek	N/A	0	365
Cockatoo Shepherds Creek (SFMP)	76	194	95
Darebin Creek	N/A	215	150
Diamond Creek	N/A	333	32
Dixons Creek	N/A	358	7
Don River (SFMP)	N/A	166	199
Gardiners Creek	N/A	31	334
Hoddles Creek (SFMP)	N/A	320	45
Kororoit Creek	N/A	25	340
Little Yarra River (SFMP)	75	145	145
Maribyrnong River (All Year)	N/A	89	276
Maribyrnong River (Winterfill) : 1 Jul - 31 Oct only	N/A	69	55
McCrae Creek (SFMP)	82	264	19
Merri Creek	N/A	11	354
Moonee Ponds Creek	N/A	74	291
Mullum Mullum Creek	N/A	109	256
Olinda Creek (Lower) - SFMP	33	89	243
Olinda Creek (Upper) - SFMP	15	245	105
Pauls Creek (SFMP)	N/A	365	0
Plenty River	N/A	183	182
Steels Creek (SFMP)	N/A	358	7
Stringybark Creek (Lower) - SFMP	N/A	249	116
Stringybark Creek (Upper) - SFMP	N/A	191	174
Wandin Yallock Creek (SFMP)	N/A	115	250
Watsons Creek	N/A	65	300
Watts River	N/A	0	365
Woori Yallock Creek (SFMP)	65	189	111
Yarra River (Lower)	242	0	123
Yarra River (Lower)	202	37	126

Appendix E – Flooding and Drainage

	2018/19	2017/18	2016/17	
Underground Drains				
Total Length of Melbourne Water Assets	1700	1672	1668	km
Total Length of Melbourne Water Assets excluding drainage scheme areas	1076	1065	1061	km
Mapped 100yr ARI	588	977	867	km
Percentage Mapped	55%	91	81	%
Mapped 20yr ARI	437	627	517	km
Percentage Mapped	41%	59	49	%
Mapped 10yr ARI	259	306	196	km
Percentage Mapped	24%	29	18	%
Mapped 5yr ARI	255	264	154	km
Percentage Mapped	24%	25%	15%	%
Natural Waterways				
Total Length of Melbourne Water Assets	8688	8665	8684	km
Total Length of Melbourne Water Assets excluding drainage scheme areas, forested areas and French Islands	6532	6425	5616	km
Mapped 100yr ARI	4275	4270	3990	km
Percentage Mapped	65%	66	71	%
Mapped 20yr ARI	565	309	254	km
Percentage Mapped	9%	5	5	%
Mapped 10yr ARI	547	302	256	km
Percentage Mapped	8%	7	5	%
Mapped 5yr ARI	438	281	236	km
Percentage Mapped	7%	7%	4%	%
Channels				
Total Length of Melbourne Water Channels	1870	1860	1859	km
Mapped 100yr ARI (underground drains)	115	138	134	km
Mapped 100yr ARI (waterways)	1344	1416	1416	km
Mapped 100yr ARI (total)	1459	1554	1560	km
Percentage Mapped	78%	84%	84%	%
Total				
Total length of Melbourne Water Assets	12,258	12,197	12,211	N/A
Total length of Melbourne Water Assets excluding drainage scheme areas, forested areas and French Island	9478	9350	8536	N/A
Mapped 100yr ARI	6322	6801	6417	N/A
Percentage Mapped	67%	73%	75%	N/A

Appendix F – Environmental Data

Energy Consumption

Our electricity consumption across our services and other in megawatt hours (MWh) is set out in the following table.

Energy consumption reporting

Performance Indicator	(a) total energy use	renewable energy use (MWh)							(h) renewable energy use (%) ((h)/(a)) * 100	Renewable Energy Generated for Export (MWh)	Renewable energy use target (%) pre 2020
		(b) solar panels	(c) hydro-electric	(d) wind power	(e) biogas	(f) green power	(g) other	(h) total			
Water treatment and supply	122,273	0	52,817	0	0	0	0	52,817	43.20%	52,633	
Sewerage treatment and management	342,487	0	0	0	100,152	0	0	100,152	29.24%	2,619	
waterways	7,473	0	0	0	0	0	0	0			
Transport	10,047										
Other (office, workshops, depots etc.)											
Offsets		0	0	0	0	0	0	0			
Total	**482,280**	**0**	**52,817**	**0**	**100,152**	**0**	**0**	**152,969**	**36.22%**	**52,252**	**25.00%**

Note: Melbourne Water is committed to increasing its use of renewable energy. Please refer to details on pages 59-61.

Greenhouse Gas Emissions

Our greenhouse gas emissions across our services and others in tonnes of carbon dioxide equivalent is set out in the following table.

Greenhouse gas emissions over the past five years in equivalent tonnes of carbon dioxide (t-CO2e)

Performance Indicator	Tonnes CO2-e				Variance (%)	Commentary
	Baseline	2018/19 Target	2017/18 result	2018/19 result		
Water Treatment and Supply	N/A	N/A	60,398	54,134	-10%[1]	Less electrical energy drawn from the grid to treat and supply water in 2018/19
Sewerage Treatment and Management	N/A	N/A	385,649	371,303	-4%[1]	Operational variance
Transport	N/A	N/A	2,564	2,531	-1%[1]	Operational variance
Other	N/A	N/A	4,866	3,378	-31%[1]	Reduction in stationary energy use 2018/19
Offsets	N/A	N/A				
Total	408,860	403,829	453,477	431,346	6.8%[2]	MW is committed to emissions reduction. See Note 3 below.

[1] year-on-year
[2] based on target
[3] Melbourne Water's reportable emissions grow with population and can vary significantly from year to year with climate and operational conditions. While 2018/19 reportable emissions were higher than the nominal target, they were lower than the 2017/18 reportable emissions as a result of increased generation of electricity from biogas (and associated reduced use of electricity from the grid). Melbourne Water is committed to achieving the committed 50% reduction by 2024/25 and has several initiatives underway to deliver on this commitment. See pages 60-61 for further information on these initiatives.

Melbourne Water Corporate Consumption

Melbourne Water's corporate consumption is 512.86kL or 0.74kL/FTE/year based on our operations at our corporate office at 990 La Trobe Street.

Appendix G – Workforce Statistics

Safety

The following safety statistics are provided as additional information in support of statutory reporting and other obligations.

Table G1 – Number of reported safety incidents per 100 full time equivalent (FTE) staff

	FTE	Hazards	Hazards/ 100 FTE	Incidents	Incidents/ 100 FTE	Total	Total/ 100 FTE
2016/17	1002	503	50.2	438	43.7	941	93.9
2017/18	1029	546	53.1	303	29.4	763	74.1
2018/19	1085	529	48.8	333	30.7	862	79.4

Table G2 – Number of lost time standard claims for the year per 100 FTE

	Number of Claims	Claims/100 FTE
2016/17	1	0.10
2017/18	3	0.30
2018/19	4	0.37

Table G3 – Average cost per claim for the year (including payments to date and estimates of outstanding claim costs advised by WorkCover)

	Cost of Claim $
2016/17:	65,339
2017/18:	59,736
2018/19	77,333

Table G4 – Types of Injury

	2017/18	2018/19
Lost time injury (LTI)	3	7
Restricted work injury (RWI) / Medical treatment injury (MTI)	10	9
First Aid	74	59
Total	**88**	**75**

Total lost days in 2018/19 were 44.

People

The following employee-related statistics are provided as additional information in support of statutory reporting and other obligations. Employees have been correctly classified in workforce data collections.

Table G5 – Employee profile 2018/19

	Full-time permanent employees (Headcount)	Part-time permanent employees (Headcount)	Permanent employees (Headcount)	Fixed-term and casual employees (Headcount)	Permanent employees (FTE)	Fixed-term and casual employees (FTE)
June 18	840	156	996	139	960	94
June 19	874	170	1044	127	1004	92

Employee profile by type 2018/19

	Jun-18						
	All Employees		Ongoing			Fixed term and casual	
	Number Headcount	FTE	Full Time Headcount	Part Time Headcount	FTE	Number Headcount	FTE
Gender							
M	732	707	620	44	657	68	50
F	403	347	220	112	303	71	44
Age							
Under 25	31	26	13	1	13	17	12
25-34	279	262	217	25	237	37	26
35-44	386	356	269	80	330	37	27
45-54	252	239	196	32	221	24	18
55-64	166	155	136	13	147	17	8
Over 65	21	16	9	5	13	7	4
Classification							
Casual	65	28	N/A	N/A	N/A	65	28
Total 1-Senior Officer	687	658	529	97	603	61	55
1	7	7	0	1	1	6	6
2	52	49	39	4	41	9	8
3	74	73	71	1	71	2	2
4	54	51	43	7	48	4	3
5	115	110	90	13	100	12	10
6	115	112	93	16	106	6	6
7	242	229	173	51	212	18	16
Senior Officer	28	27	20	4	23	4	4
Senior Employees	383	369	311	59	357	13	12
Senior Manager	369	355	298	59	344	12	11
Executives	14	14	13	0	13	1	1

Four employees were acting in long-term senior positions at the last full pay period in June of 2018.

Appendix G – Workforce Statistics (continued)

Employee profile by type 2018/19 (continued)

	Jun-19						
	All Employees		Ongoing			Fixed term and casual	
	Number Headcount	FTE	Full Time Headcount	Part Time Headcount	FTE	Number Headcount	FTE
Gender							
M	732	710	620	44	658	68	52
F	439	386	254	126	346	59	40
Age							
Under 25	34	28	16	0	16	18	12
25-34	279	266	223	21	239	35	27
35-44	419	386	289	85	352	45	34
45-54	253	241	200	42	233	11	8
55-64	164	157	134	18	149	12	8
Over 65	22	18	12	4	15	6	3
Classification							
Casual	47	20	N/A	N/A	N/A	47	20
Total 1-Senior Officer	710	678	548	100	623	62	54
1	5	5	0	0	0	5	5
2	58	56	51	4	54	3	3
3	88	88	77	0	77	11	11
4	63	58	43	8	49	12	9
5	105	102	89	11	97	5	5
6	117	113	91	12	100	14	13
7	253	236	180	61	226	12	10
Senior Officer	21	20	17	4	20	0	0
Senior Employees	414	398	326	70	381	18	18
Senior Manager	402	386	314	70	369	18	18
Executives	12	12	12	0	12	0	0

Four employees were acting in long-term senior positions at the last full pay period in June of 2018.

Total number and rates of new employee hires by age group and gender

Gender	Headcount
M	84
F	93

Age	
Under 25	20
25-34	65
35-44	61
45-54	21
55-64	10
Over 65	0

Total number and rates of employee turnover by age group and gender

Gender	Headcount
M	85
F	60

Age	
Under 25	9
25-34	37
35-44	48
45-54	28
55-64	18
Over 65	5

Hours of training for the financial year 2018/19

	All Melbourne Water		
Age	F	M	All
Total Completed Hours of Training	6315	14249	20564
Total Number of Employees Completed Training	473	774	1247
Average Completed Training Hours Per Employee	13	18	16

Ratio of basic salary and remuneration of women to men by employee category by significant locations of operation

	Ratio (F/M)	
Corporate	Base	Remuneration
MW EA 1	N/A	N/A
MW EA 2	N/A	N/A
MW EA 3	0.99	0.99
MW EA 4	1.02	1.03
MW EA 5	1.06	1.06
MW EA 6	1.02	1.02
MW EA 7	1.00	1.00
SO	0.86	0.86
Senior Management	0.98	0.98
Executive	0.83	0.83

	Ratio (F/M)	
Service Delivery	Base	Remuneration
MW EA 1	1.00	1.00
MW EA 2	0.98	0.98
MW EA 3	0.99	0.98
MW EA 4	1.02	1.01
MW EA 5	0.98	0.91
MW EA 6	0.98	0.96
MW EA 7	0.98	0.96
SO	0.96	0.96
Senior Management	0.92	0.91
Executives	0.00	0.00

In addition:

- 100% of senior management were hired from the local community at significant locations of operation
- there is no minimum notice period regarding consultation of operational changes
- there were no grievances about labour practices filed
- 94.5% of employees were covered by the Enterprise Agreement
- human rights are not part of Melbourne Water's current training program
- no incidents of discrimination have been raised with Melbourne Water
- no incidents of violations involving the rights of Indigenous peoples have occurred
- no incidents of human rights violations have been recorded.

Appendix G – Workforce Statistics (continued)

Local Jobs First

The *Local Jobs First Act 2003* introduced in August 2018 brings together the Victorian Industry Participation Policy (VIPP) and Major Project Skills Guarantee (MPSG) policy which were previously administered separately.

The following projects were commenced or completed during 2018/19 in accordance with the relevant obligations.

Projects Commenced – VIPP/Local Jobs First Standard
During 2018/19 Melbourne Water commenced 10 projects in metropolitan Melbourne (8 VIPP and 2 LJF) totalling $116,869,587. The MPSG applied to one of the projects.

The outcomes expected from the implementation of the Local Jobs First policy to these projects where information was provided are as follows:

- The average commitment was 89.12 per cent local content;
- a total of 99.98 jobs to be created
- retention of 160.83 jobs
- 2 new apprenticeships to be created and 7.26 to be retained
- creation of 13 new trainees and retention of 6 existing trainees
- The MPSG applicable project provided a total of 676 labour hours to apprentices and engineering cadets as at 8 April 2019

Projects Completed – VIPP Standard
During 2018/19 Melbourne Water completed 4 VIPP projects in metropolitan Melbourne totalling $34,852,884.
The outcomes from the implementation of the Local Jobs First policy to these projects where information was provided, were as follows:

- The average commitment was 79.35 per cent
- 10 new local jobs were committed and 40 new positions were actually created
- 34 existing jobs were to be retained and 35 were actually retained
- There were no existing or new apprenticeships or trainees employed in these projects
- MPSG was not required to be applied to any of these projects

Melbourne Water did not commence or complete any Strategic Projects within the reporting period.

Appendix H – Global Reporting Initiative

Melbourne Water is signatory to the UN Global Compact and supports the UN Sustainable Development Goals (SDGs). We provide our Communication on Progress to the UN Global Compact through our Annual Report.

Melbourne Water's approach to reporting against the SDGs is through our Strategic KPIs in our *Corporate Plan* and through a formal sustainability reporting mechanism, the Global Reporting Initiative (GRI).

This report adopts the GRI Sustainability Standards (conforming to Core level of reporting)[3] as they are the current global standard for sustainability reporting and represent best practice. They are designed to be used by organisations to report about their impacts on the economy, the environment and/or society.

Sustainable development and materiality

Sustainability reporting requires an organisation to report on their significant economic, environmental and social impacts or that substantively influence the assessments and decisions of stakeholders.

In order to determine the issues that are material to Melbourne Water, engagement was undertaken to establish the relative significance of the SDGs to Melbourne Water's strategic activities and to understand our impact or influence on the UN Sustainable Development Goals. Melbourne Water stakeholders, customers, and staff contributed to an understanding of what SDGs are material to us and where opportunities for leadership lie. The following activities were undertaken to support this materiality assessment:

- external stakeholder interviews
- interviews with Melbourne Water Leadership Team and managers
- all staff survey
- mapping of Melbourne water strategies and activities against the SDGs and targets
- review of industry priorities
- review of peer reporting.

The results showed that Melbourne Water impacts across all 17 goals, albeit to differing degrees. The goals that are most material to us, SDGs 6, 11 and 15, align with the three pillars of our strategic direction. SDGs 3, 5, 7, 8, 9, 12, 13, 14 and 17 also featured as material with Melbourne Water having less direct impact on SDGs 1, 2, 4, 10 and 16.

Melbourne Water's approach to sustainable development and to supporting the SDGs is to enhance our contribution across all UN SDGs, while demonstrating leadership for SDGs 6, 11 and 15.

Given this, our GRI reporting (Core) covers most topics. In the few cases where specific disclosures are not relevant to our organisation they have been noted in the table. We have also reported on issues as they relate to the UN Global Compact Communication on Progress (see Appendix I, The UN Global Compact).

Reporting

The *Melbourne Water Annual Report 2018/19* content was defined through extensive, business-wide consultation, including with senior management and executives. Melbourne Water is also required to report a large number of disclosures to satisfy regulatory instruments and the content of this report also reflects these requirements.

Unless otherwise specified, topics are relevant across the entire Melbourne Water organisation and only inside the organisation. Refer to Tables H1 to H7 for Melbourne Water's GRI Standards disclosures.

Melbourne Water has not sought to have this report externally assured this year.

Our last Annual Report was published in 2017/18. No restatements of information have been made.

[3] Melbourne Water's 2015-16 Annual Report used G4 Guidelines. From 2016/17 we have moved to the GRI Standards framework

Appendix H – Global Reporting Initiative (continued)

H1: General Disclosures

Indicator	Disclosure	Location
GRI 102-1	Report the name of the organisation	Inside cover
GRI 102-2	Report the primary brands, products, and services	Inside cover, 8-35
GRI 102-3	Report the location of the organisation's headquarters	Rear cover
GRI 102-4	Report the number of countries where the organisation operates	Inside cover
GRI 102-5	Report the nature of ownership and legal form	64-65
GRI 102-5	Report the markets served	Inside cover, 37-44
GRI 102-7	Report the scale of the organisation including total number of employees, total number of operations, net sales or revenue, total capitalisation broken down for debt and equity, quantity of products or services provided	164-168, 55-57
GRI 102-8	Information on employees and other workers	164-168
GRI 102-9	Describe the organisation's supply chain	58
GRI 102-10	Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain	None to report
GRI 102-11	Report whether and how the precautionary approach or principle is addressed by the organisation	69
GRI 102-12	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses	6-7, 64
GRI 102-13	Membership of associations	155
GRI 102-14	Provide a statement from the most senior decision maker of the organisation about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability	2-3, 6-7
GRI 102-16	Values, principles, standards, and norms of behaviour	47-50, 64
GRI 102-18	Report the governance structure of the organisation, including committees of the highest governance body. Identify any committees responsible for decision making on economic, environmental and social impacts	64-68
GRI 102-40	Provide a list of stakeholder groups engaged by the organisation	10, 18, 23-27, 33-34, 41-42, 58, 169
GRI 102-41	Percentage of total employees covered by collective bargaining agreements	166
GRI 102-42	Report the basis for identification and selection of stakeholders with whom to engage	10, 18, 23, 27, 33-34, 41-42, 58, 169
GRI 102-43	Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	18, 23, 27-34, 37-49, 65, 155
GRI 102-44	Report key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	See GRI 102-44
GRI 102-45	Entities included in the consolidated financial statements	76
GRI 102-46	Report the process for defining the report content and the topic boundaries and how the organisation has implemented the Reporting Principles for defining report content	169-172
GRI 102-47	List all the material Aspects identified in the process for defining report content	169-172
GRI 102-48	Restatements of information	None to report
GRI 102-49	Significant changes from previous reporting periods in the list of material topics and topic Boundaries	None to report
GRI 102-50	Reporting period for information provided	Inside cover
GRI 102-51	Date of most recent previous report	169
GRI 102-52	Reporting cycle	Annual
GRI 102-53	Contact point for questions regarding the report	Inside cover
GRI 102-54	Claims of reporting in accordance with the GRI Standards	169
GRI 102-55	GRI content index	170-171
GRI 102-56	External assurance	169

H2: Economic Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		11-12, 19-20, 24, 28-29, 169
103-2	The management approach and its components		55-57
103-3	Evaluation of the management approach		55-57, 73-141
Material topics			
201-1	Economic Performance	Direct economic value generated and distributed	55-72
202-2	Market Presence	Proportion of senior management hired from the local community	164-168
203 -1	Indirect Economic Impacts	Infrastructure investments and services supported	8-35
204-1	Procurement Practices	Proportion of spending on local suppliers	168
205-1	Anti-corruption	Confirmed incidents of corruption and actions taken	155
206-1	Anti-competitive Behaviour	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	152

H3: Environmental Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		169
103-2	The management approach and its components		11-12, 39-35, 59-63
103-3	Evaluation of the management approach		66-67
Material topics			
301-1	Materials	Materials used by weight or volume	11-17
302-1	Energy	Energy consumption within the organisation	163
303-1	Water	Water withdrawal by source	156-161, 163
304-1	Biodiversity	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	62-63
305-1	Emissions	Direct (scope 1) GHG emissions	163
306-1	Effluents and Waste	Water discharge by quality and destination	20-21
307-1	Environmental Compliance	Non-compliance with environmental laws and regulations	21, 63

Appendix H – Global Reporting Initiative (continued)

H4: Social Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		51-56
103-2	The management approach and its components		51-56
103-3	Evaluation of the management approach		64-65
Material topics			
401-1	Employment	New employee hires and employee turnover	167
402-1	Labor/Management Relations	Minimum notice periods regarding operational changes	167
403-2	Occupational Health and Safety	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities withdrawal by source	44-46, 164
404-1	Training and Education	Average hours of training per year per employee	167
405-1	Diversity and Equal Opportunity	Diversity of governance bodies and employees	165-167
405-2	Diversity and Equal Opportunity	Ratio of basic salary and remuneration of women to men	167
406-1	Non-discrimination	Incidents of discrimination and corrective actions taken	167
407-1	Freedom of Association and Collective Bargaining	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	167
408-1	Child Labor	Operations and suppliers at significant risk for incidents of child labor	58, 64-65
409-1	Forced or Compulsory Labor	Operations and suppliers at significant risk for incidents of forced or compulsory labor	58, 64-65
411-1	Rights of Indigenous Peoples	Incidents of violations involving rights of indigenous peoples	167
412	Human Rights Assessment	Employee training on human rights policies or procedures	167
413-1	Local Communities	Operations with local community engagement, impact assessments, and development programs	34-35, 39-42
414-1	Supplier Social Assessment	New suppliers that were screened using social criteria	58
415-1	Public Policy	Political contributions	155
416-2	Customer Health and Safety	Incidents of non-compliance concerning the health and safety impacts of products and services	143-145
418-1	Customer Privacy	Substantiated complaints concerning breaches of customer privacy and losses of customer data	154
419-1	Socioeconomic Compliance	Non-compliance with laws and regulations in the social and economic area	64

Appendix I – The UN Global Compact

The following index shows where we have reported our policies, programs and actions that align with the 10 principles of the UN Global Compact within the *2018/19 Annual Report*.

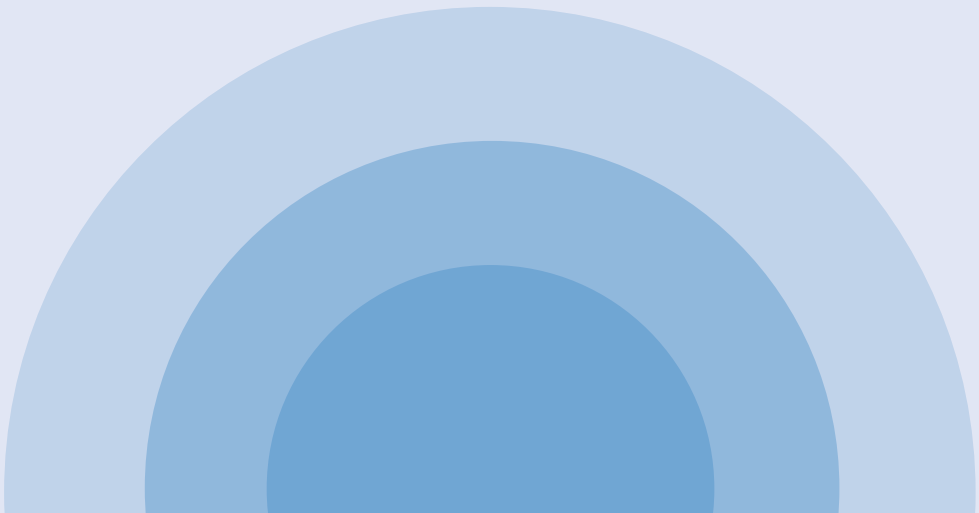
Global Compact Principles	Description	Page Reference
Human Rights		
1. Businesses should support and respect the protection of internationally proclaimed human rights	Melbourne Water's commitment to these principles is demonstrated in our commitment to building a diverse workforce and an inclusive workplace culture, underpinned by the fundamental consideration for the health, safety and wellbeing of our staff, customers and community. This commitment is implemented through the following strategies and programs, detailed within this report:	
	• Diversity Strategy and associated programs	49-50
2. Make sure that they are not complicit in human rights abuses	• Safety performance, measurement and programs	44-46, 164
	• Our management of customers' confidential and personal information	154
	• Our actions toward Reconciliation and Aboriginal Engagement	42
Labour		
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Melbourne Water's commitment to these principles is demonstrated in our commitment to building a diverse workforce and an inclusive workplace culture. Our commitment to ensuring equality and fair treatment across the business is detailed in this report through:	
	• Continued analysis of our workforce statistics to support programs	165-167
	• Diversity Strategy and associated programs, including inclusion, gender equity, parental leave, domestic violence leave and flexible working arrangements	49-50
4. The elimination of all forms of forced and compulsory labour.	• Our actions toward increasing cultural awareness	49
5. The effective abolition of child labour.	• The Melbourne Water Enterprise Agreement 2016 sets our terms and conditions of employment, and is a collective agreement between Melbourne Water, enterprise agreement employees and their union representatives. This agreement does not cover Senior Managers or the Waterways and Land Delivery team. The agreement was approved by the Fair Work Commission.	167
6. The elimination of discrimination in respect of employment and occupation.	• Our management of suppliers	58

Appendix I – The UN Global Compact (continued)

Global Compact Principles	Description	Page Reference
Environment		
7. Businesses should support a precautionary approach to environmental challenges.	Our contribution to supporting a healthy environment is one of Melbourne Water's three strategic pillars and part of our core business. We contribute to this through improving waterway quality, reducing greenhouse gas emissions and being innovative with resource recovery. We also help protect Melbourne's natural assets by improving biodiversity and building strong relationships with the community. This commitment is implemented through the following strategies and programs, detailed within this report:	
8. Undertake initiatives to promote greater environmental responsibility. 9. Encourage the development and diffusion of environmentally friendly technologies.	• Waterway quality programs and the *Healthy Waterways Strategy*	29-35
	• Our flooding and drainage programs and supporting strategies	24-28
	• Our biodiversity program and supporting *Environmental Stewardship Strategy*	59, 62
	• Our environmental programs including energy, resource recovery and climate risk management	59-61
	• Our community engagement and education programs	37-42
Anti-corruption		
10. Businesses should work against corruption in all its forms, including extortion and bribery.	We are committed to a high standard of governance, with the Melbourne Water Board having overall responsibility for corporate governance. We maintain a fraud and corruption framework, including ongoing education and awareness and avenues for reporting any allegations. We undertake detailed fraud and corruption risk assessments in line with our Enterprise Risk Management Framework, consistent with the requirements of the Victorian Government Risk Management Framework 2015. We have an extensive compliance management framework ensuring ongoing compliance with relevant laws and regulations including the *Independent Broad-based Anti-corruption Commission 2011* and the *Protected Disclosure Act 2012*. We provide assurance over our control environment through a robust assurance management program. This commitment is implemented through the following strategies and programs, detailed within this report:	
	• Our corporate governance programs and policies	64-68
	• Our risk management program and frameworks	69
	• Our compliance in accordance with Acts of Parliament	69, 152-155
	• Our Code of Conduct	melbournewater.com.au
	• Our protected disclosure policy and procedure	155

Appendix J – Letter of Expectations

Priority Area	Key Performance Indicator	Page reference
Climate Change	E2 Emissions reduction	161
	E3 Climate adaptation	60
Customer and Community	C1M Customer satisfaction	38, 142
	C2 Delivery of engagement strategy	39
Water for Aboriginal cultural, spiritual and economic values	AC1 Engagement of Aboriginal communities	42, 49, 58
	AC2 Engagement of Traditional Owners	30, 33-34, 37, 42-43
	AC3 Reconciliation Action Plan	42
Resilient and liveable cities and towns	L1 Integrated Water Management	9-10
	L2 Water efficiency	11-16
Recognising recreational values	Rec1 Recreational values	29-35
Leadership and Culture	G1 Diversity and inclusion	49-50
	G2 Board performance review	Not required
	G3 Health and safety	44-46, 162
Financial Sustainability	F1 interest cover F2 gearing ratio F3 internal financing ratio F4 current ratio F5 return on Assets F6 return on equity F7 EBITDA Margin	141
	F8 Credit rating.	Not required



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