



Melbourne Water Annual Report

2019-20

Enhancing Life and Liveability

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

Much of the infrastructure created over that time is still in use today – a testament to the ingenuity and foresight of those who came before us. We are continuing this legacy by building new and resilient infrastructure to meet the challenges of today and the future, while keeping prices as low as possible.

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 work hard to deliver sustainable public health, financial and environmental solutions such as providing affordable, clean water for homes, gardens and businesses, keeping our city clean and people healthy with effective sewerage services, and creating opportunities for community recreation and enjoyment of the land and waterways that Melbourne Water owns.

Melbourne Water does not work alone. We engage and collaborate 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 services our customers value.

With the ever-present challenges of a changing population, 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.

We are responsible for the management of critical infrastructure and the delivery of essential services that supports our customers and communities. As our business responds to the impact of Coronavirus (COVID-19) on Victoria and our nation, we are gratified by how efficiently and effectively our workforce has adjusted to the evolving restrictions and constraints we all must operate within. We are committed to supporting Victorian communities and businesses and continuing to provide the high levels of essential services the community expects from us. In cooperation with the Victorian Government's 'Working for Victoria' initiative, we are providing direct employment opportunities for more than 100 people impacted by the COVID-19 pandemic.

Our focus is not only to deliver exceptional and affordable 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 2019-20* describes Melbourne Water activities undertaken between 1 July 2019 and 30 June 2020 to meet our customers' 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 www.melbournewater.com.au.

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

Photos in this document were taken prior to the commencement of physical distancing rules in March 2020.

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 Woi wurrung, 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, economic and spiritual connections of all Aboriginal Victorians. We also acknowledge the broader Aboriginal and Torres Strait Islander community and their connections with lands and waters, and recognise and value their inherent responsibility to care for and protect them for thousands of generations.

Melbourne Water acknowledges Aboriginal Victorians as Traditional Owners and, in the spirit of reconciliation, we remain committed to developing partnerships with Traditional Owners to ensure meaningful, ongoing contributions to the future of land and water management.

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The Year in Review

Report from the Chair and Managing Director

As a provider of essential water supply, sewerage, drainage and waterway management services to the greater Melbourne region, Melbourne Water has played an integral role in helping to build the modern liveable city we see today. We are proud of our contribution to Melbourne's liveability. We continually examine how we can evolve our business to ensure we are meeting the challenges we face by listening to our customers, empowering our people, utilising technology and continuing to deliver world-class services.

Managing risk and building resilience

Our integrated risk management framework and ongoing focus on building business resilience in all areas has enabled us to manage the impacts of the COVID-19 pandemic without any interruption to our services. While the pandemic has brought challenges, we have embraced this opportunity to innovate, not just in delivery of our core services, but more broadly across the business, for example digitising our educational tour of the Western Treatment Plant (WTP) as part of a new online education hub to support educators and students learning remotely.

To ensure the services we provide to our customers and community are secure, we manage multiple risks in our operating environment – from adapting to variation in rainfall and water availability every year to reducing the impact of critical events such as flooding and bushfire – while minimising cost to our customers.

Planning for the continued impacts of climate change presents an ongoing challenge across all our services. This year we have further strengthened our approach to climate risk management by including recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) in this year's report for the first time.

We are committed to minimising our own contribution to climate change by becoming a net-zero emissions business by 2030. We have made significant progress towards this goal with investments in renewable electricity generation from biogas generated in sewage treatment and mini-hydro plants that capture the energy of water moving through our water mains. Reducing our emissions generated from the sewage treatment process – an industry wide issue – is critical to achieving this goal. To tackle this global challenge, we ran an international contest to identify emerging methods that were not yet commercially developed. The winning entry was awarded to Cranfield University/AECOM/RMIT group, and we look forward to the results of laboratory trials of this promising new innovation.

Investing in our people

Enabling our people to be more flexible in how they work has been an area of focus for several years and has been critical to our success in managing the restrictions imposed as a result of the COVID-19 pandemic this year. Our work to embed this flexibility in organisational culture and investment in a suite of mobility tools meant that 80 per cent of our people, including many in operational roles, were able to switch to remote working within a few days as the COVID-19 pandemic evolved. Only our staff performing essential physical works remain onsite, operating as segregated teams within strict physical distancing protocols to ensure safety for our people and the community. Throughout this difficult time the Melbourne Water team has demonstrated great capability and resilience. We are gratified by how well everyone at Melbourne Water has responded and got on with their work in such a diligent, flexible and safe way.

Our approach to supporting our people during COVID-19 has been highly successful – this year we've recorded an overall employee engagement score of 80 per cent, up from 76 per cent last year, placing us among the most engaged workforces across Australia.

Workplace safety is an absolute priority and the audit conducted by WorkSafe during 2019 demonstrated a significant improvement in our safety performance since 2015. These improvements provided the regulator with additional confidence in our approach, extending the period between future audits to six years, rather than the standard four.

Engaging with customers and the community to help shape the future

This year we engaged extensively with our customers and community to understand their current and future needs when developing our next Pricing Submission to the Essential Services Commission (ESC), Victoria's independent pricing regulator. Our submission is built on insights collected using innovative approaches including digital gamification, targeted deliberative panels and focus groups. The approach included engagement with Traditional Owners and consultation with councils, community groups, statutory authorities and the property development industry.

Our approach to community engagement underpins our highly regarded Reimagining Your Creek initiative that works with local communities to develop a vision to transform stormwater drains and degraded creeks into natural waterways and desired open spaces. This year, the program delivered the first 'reimagined' waterway along a stretch of Arnolds Creek in Melton West. The project is a fantastic example of what can be achieved when we come together with the community, local and State government to work towards a shared vision of Melbourne's waterways.

Educating the community about the need to tackle the challenge of water security into the future is an important part of our role. We continued our work to build understanding of water issues across the community, empowering them to work with us to co-design solutions at the local level. Our water-saving behaviour change campaign, 'Make Every Drop Count', was delivered in partnership with Melbourne's retail water companies and the Department of Environment, Land, Water and Planning (DELWP).

Driving change with technology

This year – in conjunction with Deakin University – we pioneered the use of virtual reality (VR) in system design and safety inspections. We were honoured with inclusion in the influential 2019 *AFR BOSS* Most Innovative Companies list, ranking third in the Government, Education and Not-For-Profit category. We were recognised for our Virtual Reality Multi-User Training Platform, a world-leading approach to flexible VR technology. The platform has a number of uses, from identifying hazards in buildings that are yet to be built to helping the community visualise what future parks and creeks might look like after rebuilding.

In our water services, we embarked on the first stage of an ambitious program that uses technology to optimise operation of our water network through smart automation. The project will minimise pumping costs and chemical usage by allowing the output of our treatment plants to be more frequently adjusted to meet downstream requirements.

Across our drainage network we piloted new technology that uses artificial intelligence (AI) and the internet of things (IoT) to preemptively identify potential blockages and maintenance issues, reducing the incidence of overflow during storms. We are also trialling the use of AI to build flood resilience by alerting communities in advance of rainfall events that can lead to flash flooding, based on past rainfall and flood data to predict flood risk in real time.

Supporting Victorians and the Victorian economy

In cooperation with the Victorian Government's \$500 million 'Working for Victoria' initiative, we created in excess of 100 new jobs for those in our community impacted by the COVID-19 pandemic. This initiative helps lessen the social impact of the pandemic and supports the broader Victorian economy, while strengthening our collaboration with other authorities and local councils along our many urban waterways.

Our commitment to affordable services means an ongoing focus on prudent financial management of our operations. This year a national benchmarking study by the Water Services Association of Australia (WSAA) noted that our operational costs are the lowest of any like provider in Australia, demonstrating the benefits of our longstanding approach to financial sustainability and value for money services.

We take this opportunity to thank our government stakeholders, partners, suppliers and the community for their part in helping us to provide valued services to all Melburnians. We also extend our appreciation to every individual working at Melbourne Water, whose resilience and commitment to making Melbourne a great place to live is the foundation of our success.

In accordance with the *Financial Management Act 1994*, we are pleased to present Melbourne Water's Annual Report for the year ended 30 June 2020.



A handwritten signature in dark ink, reading "John Thwaites". The signature is written in a cursive, flowing style.

John Thwaites
Chair

28 August 2020



A handwritten signature in dark ink, reading "Michael Wandmaker". The signature is written in a bold, blocky style with some overlapping strokes.

Michael Wandmaker
Managing Director

28 August 2020



Who we are and how we work

Melbourne Water is owned by the Victorian Government and is the supplier of wholesale water, sewerage, drainage and waterway management services for greater Melbourne.

Photo taken in May 2019

About Melbourne Water

We manage water supply catchments, treat and supply drinking and recycled water, remove and treat most of Melbourne's sewage, and manage waterways and major drainage systems in the Port Phillip and Westernport regions.

We build strong relationships with our customers, stakeholders and suppliers in community, government and industry, and care for the health and wellbeing of our people.

While delivering our services, we try to create further value where possible, such as enhanced liveability, integrated water management, environmental stewardship and extracting the most from our assets.

We are a team of diverse and capable people from a broad range of specialised professions. Our people are skilled in delivering on the immediate needs of the community and the long-term requirements of the environment and future generations.

Our vision and strategic direction

Melbourne Water's vision is to enhance life and liveability across greater Melbourne and the surrounding region. We know that water is central to life. It sustains the natural environment we live in, the communities we value, and the economy we depend on.

We do this by focusing on three pillars:

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.

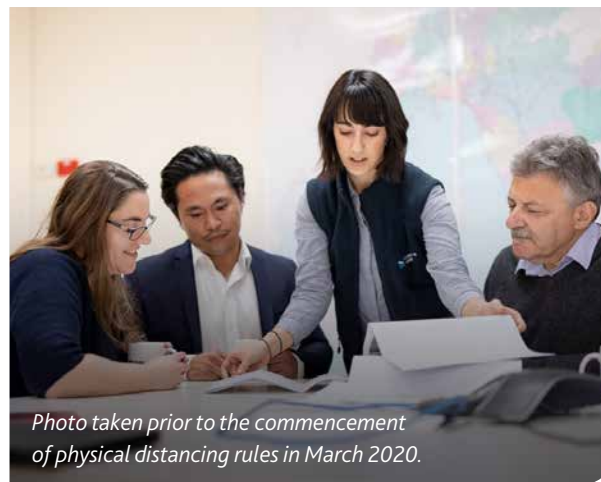


Photo taken prior to the commencement of physical distancing rules in March 2020.

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.

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 2019-20 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 KPIs provide us with a framework for setting performance targets in the long term beyond our statutory requirements.

See our statutory Performance Report (pages 145 to 147) for full details of our operational performance for 2019-20.

Building a Sustainable Community

Melbourne Water is a 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.

SUSTAINABLE DEVELOPMENT GOALS



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 demonstrated 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.

This Annual Report 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			9-11	56-64	
2 ZERO HUNGER			16-23		
3 GOOD HEALTH AND WELL-BEING	27		9-11	16-23	24-29
			36-41	46-52	53-55
4 QUALITY EDUCATION	45	9-11	42-45	46-52	65-70
5 GENDER EQUALITY			46-52		56-64
6 CLEAN WATER AND SANITATION	14	9-11	16-23	24-29	30-35
		36-41	42-45	56-64	65-70
7 AFFORDABLE AND CLEAN ENERGY	22		24-29		56-64
8 DECENT WORK AND ECONOMIC GROWTH	48		46-52	53-55	56-64
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	23,29,33	9-11	16-23	24-29	30-35
			42-45	46-52	53-55
10 REDUCED INEQUALITIES	52		46-52		
11 SUSTAINABLE CITIES AND COMMUNITIES	34	9-11	16-23	24-29	30-35
			36-41	42-45	65-70
12 RESPONSIBLE CONSUMPTION AND PRODUCTION			9-11	24-29	53-55
				56-64	65-70
13 CLIMATE ACTION	61		9-11	24-29	30-35
			42-45	56-64	65-70
14 LIFE BELOW WATER			9-11	36-41	
15 LIFE ON LAND	10,40	9-11	36-41	42-45	46-52
16 PEACE, JUSTICE AND STRONG INSTITUTIONS			46-52	53-55	56-64
17 PARTNERSHIPS FOR THE GOALS	11,41,59		9-11	30-35	36-41
			42-45	53-55	56-64

Our Resilient Business

As an essential services provider, we play an important role in supporting Melbourne's resilience to the challenges we face together, both now and into the future.

We work hard to identify the risks to our services and the business more broadly, and invest in infrastructure, technology, and developing knowledge to manage these appropriately.

Our regular Operating Environment Scan is the central element of our approach to identifying long-term trends and potential step changes that can impact the design of our services and the way we deliver them in the long term. We draw on these factors to set our organisational strategy to ensure we are positioned to respond to strategic challenges, such as the impact of climate change, changing population and demographic dynamics, and the threats and opportunities presented by technological advances.

We have developed a sophisticated Enterprise Risk Universe to identify and manage risks common to the business across all areas of our operations. The risk universe provides a comprehensive, yet concise set of risks that are considered in planning and service delivery in the near term. It sets out clear accountability for management that supports business resilience, without stifling innovation or limiting opportunities to provide better service outcomes. Our approach to managing risk is described in more detail on page 70.

Not all risks can be fully mitigated so we use our Emergency Management Framework to keep us prepared to respond to critical events – bushfires, floods, industrial fires causing waterway pollution and other significant events that have the potential to impact our operations. The framework includes our Emergency Response Plans, Business Continuity Plans, Disaster Recovery Plans and Contingency Plans, which ensure we are prepared to respond appropriately. Our commitment to skill development and training positions us to respond efficiently and effectively to the diversity of incidents we experience. We work with Emergency Management Victoria (EMV) and other State emergency service organisations to contribute to emergency responses across the State when necessary.

Our response plans in action

Black Summer

Bushfires pose serious threats to our drinking water catchments, with the potential to impact the quality and quantity of our drinking water supply. We have a range of measures in place to reduce the risk of bushfires impacting our operations, including employing approximately 40 firefighters year-round, with an extra 60-plus firefighters on board during the fire season.

As part of our emergency response management Melbourne Water works in partnership with EMV, and our agency partners including the State Emergency Service (SES), Metropolitan Fire

Brigade (MFB), and Environment Protection Authority (EPA) to support an 'all communities, all emergencies' effort.

During December 2019 and the early part of 2020, parts of regional Victoria were devastated by bushfires in an horrific period that has become known as Australia's 'Black Summer'. While these bushfires did not directly impact our area of operation, we provided firefighter support to East Gippsland as part of our involvement with Forest Fire Management Victoria (FFMV). This involved deployment of approximately 80 personnel and associated equipment and appliances over a six-week period, and operational support in the central incident command. We contributed approximately 10,000 hours of labour to frontline firefighting efforts.

COVID-19

As 2019-20 reaches conclusion, Melbourne and the rest of the world is facing the challenge of managing the COVID-19 pandemic. As a provider of essential services, our role in delivering safe, reliable water supply and sewerage management is critical to supporting good public health for the region.

When Stage two COVID-19 restrictions were announced in early March, Melbourne Water immediately activated our business continuity plans and set up an Incident Management Team. The team was focussed on ensuring we minimise the impacts of COVID-19 on our services to customers and the community, while keeping our people safe.

Our prior investment in digital infrastructure to support flexible working meant that we were quickly able to transition our workforce to a remote working environment, where the safety and wellbeing of our people, customers and the community was paramount. A small number of our staff have remained on site where necessary, and all critical roles within the workforce have been physically segregated to minimise transmission risk and in accordance with the restrictions in place. We are constantly reassessing the use of personal protective equipment (PPE) and working arrangements to ensure that we provide a safe working environment.

Our scientists have played an important role in protecting public health by helping to develop an approach to detect the virus in sewage. This data will help inform policy makers and health authorities about the level of disease in the untested population and highlight potential clusters for further investigation.

We continue to monitor potential financial impacts and market conditions and do not anticipate any significant impact in our operations or financial position.

As our remote working arrangements continue, we are focussed on enhancing our employee experience given the substantial changes to the way we work. To continue supporting our people through this rapid transition. We have introduced a program of initiatives to create meaningful experiences through a digital workplace to support continued learning and development while working remotely, and promote whole of life wellbeing.

Building our understanding of the benefits and difficulties faced by our employees during this period of unprecedented change is part of our culture as a learning organisation. We are already considering the future of work beyond the pandemic, identifying what we want to take forward and leave behind in shaping new ways of working in the future for individual, organisational and societal benefit.

Engaging With Traditional Owners, Our Customers and Community

Through leading and best practice engagement we deliver essential services that are co-created and valued by our community.



Photo taken prior to the commencement of physical distancing rules in March 2020.



The essential services Melbourne Water delivers are shaped and influenced by the current and future needs and priorities of our customers and community. We engage with them extensively as our strategies, plans and projects are designed to embed the outcomes that are most valued.

We develop relationships with our customers and partner with them to deliver shared services to our community. Our community represents 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. For detailed information on our customer service and performance, see 'Proudly Customer-Centric' on pages 43 to 45.

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

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 continuing 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.

Our aim is to work in partnership with key stakeholders in a clear and transparent way. This year, numerous activities and events have brought Melbourne Water and Traditional Owners together. Relationships have been fostered through large-scale projects and engagement with our regional services teams.

Since the Aboriginal Engagement team was established in January 2019, Melbourne Water has delivered 35 activities to 500 staff, including 10 smoking ceremonies.

Reconciliation Action Plan

The implementation of our Innovate Reconciliation Action Plan ensures the contribution of Aboriginal and Torres Strait Islander peoples are an integral and continual part of our work and relationships.

To celebrate the 2019 International Year of Indigenous Languages, Melbourne Water hosted several activities during August, including a language forum with local and interstate speakers and staff, and cultural site tours with Bunurong and Wurundjeri Traditional Owners. The showpiece event was the week-long Yaluk Biik Baan Art Exhibition, featuring works from Traditional Owners and participants from The Torch, an organisation that supports Indigenous offenders and ex-offenders in Victoria through its Indigenous Arts in Prison and Community Program. Volunteers sold 11 paintings from the exhibition, raising over \$3,000 for the Peter Cullen Indigenous Scholarship, which funds Aboriginal and Torres Strait Islander people to participate in a Trust program for water and environment managers. Many Melbourne Water staff members and external visitors explored the exhibition.

We are working to foster stronger cultural understanding through our education program. Cultural content underpinned the 2019 Kids Teaching Kids Conference event for the first time, with an Acknowledgement of Country and a speech from Melbourne Water’s Principal Advisor of Aboriginal Engagement, Nova Peris OAM, on the opening day and a Welcome to Country, smoking ceremony and cultural activities with Uncle Bill Nicholson, Wurundjeri Woi wurrung Elder, on the second day for 600 students from 30 schools at Collingwood Children’s Farm.

As part of 2020 National Reconciliation Week, we celebrated the connection between Melbourne Water and Wadawurrung at the Western Treatment Plant (WTP) and unveiled an artwork by local Wadawurrung artist Billy-Jay (BJ) O’Toole. Artworks were also procured for three key regional office locations to increase staff connection to our shared living culture. The three pieces are themed Land, Fire and Country and Sea Country. We also employed Indigenous business Yakeen Safety to design a shirt for sale to staff using elements of these works. All sale proceeds were donated to Mullum Mullum Gathering Place.

Case Study



Cultural Fire



In March 2020, Melbourne Water hosted the first Traditional Owner-led cultural fire planning workshop. Supported by Firesticks Indigenous Alliance Indigenous Corporation and DELWP, the workshop was attended by Traditional Owners

Bunurong, Wadawurrung and Wurundjeri Woi wurrung. This partnership enables Aboriginal people to self-determine the content and direction of the Melbourne Water Cultural Fire Plan for land management.

Melbourne Water is working with the Firesticks Alliance to finalise the draft Cultural Fire Plan. The next phase of this collaborative planning will see Traditional Owners inviting DELWP, Parks Victoria, Federation of Traditional Owners

Corporations and the Country Fire Authority (CFA) to workshop an implementation process with Melbourne Water.

Once the Cultural Fire Plan is endorsed by the Traditional Owners, a series of pilot cultural burns will occur over the next year. This will likely commence with Wadawurrung at the Western Treatment Plant, Wurundjeri Woi wurrung near Mount Macedon and in the Upper Yarra on Melbourne Water-owned land, followed by exploring options for Bunurong on the Mornington Peninsula.

We are considering further opportunities to trial cultural fire burns conducted by Traditional Owners at multiple sites and will monitor the outcomes.



Photo taken prior to the commencement of physical distancing rules in March 2020.

Next Generation Engagement Program

In 2019-20, we concluded our three-year Next Generation Engagement Program (Next Gen), designed to uplift community engagement through best practice engagement, guided by the International Association for Public Participation (IAP2) core values. This industry leading program resulted in community satisfaction with Melbourne Water's community engagement increasing from 65 per cent to 71 per cent over three years.

Our Next Gen program has delivered best practice engagement across all aspects of our organisation and is supported by a competency framework which has helped to build engagement capacity and capability across our technical teams. All new engagement staff are enrolled in IAP2 training as part of their induction.

Each year Melbourne Water develops complex strategies that guide our objectives, actions and targets over the medium to long term.

In 2019-20, we completed major strategic projects, including the 2021 Pricing Submission, delivering on our *Healthy Waterways Strategy* and continuing collaboration on the *Yarra Strategic Plan*. These involved significant community engagement, collaboration and empowerment, including deliberative panels and co-design approaches.

In addition, nearly 180 capital infrastructure projects and several hundred local community projects were undertaken (such as tree planting, weed control and grass cutting) to improve our local communities and protect the environment. We engaged the community in a range of ways, from community bulletins, focus groups, doorknocks and pop-up events to innovative and online approaches such as deliberative panels, co-design, digital platforms and social media.

Case Study



Engagement for the 2021-26 Price Submission



Prices for water and other essential services are set every five years by the Essential Services Commission (ESC), Victoria's independent regulator. As part of this process, Melbourne Water prepares a Price Submission for the ESC to review

before reaching a decision. This sets out our proposed service standards, expenditure and prices – and our commitments to customers – for a five-year period.

Our Price Submission for 2021–26 (PS21) has been an opportunity to explore how we can better provide services that Melburnians value. Preparation of our submission is helping us further evolve and embed our customer-centric approach by significantly increasing customer and community participation in decision-making.

Our approach implements the ESC's PREMO (performance, risk, engagement, management and outcomes) pricing framework and demonstrates how we engaged customers early, on matters of importance, and through fit-for-purpose channels which allowed for a representative sample of the customer base to share their views on issues of priority to them. Our engagement program allowed for customers to influence key aspects of our submission, and for Melbourne Water to better understand the customer experience and what customers value.

Our PS21 is the result of a comprehensive engagement program over 18 months, focussed on understanding the needs of our diverse customers across the water sector, government and industry, as well as the broader community which benefit from our services.

Throughout the consultation process we engaged our customers and the community in a range of ways, including:

- online engagement via subscribers (227), visits to the PS21 YourSay website (5,539), social media (3,666 click-throughs) and the Day Trip water education game (8,258 played)
- direct engagement via three deliberative panels (100 people), 20 focus groups (totalling 145 participants), and an online panel and five community festivals (attended by 1,500 people)
- research and surveys, with 3,903 residents and 385 businesses responding to two surveys
- Traditional Owner engagement with Wadawurrung, Bunurong and Wurrundjeri Woi wurrung and partner consultation, including 14 members from councils, community groups, statutory authorities and the development industry on the Waterways and Drainage Customer Council.

Through our engagement program, Melbourne Water has aimed to not only develop a submission that reflects the experiences, priorities and values of Melburnians, but also sets the foundation for ongoing conversation about services to support future generations.

Our submission is focussed on affordability, while still delivering the high-quality services Melburnians value and preparing for a resilient, sustainable future.



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 maximises benefits for our customers and the broader community.



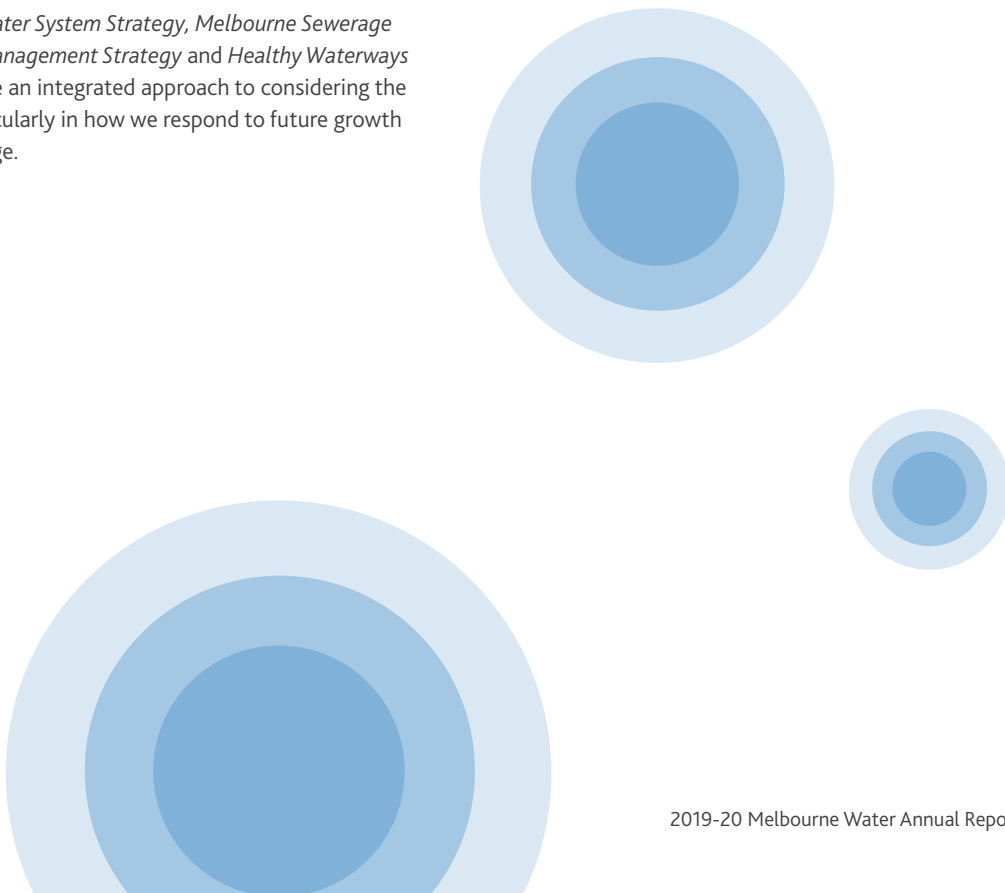
The combined pressures of ongoing population growth and climate change affect the entire water cycle. These impacts range from an increase in demand for water to generating more stormwater in the urban environment, as well as a reduction in the amount of water captured by our water supply catchments.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

Melbourne's long-term resilience and water security depends on Integrated Water Management (IWM). IWM is the concept that all parts of the water cycle are connected, from water supply to sewage management, wastewater treatment, flooding and stormwater capture. By taking an integrated approach when planning and delivering these services, we can achieve improved value for the community and better outcomes for the environment over the long term.

The *Melbourne Water System Strategy*, *Melbourne Sewerage Strategy*, *Flood Management Strategy* and *Healthy Waterways Strategy* each take an integrated approach to considering the water cycle, particularly in how we respond to future growth and climate change.

In 2019-20, Melbourne Water's IWM practice underpinned our approach to supporting greenfield and major urban renewal precinct development planning and improved liveability in existing and planned suburbs, as well as the health of our waterways. Taken together, these strategies and initiatives are contributing to the five key benefits of IWM:

- safe, secure and affordable supplies in an uncertain future
- effective and affordable wastewater systems
- effective stormwater management that protects our urban environment
- healthy and valued urban landscapes
- community values reflected in place-based planning.



Case Study



Engaging the Community – Sunbury’s Water Future



Sunbury has been identified as a growth area by the Victorian 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 mean we need to meet the growing demand for water, manage the increased wastewater and stormwater, and minimise environmental impacts.

To address these challenges, Western Water, Melbourne Water, Hume City Council and DELWP are working together to investigate future water solutions for the Sunbury region. As part of the engagement process, Sunbury’s Water Future community panel, consisting of more than 30 local residents and businesses, explored and deliberated topics and solutions related to the future of Sunbury’s water management.

Strong themes of environmental sustainability, making the most of local water supplies, and waterway protection underpinned the panel’s recommendations. The panel recommended a transformational approach to using alternative water, encouraging and educating the community on water efficiency, and improving stormwater management in urban development.

Melbourne Water is continuing to engage with the community and key stakeholders to use the panel’s recommendations to the greatest extent possible in the development of a detailed IWM servicing plan, which will be completed by 2022. The plan includes further community engagement, actions to align urban and water planning, as well as a commitment to a leading-edge pilot for stormwater harvesting in the precinct. This will be delivered concurrent to the first phase of development and will enable Melbourne Water to take an adaptive approach to achieving the outcomes of both the panel and broader drive towards IWM.

Integrated Water Management forums

The Victorian Government’s water policy, *Water for Victoria*, commits to putting IWM into practice and 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’ to collaboratively identify and explore IWM opportunities and develop a prioritised work program for investigations and investment. These types of opportunities help us to protect waterways, reduce demands on the potable network, better manage flooding risks, and create a diverse water portfolio in an uncertain future.

During 2019-20, Melbourne Water participated in 11 IWM forum sessions across the Port Phillip and Westernport region. A key focus this year was beginning development of catchment-scale IWM plans for each forum. Melbourne Water contributed to this process, which included:

- advising on outcomes and indicators for IWM, which were aligned to the seven IWM Forum Strategic Directions Statements
- providing technical advice to DELWP on our services
- providing data and advice to contribute to the development of catchment water balances
- contributing to the development of a business-as-usual case to inform the development of the catchment-scale IWM plans. A future desired state will be developed to align with the visions of Melbourne Water’s service strategies – the *Healthy Waterways Strategy*, *Melbourne Sewerage Strategy*, *Melbourne Water System Strategy* and *Flood Management Strategy*.

Facilitating Integrated Water Management for urban development

Significant opportunities have been identified for collaborative investment in IWM within new developments to improve water security, re-use wastewater and achieve healthy waterways consistent with community aspirations.

In addition to pursuing opportunities within growth corridors such as Sunbury and Upper Merri Creek, supporting council and retail water businesses on Precinct Structure Plan or development scale IWM opportunities, Melbourne Water is collaborating with the Department of Jobs, Precincts and Regions (DJPR) to help plan major urban renewal.

Both the Fishermans Bend Framework and the Arden Vision require new buildings to meet Green Star ratings, contributing to future sustainability. Necessary investment in flood mitigation infrastructure provides an opportunity for facilitating IWM, where possible, supporting State and local government and retail water businesses to deliver multiple benefits via these assets.

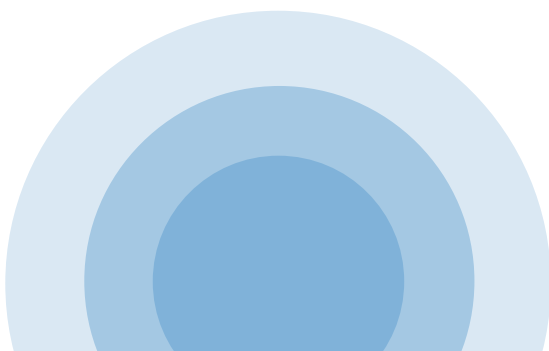
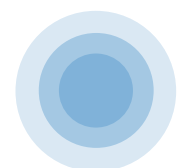
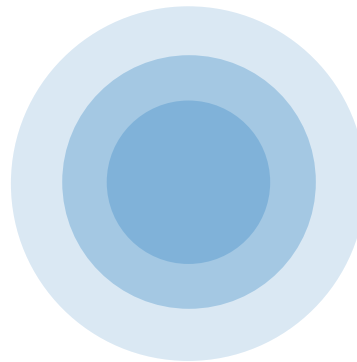
Both the Fishermans Bend Framework and Arden Vision projects offer opportunities for a green, community-focused public realm, either via open space flood storage or 'green streets' that combine flood mitigation and other benefits such as recreation, community use or cooling. There are also opportunities for stormwater harvesting, rainwater tanks or increased use of recycled water.

Integrated Water Management capacity building and education with Clearwater

Established in 2002, the Clearwater program aims to improve the quality of Victoria's water environments by better managing urban stormwater and ensuring industry makes use of the latest technical and scientific information. Clearwater helps professionals, organisations and the sector take an integrated approach to water management through network building, specialised training workshops, guided technical tours and other knowledge-sharing activities.

Clearwater has been working with DELWP to deliver an online decision-making tool to support council staff, developers and consultants across Victoria with the application of a specific Victorian Planning Policy: Planning Amendment VC154. The tool is expected to be launched in August 2020.

Clearwater helped deliver IWM in 2019-20 by presenting 12 events, connecting with 398 participants from 106 organisations, and fully funding two water leadership program scholarships (one of which is dedicated to emerging Indigenous water leaders). Some of these were delivered in partnership with Stormwater Victoria, the Cooperative Research Centre for Water Sensitive Cities (CRCWSC) and the International Water Centre.





Supply of Water Products

We provide reliable, affordable, fit for purpose water to our customers and the community and plan to ensure the supply is secure, now and in the future.

OUR WATER SERVICE SUPPORTS



HEALTHY PEOPLE



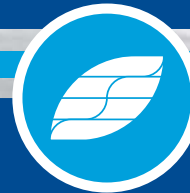
providing world-class water quality and reliable supply that underpins public health.



HEALTHY PLACES



building a portfolio of water supply sources that creates water security for agriculture and green open spaces.



HEALTHY ENVIRONMENT



balancing the needs of the environment and our customers through responsible management of water supplies.



WE HAVE ENHANCED LIVEABILITY IN 2019-20



Improving toilets and shower facilities for campers and visitors as part of the upgrade to the Dam Wall at Upper Yarra reservoir. We are also working with Yarra Ranges Council and Parks Victoria to install a new playground.



Delivering 2km of shared user trail and revegetation as part of St Georges Road Water Main Renewal, now the number 3 commuter path in Melbourne.

Supply of Water Products



A safe and secure water supply is essential to our way of life.



To ensure Melbourne’s water supply remains secure, Melbourne Water manages catchments, water storages and the water transfer network to meet the needs of a growing city. We prepare for droughts, floods, bushfires and other events.

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 needs minimal treatment, providing a high quality, 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 standards as water from closed catchments.


156,700
 HECTARES OF PROTECTED CATCHMENTS

and
142,000
 HECTARES OF OPEN CATCHMENTS


10 STORAGE RESERVOIRS
 TOTAL CAPACITY
1812 BILLION LITRES

14 WATER TREATMENT PLANTS
221 KM AQUEDUCTS


449 BILLION LITRES
 HIGH-QUALITY DRINKING WATER DELIVERED TO CUSTOMERS AND THE COMMUNITY

VICTORIAN DESALINATION PLANT UP TO
150 BILLION LITRES PER YEAR

 **1067** KM WATER MAINS 

Managing water security

In 2019-20 we continued to deliver our *Melbourne Water System Strategy* and collaborated with DELWP on a number of projects that build regional water security in the long term in line with the relevant Sustainable Water Strategy. These included the Water Grid Partnership, established to improve the current and future water grid and how it operates, and the pilot water grid stress test, exploring hypothetical scenarios and potential responses to extreme conditions.

To support DELWP develop the forthcoming *Central and Gippsland Region Sustainable Water Strategy*, we contributed to the recent Southern Market Trial and scoping studies of possible system augmentation scenarios. We also helped to finalise the Long Term Water Resources Assessment, a key input to the sustainable water strategy.

In July 2019, Melbourne's 10 storages noted in 'Melbourne's water supply system' below were 50.1 per cent full (907.3 billion litres). In December 2019 they climbed to 63.9 per cent (1158.7 billion litres). By June 2020 they were at 63.8 per cent (1155.8 billion litres). Storage levels at 30 June 2020 were the highest for this time of year since 2015, and well above the low of 26 per cent (453.2 billion litres) experienced in 2009.

Storages showed a welcome net increase of 13.7 per cent in 2019-20 as a result of both above average rainfall and a desalinated water order of 125 billion litres. However Melbourne's storages were last above 90 per cent full in 1997, as shown in the Melbourne water storage chart on page 19.

Melbourne will need to rely on both rainfall on water supply catchments and drinking water from the Victorian Desalination Plant to refill storages over the long term.

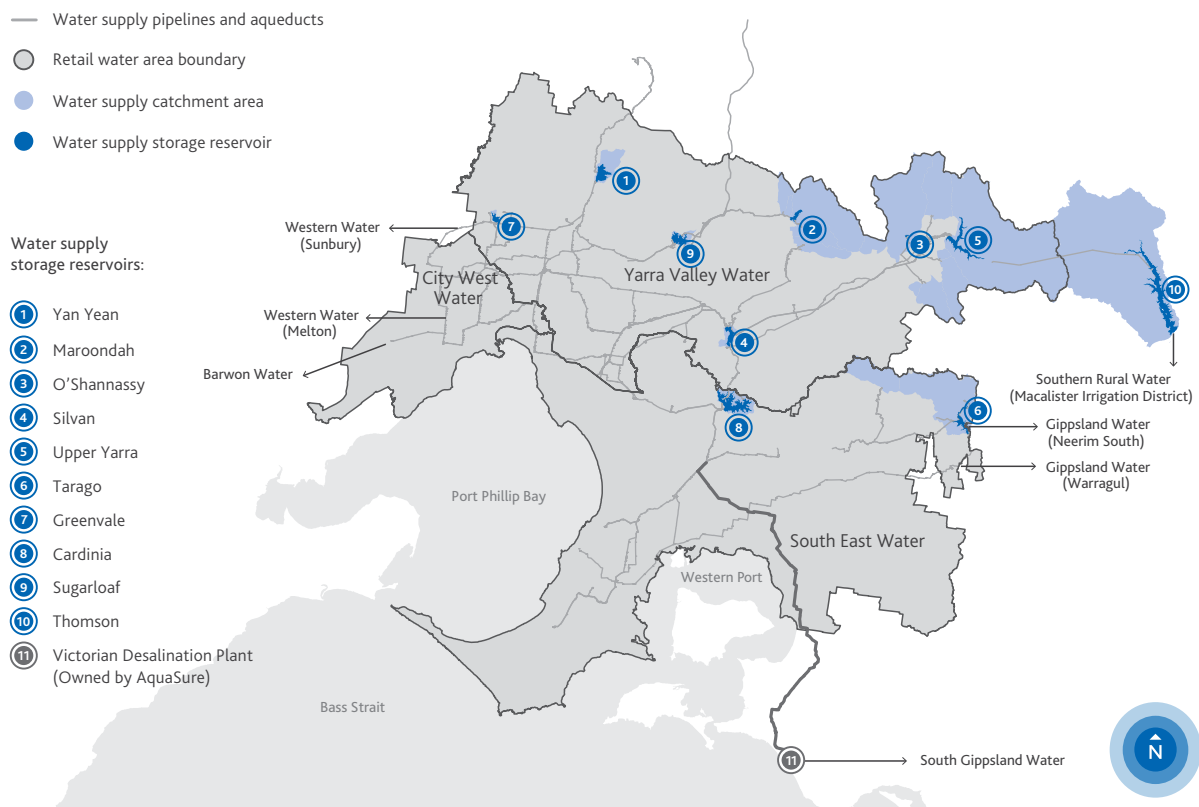
Water in Melbourne's storages typically increases during the winter-spring filling season before being drawn down during the warmer, drier summer-autumn period. Winter-spring in 2019 saw catchment rainfalls (up 9 per cent) and inflows (up 6 per cent) above the 30-year average. The monthly average rainfall chart (page 19) shows that monthly rainfall across Melbourne's storage catchments varied from a high of 168 millimetres in April (2020) to a low of 20 millimetres in December (2019). The total rainfall of 1235 millimetres for the 12-month period was 17 per cent above the 30-year average.

The monthly reservoir inflow varied from a high of 104 billion litres in August 2019, to a low of 18 billion litres in March 2020.

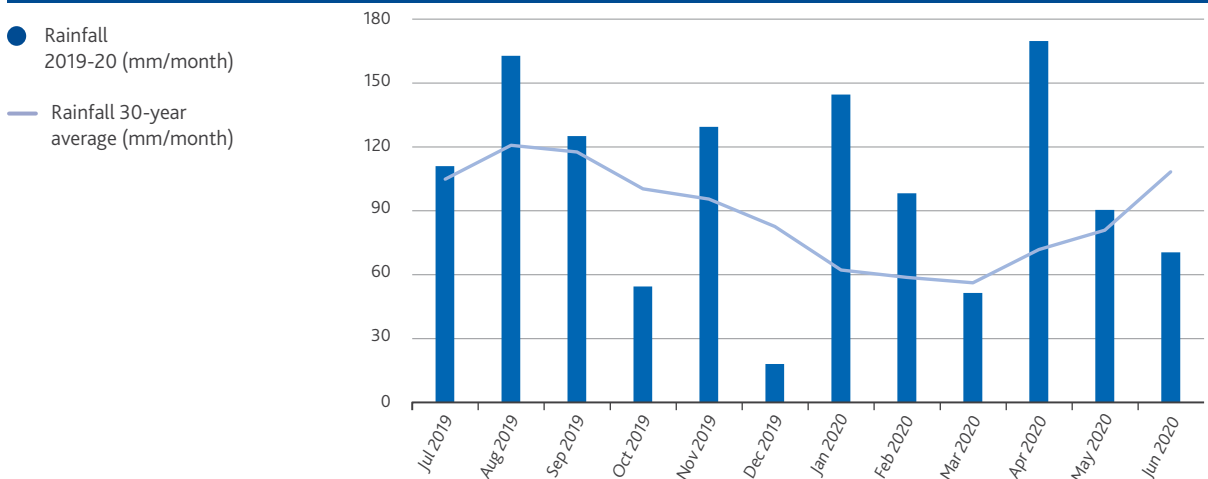
The 2019-20 total inflow to Melbourne's four major harvesting storages (Thomson, Upper Yarra, Maroondah and O'Shannassy) of 615 billion litres was 27 per cent above the 484 billion litres average of the last 30 years. They were 48 per cent above average for the period since 1997, which is a DELWP scenario for future water resources planning to represent recent streamflow conditions.

However, 2019-20 inflows were less than 1 per cent above the long-term average of 613 billion litres for the pre-Millennium Drought period (1913-14 to 1996-97).

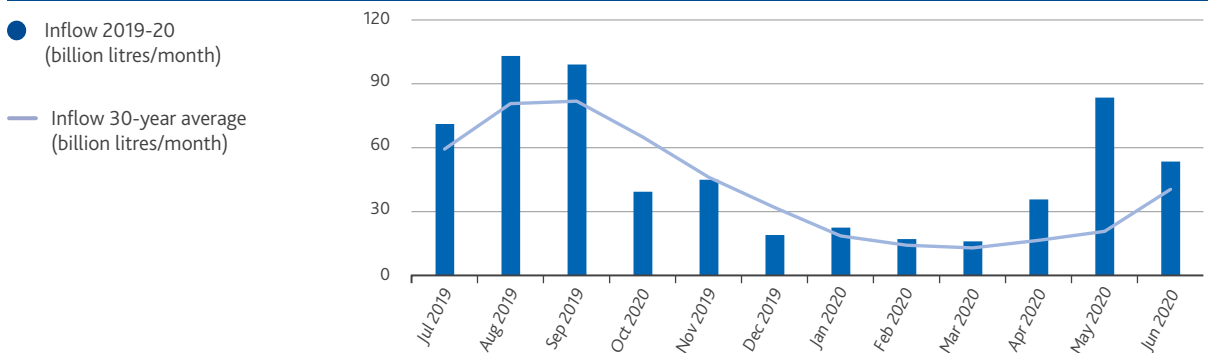
Melbourne's water supply system



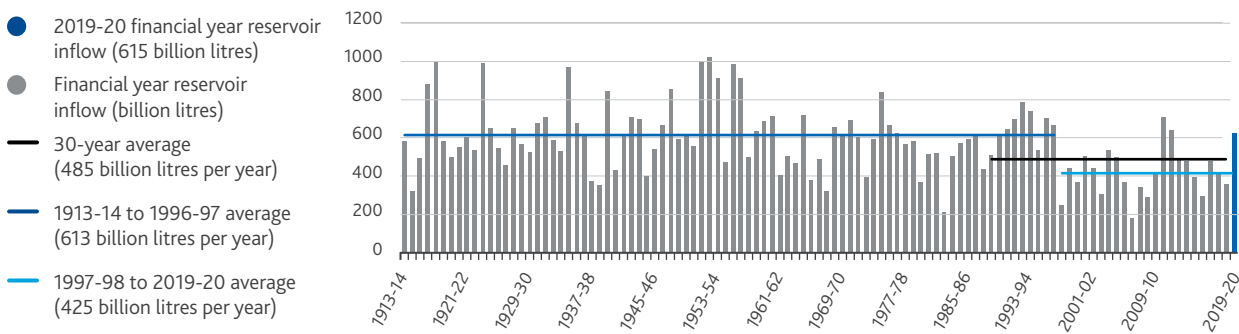
Monthly average rainfall at Melbourne's major harvesting reservoirs



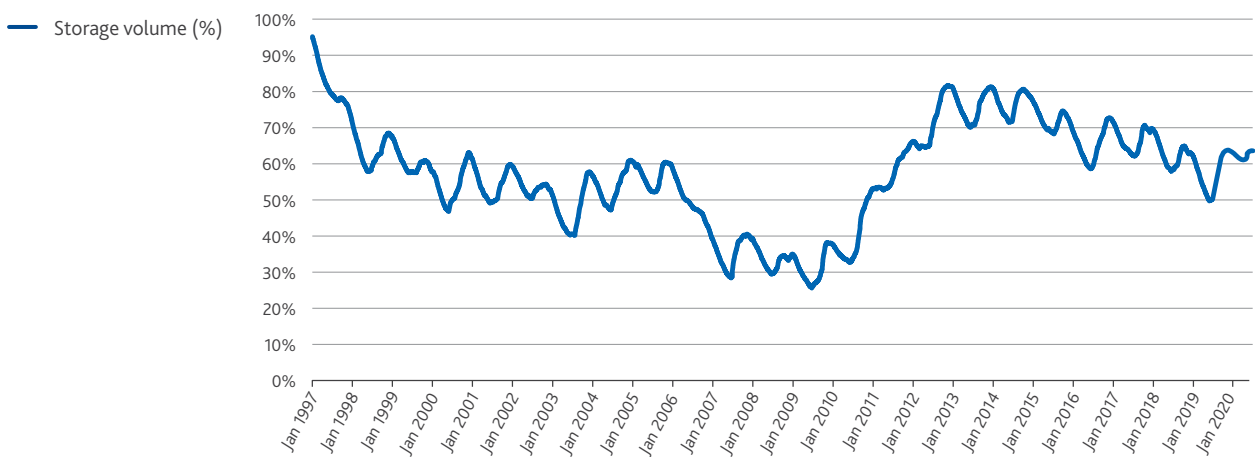
Monthly average inflow at Melbourne's major harvesting reservoirs



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



Melbourne water storage

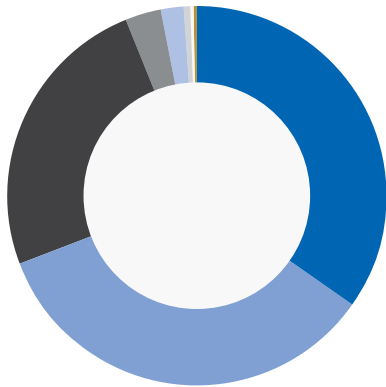


Water from the Victorian Desalination Plant

Melbourne’s water system also includes the Victorian Desalination Plant (VDP), 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 Victorian Government ordered 125 billion litres of drinking water from the VDP for 2019-20, with 118 billion litres delivered in 2019-20 and 7 billion litres in June 2019. The Minister for Water also announced an order for a further 125 billion litres to be delivered in 2020-21. Operational and planning advice provided by Melbourne Water and Melbourne’s retail water companies helped inform this decision. Since 2017, more than 200 billion litres of water has been supplied from the VDP. Without this water, Melbourne’s water storages would be around 11 per cent lower than they were on June 30.

2019-20 retail water consumption



- 34.8% Yarra Valley Water 156.4 billion litres
- 34.5% South East Water 155.2 billion litres
- 24.6% City West Water 110.5 billion litres
- 3.2% Western Water 14.2 billion litres
- 1.9% Barwon Water 8.7 billion litres
- 0.6% Gippsland Water 2.9 billion litres
- 0.3% South Gippsland Water 1.2 billion litres
- <0.1% Westernport Water 0.2 billion litres

Supplying our Customers

Melbourne Water supplied 449 billion litres of water in 2019-20, which is 2 per cent less than last year, to meet customer demand for water.

Water consumption

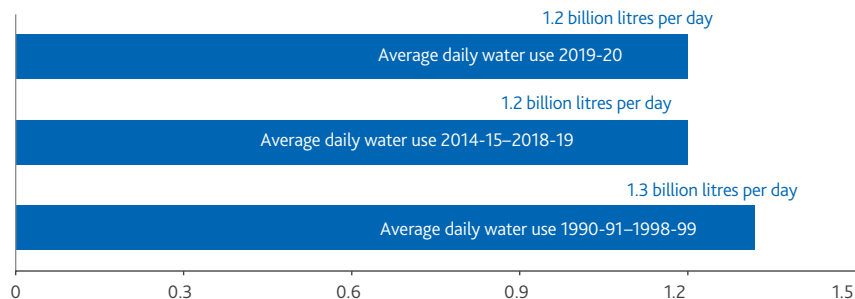
Permanent water saving (use) rules apply across Victoria so we continue to use water wisely. Melbourne’s residential water use in 2019-20 was 154 litres per person per day¹ – meeting the Victorian Government target of 155 litres. This is 8 litres less than both last year’s consumption and the five-year average.

Melburnians averaged 1.2 billion litres of water use per day this year – equal to the last five-year average. This is despite ongoing growth in population over the five-year period. While water consumption has been generally increasing over the past eight years, it is 20 per cent lower than in 1997.



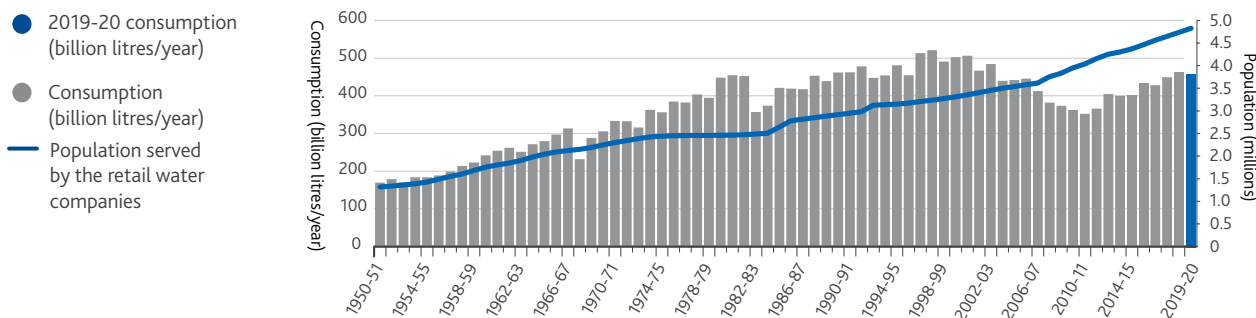
Average daily total water use for Melbourne including non-residential

● Average daily water use (billion litres per day)



(1) This estimate uses actual water consumption for the first three quarters of 2019-20 and estimated water use for the April-June 2020 period. This approach is necessary due to the quarterly billing cycle for retail water customers, meaning that the actual data is not complete until October. Given the timing of the COVID-19 pandemic, there is significant uncertainty in the estimated water use in the April-June period related to changes in behaviour, including work from home directives.

Long-term total consumption by financial year



Driving water conservation

With Melbourne’s population growing and climate change making rainfall less reliable, we all need to do our part to secure Melbourne’s water supply now and into the future.

Melbourne Water works closely with Melbourne’s retail water companies to promote efficient water use through public education campaigns, including the Target 155 program that encourages each household to limit water consumption to 155 litres per person, per day. In December 2019, the 'Make Every Drop Count' behavioural change campaign was launched in partnership with City West Water, South East Water and Yarra Valley Water. The campaign improved understanding of how water use impacts our water security, with post campaign analysis showing 63 per cent of Melburnians found the topic of water conservation more important than a year ago.

Our community awareness programs have contributed to Melburnians using much less water per person than they did 20 years ago, down from 247 litres per person per day in 2000-01 to 154 litres in 2019-20.

Drinking Water Quality Strategy

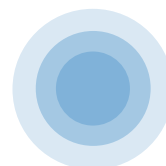
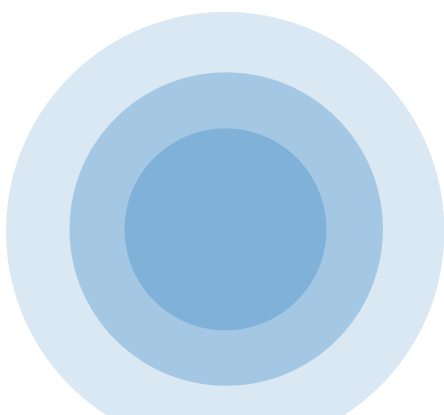
In 2019, the Catchment Management Optimisation Program was finalised, which has helped to optimise our approach to treating water to meet strict targets for public health protection. We have adopted a microbial health-based target in the *Drinking Water Quality Strategy*, which has been a strong driver in identifying opportunities for improvement within our existing processes to deliver safe, secure and affordable drinking water to our customers and the community.

The program outcomes include a range of priority initiatives, including water treatment and other infrastructure improvements, additional catchment security, pest animal management, and bushfire management, as well as identifying key benefits and risks posed by increasing access to our catchments for recreation.

Bushfires have long been recognised as a key risk for the water supply system in Melbourne, especially given the protected, forested water supply catchments which enable us to supply safe, affordable drinking water to the majority of Melbourne without the need for filtration treatment. Melbourne Water already invests in bushfire risk management initiatives, which have enabled effective responses to the bushfires in Melbourne’s water supply catchments in recent years. However, in light of the catastrophic bushfire season that affected south-eastern Australia during 2019-20, a review is currently underway to reassess the strategic resilience of the water supply system to bushfires, and to identify a portfolio of potential investment pathways to ensure strategic resilience is maintained over the short, medium, and long term.

Water quality compliance

Our commitment to delivering high-quality drinking water continued in 2019-20. 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.

We continue to explore new opportunities to increase recycled water use at both the ETP and WTP, to provide a sustainable water supply for greater Melbourne.

Recycled water volumes used onsite and supplied to our customers in 2019-20 are shown in Table 1.



Table 1: Recycled water produced for 2019-20

	Volume 2019-20 (ML)
Total sewage treated*	347,003
Total recycled water supplied	36,429
Western Treatment Plant	
Conservation flows used onsite	3611
Non-agricultural use onsite	3
Agricultural use onsite	13,944
Southern Rural Water	
– Werribee Irrigation District	3,767
– Werribee Tourist District	50
City West Water	
– Werribee Employment Precinct	183
– MacKillop College	27
– Water tankers/standpipes	-
– West Werribee Dual Supply (non-residential)	-
– West Werribee Dual Supply (residential)	522
Western Treatment Plant total recycled water	22,107
Eastern Treatment Plant	
Re-used onsite	8853
Trility – Eastern Irrigation Scheme	4026
Supply to South East Water – South Eastern Outfall	1443
Eastern Treatment Plant total recycled water	14,322

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

Case Study



Using technology to optimise our water network

7 AFFORDABLE AND CLEAN ENERGY



To deliver our services more efficiently and effectively for our customers, we launched the first stage of an ambitious program to transform our water transfer network through automation and data acquisition. The intelligent

software product, AQUADVANCED® Energy by SUEZ, assesses the entire network every 30 minutes and uses hydraulic demand modelling and inbuilt analytics to make adjustments to time-based scheduling across the system.

This scheduling optimises network use through load shifting, increased pump energy efficiency, and water re-routing techniques. The use of this technology delivers a range of benefits, including decreased chemical usage by smoothing out the flow of our treatment plants; better product consistency and plant performance; lower risk and reduced energy consumption.

The first phase of this project is now operating through the Winneke–Preston network corridor. The second phase will focus on Tarago–Cardina in early 2021 and then Silvan–Greenvale network in mid-2021.

Maintaining our world-class infrastructure

In 2019-20, Melbourne Water invested \$129.7 million in critical upgrades to our world-class water supply network. This included continued upgrade works on two critical reservoirs within Melbourne's water supply network, with a \$29.5 million investment at O'Shannassy Reservoir as part of a \$40.2 million, three-year upgrade and \$27.1 million at Upper Yarra Dam as part of a \$42.3 million six-year upgrade. These works are helping to ensure these older assets keep pace with current best-practice dam safety standards, securing Melbourne's world-class drinking water for future generations.

Case Study



O'Shannassy Reservoir Upgrade



O'Shannassy Reservoir, in Warburton East, is a crucial part of Melbourne's storage reservoirs system, supplying water to Silvan Reservoir and on to homes and business across Melbourne.

The upgrade will replace O'Shannassy Reservoir's outlet pipe and tower structure which was originally constructed in 1928. To install the new outlet pipe, tunnelling was required to navigate through a peak in the catchment, avoiding significant excavation and tree loss.

Although the catchment is closed to the public, the project team sought ways to engage the community and worked in partnership with Yarra Ranges Shire to invite local students to name the tunnel boring machine involved in the works.

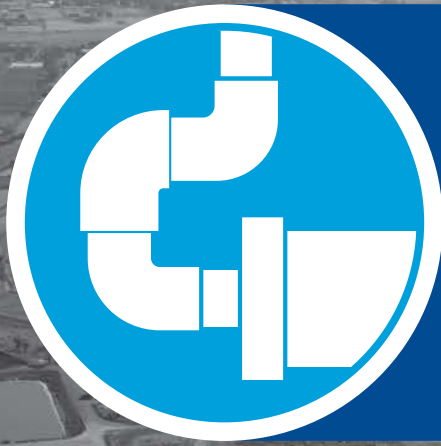
Pupils from Warburton Primary School named the machine Dr Collette Burke, in honour of Victoria's Chief Engineer. In April 2020 'Collette' completed her 425-metre journey drilling the tunnel. Melbourne Water is working with project partner, John Holland-KBR Joint Venture to install the last section of the new pipeline, which will continue to supply Melbourne with clean drinking water for future generations.

John Holland-KBR Joint Venture Project Manager Kyle Nestor said, "Our team is proud to be designing and building new water infrastructure for Melburnians. Together with Melbourne Water, we believe it is important to create local jobs when working in an area. We have hired several local people to work with us to deliver this essential project, while our team of engineers and supervisors has moved into the region."

The project is expected to be completed in late 2020.



Photo courtesy of David Hannah Photography.



Sewerage Management

We provide safe treatment and sustainable management of sewerage to the greater Melbourne region.

OUR SEWERAGE SERVICE SUPPORTS



HEALTHY PEOPLE



safely and efficiently managing sewage, underpinning public health.



HEALTHY PLACES



manufacturing recycled water as part of an integrated approach to supporting green open spaces.



HEALTHY ENVIRONMENT



contributing to a circular economy by recovering resources where possible and treating remaining sewage before it is discharged to the environment.



WE HAVE ENHANCED LIVEABILITY IN 2019-20



providing easier wayfinding, bird information board and community connection to

improve Western Treatment Plant's renowned birdwatching site.



bringing heritage and education together through an urban design approach in the

new Corococ precinct at Western Treatment Plant.



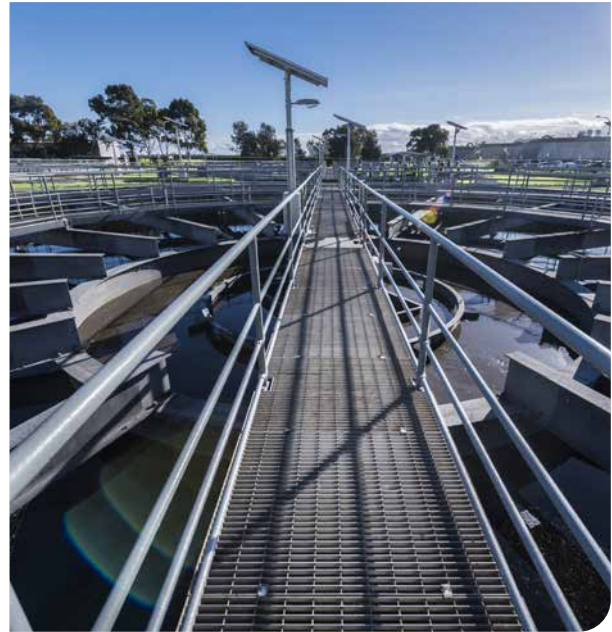
securing funding to transform 3.7km of the decommissioned Main Outfall Sewer

into lush parkland, for the next stage of the Greening the Pipeline project.

Sewerage Management



A reliable sewerage system is vital to the health of Melbourne’s people and environment, safely transporting sewage to our treatment plants for processing. Increasingly, we are recovering and reusing more resources like recycled water, biosolids and energy from the sewage treatment process to derive more environmental benefits.



Melbourne Sewerage Strategy

Along with Melbourne’s retail water companies, we work to deliver the *Melbourne Sewerage Strategy*.

The strategy takes a long-term view, planning for a population of 10 million people thriving in a water-sensitive city. The *Melbourne Sewerage Strategy* describes a 50-year transformation in our sewerage system from a mostly one-way process that collects, treats and discharges, to a circular process focused on the recovery, re-use and recycling of valuable resources like water, biosolids and energy.

Since the strategy’s release in 2018, much of the work has focused on how we begin building greater resilience into the sewerage system to ensure that in the context of increasing urbanisation, population growth and climate change, it remains reliable and continues to protect public health and the environment for future generations. A resilient sewerage system will have the flexibility to enable us to adapt quickly as new challenges arise and to take advantage of opportunities to derive more value from our assets.

Sewage Quality Risk Assessment Toolbox

Melbourne Water, City West Water, South East Water, and Yarra Valley Water each share responsibility for the management of the quality of Melbourne’s sewage and, therefore, also the resources derived from it. This year, as part of our collaborative *Melbourne Sewerage Strategy*, we partnered to develop a Sewage Quality Risk Assessment Toolbox (SQRAT) – a centralised, ‘single source of truth’ digital platform for proactively assessing sewage quality risk.

Through this platform, we are improving safety outcomes for our workforce, increasing the lifecycle of our pipes and pumps, and embedding stronger sector governance to better protect our environmental end points such as air, water and soil. Following a successful pilot with City West Water in early 2020, we are working with our metropolitan retail water company partners to transition all standard sewage risk management practices into the platform in 2021.

400 KM OF SEWERS

9 SEWAGE PUMPING STATIONS

12 AIR TREATMENT FACILITIES

60% WESTERN TREATMENT PLANT WERRIBEE



40% EASTERN TREATMENT PLANT BANGHOLME

347 BILLION LITRES OF SEWAGE REMOVED AND TREATED

Our system

Melbourne owes much of its liveability to the reliability of its sewerage system. Construction on the network of pipes, pumps and treatment plants commenced in the 1890s and the system has grown and adapted with Melbourne to ensure ongoing protection of public health and wellbeing.

Our system is characterised by two major treatment plants – the Western Treatment Plant (WTP) at Werribee and the Eastern Treatment Plant (ETP) at Bangholme – and the sewerage transfer system, which moves large volumes of sewage across the city via 400 kilometres of sewers and nine sewage pumping stations.

Delivering our service

Melbourne has a world-class sewerage system that has protected public health and the environment for more than a century. Our long-term investment planning considers the implications of external factors such as a growing population and climate change to ensure that our sewerage system continues to reliably deliver these outcomes.

In 2020, Melbourne experienced its second-wettest start to the year since 1856. The abnormal rainfall led to extremely high inflows into the sewerage system. During one such event we were required to activate a bypass around the final treatment stage at the ETP. While we usually treat the effluent to Class A quality before releasing it to the outfall at Gunnamatta Beach, this temporary bypass measure was necessitated by the unprecedented rainfalls. As soon as the elevated inflows had subsided, we reinstated the final treatment step. The local Gunnamatta community and other relevant stakeholders were kept informed during the event, and stringent management of the event ensured no impact to public health or amenity occurred.

As part of the *Port Phillip Bay Environmental Management Plan*, the WTP has a three-year rolling average limit of 3,100 tonnes per annum of nitrogen that can be discharged to Port

Phillip Bay. This nitrogen load limit was exceeded in 2019-20 as a result of higher than expected population-related growth in sewage loads entering the WTP over the past few years, compounded by the abnormally high rainfall-related inflows into the treatment plant in 2019-20. Planned works to increase the nitrogen removal capacity to address recent and ongoing growth are progressing.

Melbourne Water treated a total of 347 billion litres of sewage at ETP and WTP. More than 22 billion litres of recycled water was reused from the WTP and more than 14 billion litres from the ETP. Further details can be found in Table 1 on page 22.

Cocoroc Landscape Works

Melbourne Water strives to make the best use of our assets to promote liveability benefits where we can.

The WTP is one of Victoria's most popular birdwatching sites and an area of great cultural and historic significance. It is visited by thousands of people annually through Melbourne Water guided tours (including a virtual tour introduced this year) and self-guided access to birdwatching areas. The WTP Future Land Use Plan identified visitation and community education as key components for maximising the social, environmental and economic value of WTP for the community.

In 2019-20, we commenced landscaping for the new administration and education centre in the Cocoroc precinct as part of a \$2.1 million investment program at the WTP to encourage increased visitation and eco tourism. Cocoroc ('frog' in the language of the Wathaurung people – the Traditional Owners of the land upon which it was built) was established in 1894 to home the workers employed at the plant. The landscape design features a strong emphasis on the use of sustainable materials and creation of inviting and accessible outdoor spaces for visitors. The project will bring to life this cultural, historical and intellectual site of significance, and provide enduring benefits and value for the community.

Case Study



Collaboration on Sewage Surveillance of SARS-COV-2

3 GOOD HEALTH AND WELL-BEING



Melbourne Water is at the forefront of an innovative COVID-19 sewage sampling project to help inform policy makers and health authorities about potential clusters of people infected with the virus and timelines of potential outbreaks.

This sample analysis will help inform COVID-19 controls by indicating disease prevalence in the community.

Melbourne Water has been involved in similar sewer epidemiology projects for a number of years that involved testing for a range of pathogenic viruses in treated and untreated sewage and using that data to inform risk assessments.

The ColoSSos Project (Collaboration on Sewage Surveillance of SARS-CoV-2) tracks and monitors the presence of the virus that causes COVID-19 and its persistence in the Australian sewerage network, providing information on where it is present in the population. The national project involves 12 utility partners, six

health department and 10 research organisations and is supported by the Water Services Association of Australia (WSAA).

The research program has the potential to identify emerging or re-emergent outbreaks, better characterise the extent of asymptomatic infections and community transmission, identify the true peak in infected individuals (compared with confirmed cases) within a sewer catchment, and confirm 'clearance' of the COVID-19 virus from an area.

Sampling has commenced at different sites across Melbourne and Australia, with more than 1200 sewage samples taken since the program began. This includes 380 samples from Victoria from several sewage treatment plants, including the WTP and ETP, as well as a number of sewerage system hotspots. The method is being continuously updated to improve performance and sensitivity.

While the project is in its early stages, the methodology is promising, and may yield important new information to help inform disease control measures.



Aerial shot of Western Treatment Plant lagoons

Improving our infrastructure to support Melbourne’s growing population

We invested \$136 million in sewerage capital works in 2019-20 to support Melbourne’s future health and liveability. This included \$38 million to expand treatment capacity at the WTP and \$7.6 million to renew ageing aeration blowers at the ETP.

This year, we continued a significant program of works that began in 2012 to increase the WTP’s capacity, with the \$150 million nitrogen removal plant on track for hand over to Melbourne Water in 2021. Technical innovations in the nitrogen removal plant’s design, including advanced control, are delivering improved energy efficiency and the required treated water quality to support the environmental health of Port Phillip Bay.

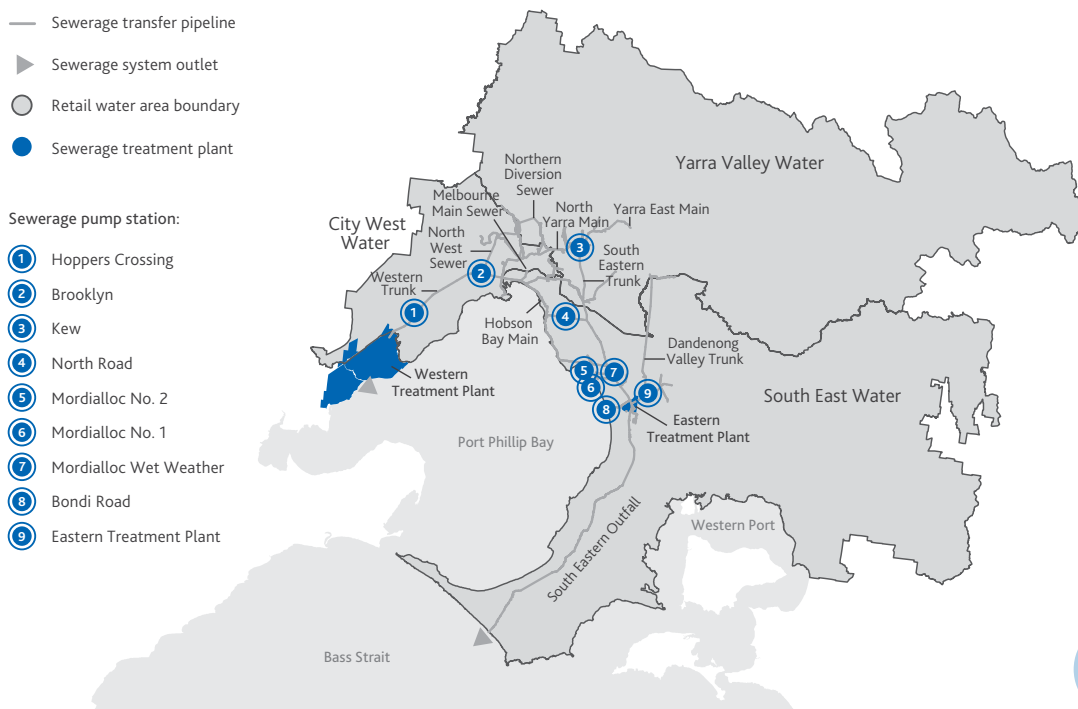
The third and final stage of a program to uplift the WTP’s nitrogen removal capacity will include new process technologies to treat sewage. Melbourne Water completed a successful pilot that lowered carbon use in the nitrogen removal process, ensuring that carbon can instead continue to be recovered for energy generation. Elements of this process are being incorporated into the design for a new nutrient removal plant, which will progress to detailed design in 2020-21.

In 2019-20 we undertook a number of sewer relining projects, including the Maribyrnong River Main Relining Project (\$12.4 million).



Photo taken prior to the commencement of physical distancing rules in March 2020.

Melbourne Water’s sewerage system



Case Study



Upgrading Maribyrnong River Main sewer

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



To provide the community with a secure and reliable sewerage service for decades to come, Melbourne Water upgraded 7.2 kilometres of the Maribyrnong River Main (MRM) sewer, one of the main sewers in our

400-kilometre network. The sewer transports 24 million litres of sewage each day from 36,000 properties in the north-western suburbs of Melbourne to the WTP.

The \$35 million project began in mid-2018 and was completed in March 2020. Using trenchless technology, we relined the inside of the existing sewer with new plastic sleeving without having to dig it up, ensuring that important cultural and environmental values of the local area were protected.

The upgrade works included rehabilitating more than 70 ageing and damaged manholes, and decommissioning others. The project delivered a number of efficiencies through strong resource planning, including having a number of crews simultaneously working in multiple locations.

Melbourne Water worked closely with several agencies and groups, including Moonee Valley City Council, Parks Victoria, Wurundjeri Land Council, Friends of Maribyrnong Valley and Friends of Steele Creek. These partnerships were critical to the project's successful completion.

We are leaving a lasting legacy by enhancing the environment and amenity of the local area through more than 10,000 native plantings, which support other revegetation works undertaken by Parks Victoria, Friends groups and Moonee Valley City Council.





Flood Resilience and Drainage

We work with our stakeholders to ensure communities are resilient to flooding and the impacts of stormwater on waterways are minimised.

OUR FLOOD MANAGEMENT SERVICE SUPPORTS



HEALTHY PLACES



building a region that is resilient to floods and manages the impacts of climate change and urban development.



HEALTHY ENVIRONMENTS



designing integrated solutions that minimise the negative impacts of stormwater on the environment.



WE HAVE ENHANCED LIVEABILITY IN 2019-20



restoring concrete drains and pipes back to living streams through the Reimagining Your

Creek program. The revitalised spaces offer improved access to open public space for respite, recreation and exercise.



improving public safety and stronger cultural connection as a result of community consultation on the

Shakespeare Grove Main Outfall Drain upgrade on Port Phillip Bay. Design contributions include a new viewing platform and reflection circle with views over the St Kilda foreshore, Luna Park and Port Phillip Bay.



partnering with Kingston Council to make flood retarding basins more accessible

to the community and providing more recreation opportunities in local areas.

Flood Resilience and Drainage



As the floodplain manager for the Port Phillip 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.



Flooding is a natural occurrence in the Port Phillip and Westernport region. Climate change and urbanisation continue to significantly increase our flood risks and we now have improved information about the impacts on our region.

Melbourne Water is leading the refresh of the *Flood Management Strategy for Port Phillip and Westernport* in close collaboration with our flood partners to enhance our collective understanding of flood risks and opportunities to address them. The strategy sets out a vision for flood management across Port Phillip and Westernport and a framework to help guide the work of the many organisations responsible for preventing, managing and recovering from flood events. The refreshed flood strategy will include the Boon Wurrung story 'The Time of Chaos', as told by N'arweet Dr Carolyn Briggs from The Boon Wurrung Foundation, demonstrating the historical and continued connection of Aboriginal Australians to land and flooding.

There are a number of organisations involved in the delivery of Melbourne's flood and drainage services, and our partners include local, State and federal government, water authorities, emergency services and the insurance sector. In 2019-20, we

facilitated a series of consultation workshops and working groups to develop the refreshed strategy and facilitated four partner workshops with 140 attendees to form strategy content. Key strategy focus areas include: delivering programs to reduce flood risk, empowering communities, achieving multiple benefits, climate adaptation, and land use planning.

We are working with Emergency Management Victoria, Victoria State Emergency Service (SES), the Department of Environment, Land, Water and Planning (DELWP) and the Bureau of Meteorology (BoM) following the successful pilot of a flood alert mobile phone app developed by Melbourne Water. Work is progressing towards partners collectively sending flash flood alerts and information to the community through the VicEmergency mobile phone app. This service will be supported by flood education and awareness provided through our partnership with the SES, helping us to meet our commitment to provide the right information, at the right time, to the people who need it. We are continuing to work with our local council partners on priority focus areas for flood planning and management through the development of Flood Management Plans.

We continue to drive stronger planning controls through planning scheme amendments – one of the most effective ways to mitigate the effects of flooding. In conjunction with councils, over the past year we have completed a planning scheme amendment for South Gippsland Shire Council, which has been gazetted by the Minister for Planning, with a further amendment currently on Public Exhibition for Moorabool Shire Council. We are progressing further amendments with the City of Melbourne, Glen Eira City Council, Kingston City Council, City of Maribyrnong and Baw Baw Shire Council. The exhibited and gazetted amendments will deliver flood data and planning controls for approximately 4000 properties.

Melbourne Water regularly makes decisions about where to undertake flood modelling and mapping, and where and how to invest in flood risk management. This year we have invested in prioritisation tools and processes to improve our flood modelling program, and better manage regional flood issues and opportunities.

In 2019-20 we completed modelling of the Cardinia, Casey, Whittlesea, Mornington and Kingston council areas in collaboration with each council. A number of other collaborative modelling projects are also progressing well with Whitehorse, Knox, Wyndham Monash and Macedon Ranges councils.

We also completed a major update to our Flood Mapping Guidelines and Technical Specifications to account for significant advances in the guidelines and data availability for flood modelling projects, including adoption of climate change scenarios in flood modelling. Embedding this industry best

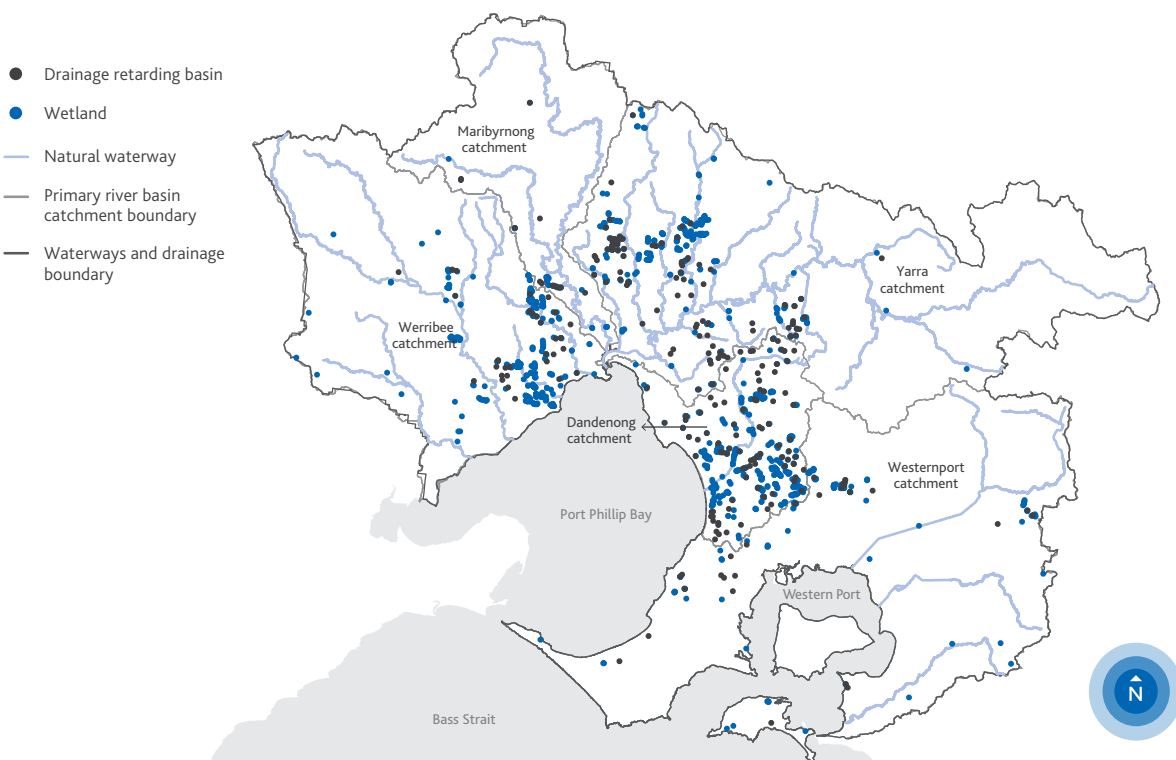
practice approach supports the current Victorian Government infrastructure program, while ensuring the protection of the community from unacceptable flood effects.

Following the release of the *Marine and Coastal Policy 2020*, Melbourne Water is working closely with DELWP to implement a number of actions outlined in the *Marine and Coastal Act 2018* and related Transition Plan, including scoping Melbourne Water’s ongoing role in providing coastal erosion advice. The Port Phillip Bay Coastal Hazard Assessment and Decision Support System will be finalised during the next year following technical advice, data and communications support from Melbourne Water in 2019-20, and will form the basis of Melbourne Water’s coastal erosion advice. We continue to support strategic planning for sea level rise in partnership with DELWP, coastal councils, the Municipal Association of Victoria (MAV) and the Association of Bayside Municipalities, as well as the development of the *Marine and Coastal Strategy 2021-2026*.

During 2019-20 \$23.6 million was allocated to construction of flood mitigation projects, including finalising a major upgrade of the Murrumbeena Main Drain (\$2.68 million).

Retarding basins are an important feature of the drainage system, helping to reduce flooding by catching heavy rainfall and holding it in a reserved, low lying area of land. In 2019-20 we worked closely with Moreland City Council and Brimbank Council to investigate and design flood mitigation works for areas with high flood risk.

Melbourne Water’s waterways and drainage system



1490 KM OF UNDERGROUND DRAIN ASSETS

70 FLOOD WARNINGS ISSUES TO BoM 

 **250** MONITORING STATIONS

 **24** DRAINAGE PUMP STATIONS

MORE THAN **4800km** OF DRAINS AND WATERWAYS MAPPED FOR FLOOD EVENTS WITH A 1% CHANCE OF OCCURRING EACH YEAR

243 FLOOD-RETARDING BASINS 

SUPPORTED DEVELOPMENT OF **23,000** HOUSES 

Case Study 

Stakeholder engagement supporting Murrumbeena to Malvern Flood Mitigation



Building infrastructure is a critical part of how we continually improve our services. The Murrumbeena to Malvern Flood Mitigation Project demonstrates how we engage local communities in helping to minimise disruption during the construction process.

was proactively managed by involving businesses, community and other key stakeholders in assessing road and rail closure options, with a commitment to finding a solution with the least impact on those affected.

In early 2020, Melbourne Water completed construction of a 2-kilometre-long, 1.8 metre diameter stormwater drain through residential streets, roads and parks between Railway Parade in Murrumbeena and the Monash Freeway in Malvern East. The \$40.9 million project delivered a new stormwater drain that reduces the impact of flooding to properties in the area that had been impacted by significant flooding in 2006 and 2011.

Construction within an urban residential environment poses many challenges. Narrow residential streets meant the community of Murrumbeena and Malvern experienced an operational construction site on people's doorstep for two years. We recognise the many challenges this posed and we appreciate the community's support and understanding during this period.

A number of community disruption challenges were encountered during the project, including an open cut crossing the Glen Waverley railway line and another crossing 12 lanes of major roads. Tree removal and construction fatigue in the area were also significant factors requiring consideration. Each of these challenges

Throughout the project, the team held several community engagement onsite sessions, hundreds of face-to-face conversations, as well as developing printed, online and media communication materials.

Our engagement strategy, along with interagency cooperation and innovative design, was critical to the success of the project – ensuring community interests were identified and balanced with the need to deliver this important part of our infrastructure network.



Photo taken prior to the commencement of physical distancing rules in March 2020.

We worked closely with Bayside City Council and residents to undertake a major flood study to investigate and design potential flood mitigation works for the Elwood Canal in Elwood. Many buildings in this location are regularly subject to flooding, resulting in significant damage. This is a challenging catchment with limited opportunities to implement cost effective flood mitigation solutions. As a result of the flood study, two hydraulically feasible options have been identified and are being further investigated to determine if they can provide effective and efficient flood mitigation outcomes to expand the existing diversion pipe to the bay and increase the existing retarding basin in Elsternwick Park. We are working with council and the Community Reference Group to progress these studies.

The adoption of new technology is helping to drive new opportunities for risk reduction and flood mitigation. To better protect our communities from flash flooding, we are developing an artificial intelligence (AI) solution with Piccard, which will learn from current live data, past rainfall and flood

data to recognise weather patterns that lead to flash flooding. This is providing far greater information about flood risk and a real-time indication of the flooding extent in an area, which can then be shared with our emergency and council partners.

Melbourne Water maintains approximately 4000 grates on drains across our network, which stop debris entering the stormwater system. Following a successful pilot in Salt Creek, Rosanna last year, we will be installing cameras and level sensors across our drainage network, which supply photos of grates to Melbourne Water. The technology also uses AI image processing to determine if the grate is blocked and needs urgent maintenance outside of the normal schedule. This data is easily shared with local councils to support communities with a reduced flood risk and is driving significant efficiency improvements in our asset management planning.

Case Study



Arnolds Creek 'Reimagined'



Reimagining Your Creek is a new, innovative urban design program that transforms Melbourne's stormwater channels and underground pipes back to natural waterways to create engaging spaces for community enjoyment, recreation and wellbeing.

The first creek being 'Reimagined' is Arnolds Creek in Melton, one of many waterways Melbourne Water manages. It is located in a highly urbanised catchment adjoining the Werribee River. Before restoration, Arnolds Creek featured a concrete channel that ran up along either side of a grassy reserve and provided little environmental or amenity value to the community.

The site has now been transformed into a health and wellness hub, delivering a series of walking paths, boardwalks and bridges that connect the community to nature and each other, and improve pedestrian and cycling connections with other transport links. A new urban forest and revegetation along the creek provide additional shade for the community, opportunities for bird movement, and mitigation of the urban heat island effect.

Melbourne Water embraced a holistic and collaborative approach in delivering the Reimagining Arnolds Creek project, in partnership with Melton City Council and

the local community. By working together with the community and local stakeholders – the people who are most likely to use the open space – the final re-design is one that better meets their needs and preferences.



Land development

Melbourne Water plays an indirect but important role in facilitating the provision of housing to our community. We work with our customers across the breadth of land development, from broadacre greenfield areas on the city's margins, through to urban renewal and development in established suburbs. We help 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.

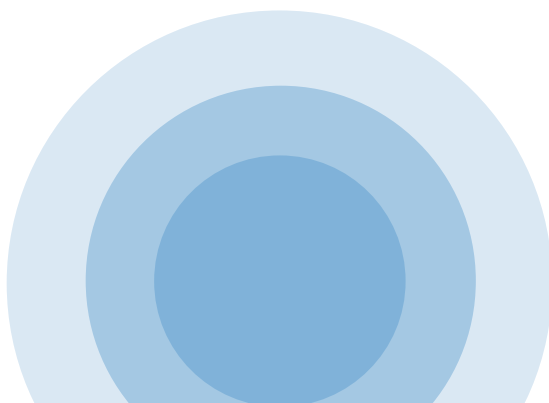
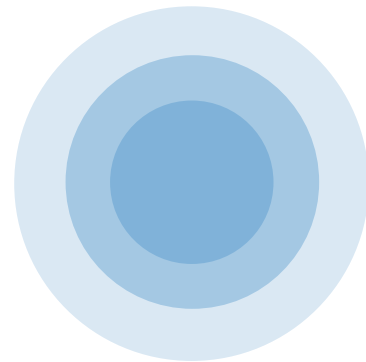
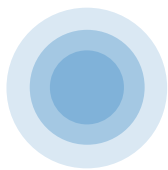
In 2019-20, we progressed stormwater management strategy designs for 29 catchments across Melbourne Water's growth areas. This work included flood and environmental studies, conceptual and detailed infrastructure design and costing and community and agency consultation. Over the past year, the Lindum Vale Precinct Structure Plan was gazetted by the Victorian Planning Authority which covered two catchment strategy areas totalling around 144 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 to contribute to Healthy People, Healthy Places and a Healthy Environment.

More than 1050 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 more than 23,000 new homes in 2019-20. We also supported development capital works, which included nine flood retarding basins, 20.5 kilometres of underground pipes to manage drainage and flood flows, 11.8 kilometres of waterway rejuvenation and 14 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 Victorian 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 and South East, the Mordialloc Freeway Project, the Monash Freeway Upgrade Project – Stage 2, the Westgate Tunnel Project, the North East Link Project, Western Outer Ring Main (Gas), the Crib Point Gas Import Jetty and Crib Point-Pakenham Gas Pipeline Project, the Metro Tunnel Project, Regional Rail Revival, Melbourne Airport Rail, Suburban Rail Loop and the Western Rail Plan.

In 2019-20, we responded to more than 9800 statutory town planning referrals for development and subdivision, over 11,300 non-statutory works applications and 2667 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.





Waterways

We manage the environment in and around waterways to ensure it is healthy for the community to enjoy.

OUR WATERWAYS SERVICE SUPPORTS



HEALTHY PEOPLE



increasing community wellbeing by improving access to nature and recreational facilities.



HEALTHY PLACES



working with our partners to enhance waterways so that they reflect community preferences.



HEALTHY ENVIRONMENT



managing waterways from catchment to coast to protect and establish healthy ecosystems and enhance biodiversity.



WE HAVE ENHANCED LIVEABILITY IN 2019-20



collaborating with councils and Paddle Victoria to make it safer and easier to paddle on the

Yarra River. Potential new or upgraded boat launching ramps are part of the considerations in the Yarra Strategic Plan.



leading the way in collaborating with community on local waterways. We received an

Award for Excellence in Strategic and Masterplanning for initiating the 'Chain of Ponds' Moonee Ponds Creek Collaboration.

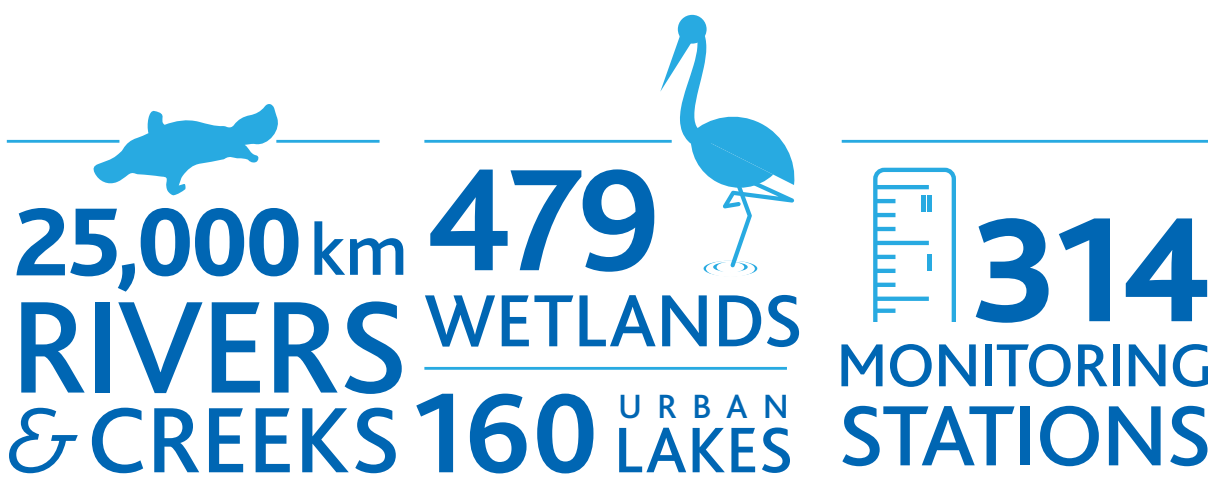


expanding our incentives program to support community-driven waterways amenity

and recreation projects as well as environmental outcomes.

Waterway Management

 The health of Melbourne's waterways is central to the liveability of the region.



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. They also provide economic benefits by supplying water for agriculture, recreational fishing, commercial industries and tourism opportunities.

In 2019-20 Melbourne Water invested \$182.7 million to repair and protect our waterways from a variety of threats, including those posed by climate change and population growth.

Driving evidence-based delivery of the Healthy Waterways Strategy

The *Healthy Waterways Strategy* is a shared strategy across Melbourne Water, State and local government, water corporations and the community. The strategy provides a regional vision for the health of rivers, estuaries and wetlands in the Port Phillip and Westernport region and

contributes to delivery of the *Port Phillip and Westernport Regional Catchment Strategy* and *Victorian Waterway Management Strategy*.

A significant achievement during 2019-20 was finalisation of the comprehensive MERI (Monitoring, Evaluation, Reporting and Improvement) Framework. The framework sets out how we will measure the success of the *Healthy Waterways Strategy's* implementation and will drive a comprehensive data collection regime to inform robust, evidence-based decision making on the best ways to deliver the strategy's goals. The MERI Framework was approved by the Regional Leadership Group (RLG), an independent panel that guides delivery across the region with membership drawn from delivery partners including DELWP, Port Phillip and Westernport Catchment Management Authority, Environmental Protection Authority (EPA), Municipal Association of Victoria (MAV), Parks Victoria and Melbourne Water.

The MERI Framework was used to develop the first *Healthy Waterways Strategy* Annual Report in December 2019, which provided our first assessment of delivery on strategy objectives, and was presented to collaborative forums for each of the five catchments covered by the strategy. We recently launched a web portal to provide online reporting on strategy deliverables and outcomes, including an interactive *Healthy Waterways Strategy* Report Card.

Aboriginal cultural values and recreational uses of waterways

As we implement the *Healthy Waterways Strategy*, Melbourne Water is engaging with Traditional Owners to co-deliver projects that provide for Aboriginal cultural values and recreational uses of waterways. During 2019-20, a landscape-scale approach to managing billabongs was produced with consideration to cultural, ecological and liveability outcomes.

During September 2019, 50 million litres of water were delivered to Banyule Billabong, on the lower Yarra floodplain near Heidelberg, to support ecological requirements. Weed control was undertaken post watering. The data will be analysed to inform a long-term environmental watering solution to support the cultural, ecological and liveability values at this site. This project was undertaken in partnership with Banyule City Council, Parks Victoria and Wurundjeri Woi wurrung Cultural Heritage Aboriginal Corporation, with contributions from Banyule Bush Crew, Victorian Environmental Water Holder (VEWH) staff, Yarra Riverkeeper Association and Friends groups.

In April 2020, the Wurundjeri Woi wurrung Cultural Heritage Aboriginal Corporation completed its cultural values study. Melbourne Water has supported this project by attending on Country visits with Elders and we are pursuing opportunities to link this study and the identified potential cultural benefits with environmental watering in their area in the future.

Managing streamflow

Melbourne Water produces streamflow 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 2019-20 Melbourne Water completed reviews of the streamflow management plans for Plenty River, Hoddles Creek, Stringybark Creek and Steels, Pauls and Dixons creeks. The objectives of the plans are to manage the water resources of the four catchments, develop sustainable allocations for agriculture and other uses, and maintain an environmental water regime to sustain waterway health. We aim to extend our commitment to these plans for another five years. We will seek to repeal the Plenty River Stream Flow Management Plan and replace it with a Local Management Plan, given its low level of diversions and low risk to the environmental water regime.



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

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

In 2019-20, we contributed to the health of our waterways through direct maintenance works, capital projects and incentives programs, including:

- 1258 sites where Melbourne Water conducted active weed control to protect native vegetation, increase biodiversity, improve stability of riverbanks and provide better habitat for a wide range of animals
 - 1348 sites where Melbourne Water conducted grass cutting to improve access to waterways, help control litter and provide high-quality public open space
 - removal of over 32,000 cubic metres of silt from our stormwater system and more than 1690 cubic metres of litter and debris from our drains, helping to 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)*
 - 29 new waterways capital investment projects across the Port Phillip and Westernport region that are improving streamside vegetation connectivity, replanting sections of waterways, improving habitat for platypus and other threatened species and significant weed and pest control projects
 - construction of three new fishways and significantly upgrading an existing fishway to improve waterway connectivity and provide better habitat for fish and other animals
 - 10 new waterways capital investment projects across the Port Phillip and Westernport region to stabilise riverbanks
 - three new waterway capital investment projects to improve community access and connection to the Yarra River.
- In addition to works directly contributing to the health of our waterways, this year we also:
- trialled real-time monitoring technology at an industrial stormwater catchment – an Australian first – at Dandenong Creek to address industrial pollution. In partnership with Knox City Council and Monash University, 25 sites have been established. The program has the potential to fundamentally change our understanding of industrial stormwater pollution sources, with insights from the trials being applied to other high pollution risk industrial sites across Melbourne
 - launched the Stony Creek Rehabilitation Plan in September 2019, which provides guidance for delivering the community's vision for Stony Creek. The plan relies on collaborative partnerships and identifies actions for local and State government agencies, Traditional Owners and the community over the next 10 years, and aligns with a range of legislative, policy and strategic frameworks including Melbourne Water's *Healthy Waterways Strategy*, Maribyrnong City Council's Stony Creek Future Directions Plan and open space strategies, and the EPA's environmental policies, legislation and guidelines
 - finalised an 18-month collaboration with the Waterways of the West Ministerial Advisory Committee to develop a community vision and recommendations to protect iconic waterways in Melbourne's west. A Waterways of the West Action Plan will be released in late 2020 by the Victorian Government
 - commenced developing locations for the Waterway Blitz initiative, based on known litter hot spots, places of high community use and locations identified in the *Healthy Waterways Strategy*. The Waterway Blitz is an opportunity to focus extra attention on improving the amenity of our most frequented waterways and engaging local communities and business in the process
 - in partnership with The University of Melbourne and Greening Australia, Melbourne Water is modelling the likely impacts of climate change on the distribution of 31 key native vegetation species commonly used in our streamside revegetation programs. For five of those species, we are also investigating the likely impacts of climate change on various life stages (e.g. germination), that may be different to the tolerances/distribution of mature plants. We expect that this research will be the foundation for a 'climate resilient' revegetation framework for Melbourne Water.

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, funded projects also provide a range of other benefits to the community such as greener open spaces, alternative water supply options and reduced localised flooding.

In 2019-20, Living Rivers awarded \$2 million in funding for 31 projects across 14 council areas. These projects will be delivered over the next three years and range from strategic planning and capital works to training and community engagement.

Of the 31 projects funded last financial year, 13 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 979 kilograms per year. This will improve habitat for plants, animals and the overall health of the waterways and bays.

River Health Incentives Program

A total of 1001 private landholder, community and public land manager grants were awarded through our River Health Incentives Program in 2019-20. This amounted to over \$5.1 million in support for our delivery partners to utilise their skills, expertise and local knowledge to create great outcomes for waterways across the region.

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

- 134 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
- 106 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
- 699 Stream Frontage Management Program 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 riverbanks and provide better habitat for a wide range of animals
- 62 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.

Case Study



Broadening and enhancing our incentives offering



Since our programs began 23 years ago, Melbourne Water has provided 16,000 grants that have supported our customers and the community to undertake a range of activities that have helped us to improve the health of our waterways.

This year we have refreshed the program to streamline the approach, incorporating customer feedback to drive better outcomes. The updated program is more flexible and adaptive to customer needs, supporting Melbourne Water to respond to emerging challenges and initiate new opportunities and partnerships.

The program was rebuilt around four key themes; connected habitats and catchments, integrated water management enablers, liveable cities, and innovation.

During 2019-20 we undertook a trial with a small group of customers which enabled us to test the program and process. As a result of the trial we funded 13 projects which included new customers, new activities and longer term partnerships with a more consistent approach. We will continue to refine the new program before making it available to more of our customers towards the end of 2020.

Delivering environmental water releases

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

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.

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 2019-20 Melbourne Water released over 4.97 billion litres of water, as shown in Table 2.

Table 2: Environmental water delivered for 2019-20

River	Volume	Outcomes
Yarra	4000 ML	No planned summer fresh releases were made to the river this year due to high summer rainfall leading to flow requirements being met naturally along the river. The autumn release in April/May was commenced and the volumes were reduced during the watering event due to high rainfall allowing the peaks to be met naturally during the event. The releases into the Yarra River 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 streamside 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 two billabongs in the Yarra floodplain – Yering Backswamp and Banyule billabongs – to improve wetland vegetation and provide habitat for frogs and birds.
Tarago and Bunyip Rivers	40 ML	Only one partial summer fresh release was made to the rivers due to high summer rainfall and operational activities, leading to all flow requirements being met naturally throughout the year. The releases are 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	937 ML	One spring fresh release was made into the upper Werribee system (from Merrimu Reservoir to Melton Reservoir), to flush the build-up of organic matter and improve habitat for frogs and macroinvertebrates. Five other fresh releases were made in the lower Werribee system to improve water quality and promote fish movement from the estuary to the freshwater river.
Maribyrnong	0 ML	No releases made due to lack of available water.

In 2019-20, Melbourne Water made environmental releases of 13,661 million litres from Thomson Reservoir in cooperation with the West Gippsland Catchment Management Authority and on behalf of the VEWH.

Case Study



The Yarra Strategic Plan



The Yarra River, our Birrarung, 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 integral to the future prosperity of our whole region.

In 2016, the Yarra River Ministerial Advisory Committee (Yarra MAC) identified the critical need for a unifying vision for the Yarra River corridor, together with an overarching strategy to integrate the sometimes disjointed planning for development, amenity, environmental and cultural values of the river.

As a recognised leader in collaborative design and governance, Melbourne Water was appointed lead agency to develop the Yarra River 50-Year Community Vision and the Yarra Strategic Plan.

To achieve a transformative shift in governance, Melbourne Water formed the Yarra Collaboration Committee (YCC).

Membership includes Wurundjeri Woi wurrung Cultural Heritage Aboriginal Corporation representatives and 15 State and local agencies with a role in planning and managing the Yarra. Since November 2017, the YCC has met on more than 20 occasions to inform the development of the YSP.

Melbourne Water, in partnership with the YCC, delivered the draft Yarra Strategic Plan for public consultation in January 2020. Consultation through community forums, pop-up discussion stalls and a strong digital presence reached more than 120,000 community members. When COVID-19 restrictions commenced, Melbourne Water boosted online engagement to ensure we provided ample opportunity for people to have their say on the final plan.

This ongoing commitment by Melbourne Water and the YCC to foster a new collaborative governance model demonstrates the commitment by government and the community to protect the Yarra River corridor for future generations.



Photo taken prior to the commencement of physical distancing rules in March 2020.

Improving How We Do Business

Proudly Customer-Centric

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



Photo taken prior to the commencement of physical distancing rules in March 2020.



To assist Melbourne Water to define and understand our customers, we separate our 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.

Customer-centric leadership

Our *Melbourne Water Customer and Community Strategy* guides our approach to customers and the community, and outlines our plan to better manage and respond to their needs.

We have continued to embed a customer-focused mindset across our business. This ensures we maintain and strengthen our social licence to operate, helps to minimise reputational risk, increases our understanding of the drivers of customer satisfaction and builds higher confidence and trust in what we do.

Key improvements during 2019-20 included:

- customer data and insights driving business and service improvement, including our first ever Customer and Community Insights Report to inform strategic planning on our customers’ needs and their experience in relation to our services
- deepening our Customer Research and Insights program to measure customer satisfaction by each service and embedding these into our customer engagement
- development and implementation of an integrated approach to service planning with our local government partners to ensure stronger, more embedded and more transparent co-planning to benefit local communities. This is improving service delivery through proactive engagement with our partners to achieve better alignment, coordination and collaboration in the delivery of waterways, land, and drainage services. Co-delivery of the *Healthy Waterways Strategy* will be a key component of the future program
- delivering customer and service-led digital solutions, including introducing a customer portal to our local government partners (see page 44 for details)
- developing a proof of concept for a new strategic customer relationship management tool. The tool will allow us to obtain a view of customer relationship history and insights, leading to a single view of the customer
- customer journey maps for our water and sewerage services to understand the end-to-end experience a customer has when accessing our services
- digital engagement with customers through virtual reality tools for education, including the virtual tour of the Western Treatment Plant (WTP) – see case study on page 45.

Measuring our customer performance

To better understand the needs of our customers, we use a broad and evolving range of tools including targeted research projects, internal data analysis and direct feedback to inform our customer strategies and plans.

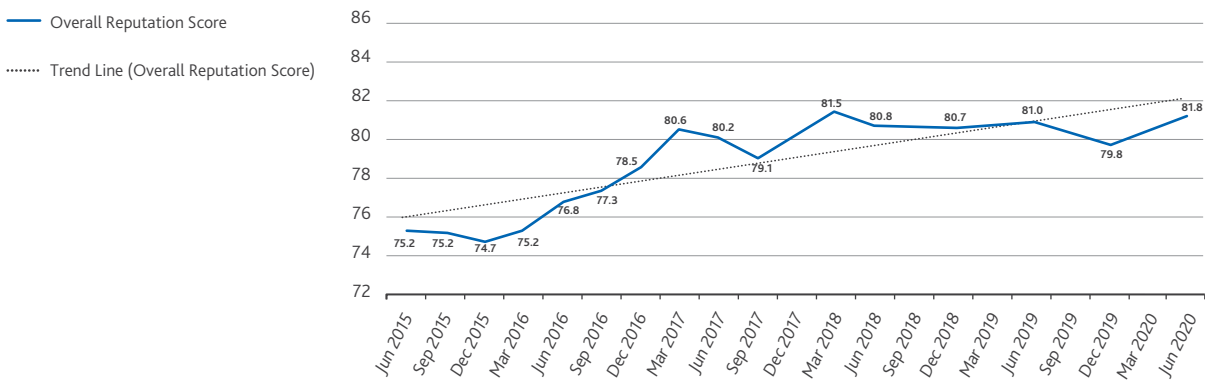
Our six-monthly Reputation Study tracks customer and community perceptions of Melbourne Water and includes metrics relating to trust, esteem, admiration and respect. Our overarching Reputation Score continues to strengthen, up to 81.3 from 81.0 in June 2019. This increase was driven by growth in both the wider community (76.4, up from 76.1 in June 2019) and with our own customers (82.4 compared with 81.5 in June 2019).

While our Reputational Score is strong, we are always striving to improve. We are in the process of implementing a

customer satisfaction framework that will establish and track performance aligned to core services and customer segment satisfaction levels. This more targeted measurement will inform tactical improvements to the way we engage and work with our customers.

Our Customer Service Centre continued to maintain a very high standard of service assisting customers and the community. In 2019-20, it managed over 30,000 phone calls, responded to 700 social media posts, as well as engaging in email and other written communications. According to independent benchmarking of our call centre, our customer satisfaction performance rating continued to exceed the Australian water sector average, positioning Melbourne Water in the top five operators in the sector nationally.

Melbourne Water Reputation Score – Community and Customers



Elevating our digital services

Our digital services continued to evolve to deliver an improved channel experience for our customers and the community. We enhanced our website and content based on customer feedback to ensure our website is available for customers to self-serve where and when they choose.

With the onset of COVID-19 restrictions and changes in the way businesses interact with their customers, we adopted new ways to deliver on our long-term customer strategy. This included fast-tracking roll out of new digital services, shifting workshops to online collaboration platforms, and creating a digital education hub on our website to support education and citizen science resources.

We expanded our digital education offering by improving digital resources for school students with easier to navigate web content and resources. We also created a virtual tour of

our WTP to allow teachers and students to experience this important site via the web.

With our vision to make our data more accessible, this year we launched a secure customer portal for our local government partners and other key customers. The portal offers customers a quick and simple way to access relevant and accurate Melbourne Water data and information, including geographic information systems (GIS), flood drainage and asset data, and data to support implementation of our *Healthy Waterways Strategy*.

Engaging a community of citizen scientists

Citizen scientists make a valuable contribution to our work for Melbourne. Our Frog Census app engages citizen scientists to contribute to scientific research by monitoring the health of our waterways and catchment. The app users monitor frog calls in the Yarra catchment before and after environmental watering events. Since its launch in 2016 we have had more than 6210 frog reports submitted by over 3000 volunteers. In 2019-20, we updated the app's functionality to geo-fence the Lower Yarra Billabongs and highlight billabongs of interest (such as those about to receive water) within the app. This dual purpose allows us to effectively collect data on the billabongs and direct volunteers to sites of interest via their various communications channels (approximately 1800 people across the app, Facebook page and newsletter).

More than 500 volunteer citizen scientists have helped deliver healthy environments and cleaner waterways over a three-year Litter Action Project which will finalise in October 2020. The program is supported by DELWP's Port Phillip Bay Fund and collaborations with local councils, community groups and schools.

Collaborations and partnerships

In 2019-20, Melbourne Water continued to support education programs to improve understanding of water issues in the Victorian curriculum. Melbourne Water sponsored the

Geography Teacher Association of Victoria Annual Conference for the first time. The three-day event was held in September 2019 and brought together more than 700 geography educators to share their knowledge and skills with their colleagues at the largest geography education event in Australia.

In October 2019 Melbourne Water's Education team worked in partnership with Kids Teaching Kids to create a two-day conference with the theme, 'How does water connect or relate to cities, energy, waste and biodiversity?'. Teachers from 49 schools and 466 students (Years 4-10) attended the conference.

We also continued our partnership with the Yarra Riverkeeper Association for several community clean-up events along the Yarra and Maribyrnong Rivers in Melbourne's CBD. The River Blitzes have greatly reduced litter and microplastics in the Yarra and Maribyrnong rivers and stopped rubbish flows into Port Phillip Bay. Over the course of the blitz project, more than 700 volunteers in kayaks have collected nearly 1500 kilograms of waste. The River Blitz series attracted wide media coverage, which assisted in promoting the important work that both the Yarra Riverkeeper Association and Melbourne Water do with the community.

In February 2020, Melbourne Water was a partner in the Maribyrnong Inflatable Regatta. The event saw 1500 participants paddle 2 kilometres on the Maribyrnong River, a change from previous regattas, which have been held on the Yarra River.

Case Study



The Western Treatment Plant virtual tour



The Western Treatment Plant (WTP) has been contributing to the health and liveability of Melbourne since it began treating sewage in 1897. This innovative and impressive 10,500-hectare site produces its own electricity, creates recycled water and is home to many rare bird species. It has important Aboriginal and European cultural heritage value.

In response to the ongoing success of our onsite WTP education tours, we developed an immersive virtual tour of the plant, which enables more people to visit and learn about the site's various features – from century-old paddocks to bubbling sewage treatment ponds. Our virtual tour allows users to learn about and experience the WTP in all its glory from the comfort of home.

Launched in late 2019, the WTP virtual tour experience is an interactive, self-guided tour, providing a bird's eye view with 360-degree imagery, informative videos and engaging 'hot spots' with extra facts and details about the plant.

This tour increases access for those unable to physically visit the plant, particularly school students. It raises awareness and understanding of water-related issues, encouraging advocacy and improved water education.

The WTP virtual tour was promoted by Kids Teaching Kids, the Geography Teacher Association of Victoria and Sustainability Victoria's ResourceSmart Schools program and these organisations continue to support the tour. In April 2020, during the COVID-19 restrictions, Melbourne Water was invited by the Water Services Association of Australia (WSSA) to share the WTP virtual tour with water educators across the country.

The transition to remote learning for schools during COVID-19 restrictions garnered increased interest in the WTP virtual tour. Between December 2019 and June 2020, more than 2000 users participated in the tour. The virtual tour is now an integral part of our education services, with webinars provided to interested schools as virtual excursions, enabling teachers and students to learn about this amazing plant from home and within the classroom.

Safe and Inspired People

With safety foremost, Melbourne Water aspires to be a leader in delivering our services. We achieve this through our diverse and capable workforce. 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.

We are progressing on 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. We go beyond compliance and responding to safety events, as we work towards building a culture where safety is a 'whole of life' experience, starting in the home and reinforced in the workplace.

Melbourne Water started on this journey in 2017, when we commissioned Professor Hudson to visit our sites and offer his observations regarding safety. He then revisited in October 2019 and conducted an extensive review with Melbourne Water's Board and Leadership Team, noting our progress towards generative safety culture.

We regularly assess the strength of our safety culture by monitoring a range of cultural measures that provide a snapshot of three key safety dimensions:

1. A monthly metric (Energy Index), which 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 (Vibe), based on a Net Promoter Score (NPS), 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 2020) revealed a proactive/generative safety score of 76 per cent (up from 70 per cent in 2018-19).

We know that our focus on creating a generative safety culture is delivering results. Our total recordable injury frequency rate (TRIFR) was 2.2 in June 2020, below our target of 2.7, and we are particularly proud of our Major Projects Delivery team, including our capital delivery partners, achieving a TRIFR of below 1 in April 2020. This is testament to our partnership approach with contractors and their subcontractors who are also included in this number. For further information and data on our expanded safety results, see Appendix G.

Driving safety outcomes through culture

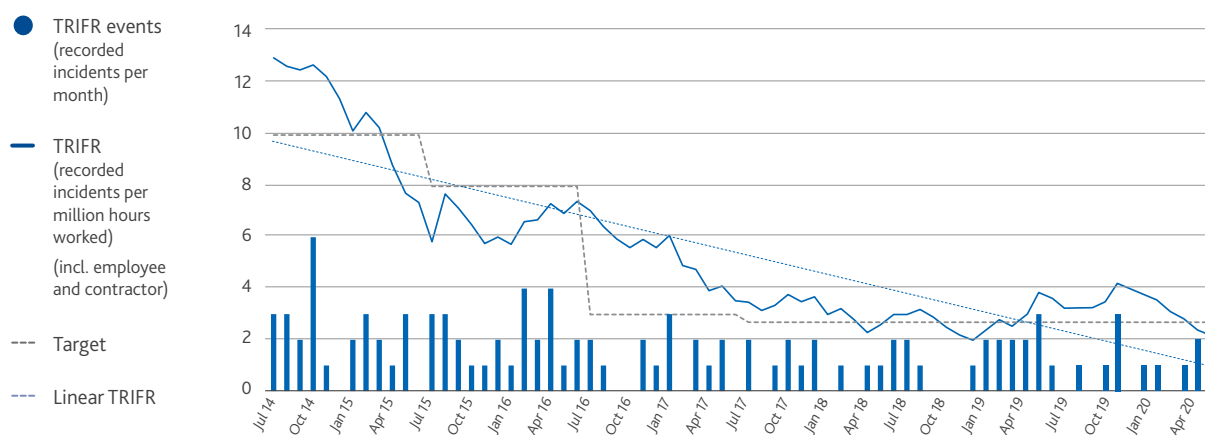
This year we were honored to be acknowledged in the influential 2019 *AFR BOSS* Most Innovative Companies list, ranking third in the Government, Education and Not-For-Profit category for our Virtual Reality Multi-User Training Platform (see Case Study on page 48), a world-leading approach to flexible virtual reality technology. The platform has a number of uses from identifying hazards in buildings that are yet to be built and is an integral part in reducing our safety risk. The highly competitive ranking was based on a rigorous assessment by Australia’s leading innovation consultancy, Inventium, and a panel of industry expert judges. More than 800 organisations were nominated across Australia and New Zealand.

As a self-insurer for workers' compensation, we are subject to regular audits by WorkSafe Victoria regarding compliance with the rigorous occupational health and safety (OHS) obligations of our self-insurance licence. The results of our last audit in 2015

were on the low end of the acceptable range, so we set ourselves a challenge of effecting significant improvement from that baseline. Our sustained commitment to building a generative safety culture was validated by our 2019 WorkSafe audit which delivered commendable outcomes and extended the term of our self-insurance licence, with the effect that our next audit will be in six years rather than the standard four years.

In October 2019, we hosted the Water Industry Safety Event (WISE), which is an opportunity for collaboration and knowledge sharing across the water industry. Attended by safety representatives, OHS professionals, operational leaders, and operators and suppliers from numerous water authorities, the event featured presentations from Melbourne Water, North East Water, Goulburn Valley Water, Gippsland Water and South East Water.

Total Recordable Injury Frequency Rate (TRIFR)



Whole of life safety through enhanced wellbeing

Melbourne Water launched our Wellbeing Program to raise engagement and energy around safety and wellbeing. ‘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. In 2019-20, the Wellbeing Program adopted a holistic approach with an emphasis on mental health.

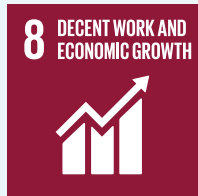
In 2019-20, our employees and contractors benefited from a range of wellbeing opportunities under the program, including:

- the use of home safety kits, which include an asbestos test, stud finder, microwave radiation tester, lead paint tester and carbon monoxide detector
- 854 employees accessed a wellbeing allowance
- 1311 drive-through flu vaccinations between March and June 2020 to support 738 Melbourne Water staff and 573 family members during the COVID-19 pandemic
- a seven-week mental health campaign that addressed topics like resilience and creating a psychologically safe work environment. A feature was videos on mental health involving our own people talking about their experiences, both episodic and ongoing
- 37 employees being trained and registered as First Aid officers
- two fatigue awareness sessions conducted by Dr Kirsty McCullough, a human factors and fatigue risk management consultant, as well as an evening session that employees' family and friends were invited to attend.
- three sessions for teams on resilience in uncertain times.

Case Study



World-first Virtual Reality Inspection System



Safety is at the heart of what we do. Technology is enabling us to work smarter in how we identify and manage potential hazards, as well as prepare and train our workforce in best practice safety procedures. Since 2017, Melbourne

Water has been using virtual reality (VR) for occupational hazard detection, and it now forms part of the mandatory phase of our evaluation process for new facility designs.

This year, we continued our long-standing partnership with Deakin University to design and build a world-first Confined Space Entry Simulator, which aims to change the way mandatory safety training is designed and implemented.

The simulator provides an engaging way to learn about effective confined space entry preparation, before giving trainees the opportunity to experience what it is like to be lowered by a harness into a live sewer.

To reduce safety risks, operations and maintenance technicians who perform the hazard identification procedure first receive training on how to use the VR interface and hardware. A technician navigates around the VR environment, while a spotter keeps their space free of obstacles. Technicians aim to identify hazards such as ergonomic issues (for example, a valve placed at a height that makes it not easily accessible). Melbourne Water has included some accessibility considerations in our recently



published VR Design Standard to make it possible for differently abled participants to use the tool. We are also building in speech-to-text capability to enable inspectors from non-English speaking backgrounds to collaborate within the VR environment.

VR enables workers in non-engineering roles to evaluate how a project design will affect them, and can help to identify hazards at the design stage.

This world-leading project has received significant interest from the industrial sector and WorkSafe Victoria and has potential to replace other forms of confined space entry training.

Inspired People

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

Future Ready Workforce

We have continued to invest in creating the best environment for our people to work and thrive and that will enable us to continue to adapt to the challenges and customer expectations of the future.

We have invested in streamlining our learning and development programs, freeing up time for people to learn in the flow of work, rather than in a traditional learning setting. This includes simplifying our on-boarding processes, significantly reducing the number of induction modules without compromising on critical safety and governance protocols.

During 2019-20, 93 per cent of employees completed performance reviews and were career mapped, which means we have a comprehensive snapshot of individual and team competency and performance across our organisation that underpins our training and development strategies. This data informed our succession plans, which provide visibility of a three-year runway of future talent for key and critical roles.



Photo taken prior to the commencement of physical distancing rules in March 2020.

Our workforce in numbers

In 2019-20 Melbourne Water:

- Employed 1198 people compared to 1171 in 2018-19
- Continued to actively support greater diversity in our workforce. Females comprise 39 per cent of our workforce compared to 37 per cent in 2018-19.
- Filled 44 per cent of our vacant roles via internal candidates, consistent with our focus on career development.
- Delivered 4161 training sessions for staff 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.

Our continued focus on building a thriving culture – where people feel valued and have a sense of belonging is yielding success. This year, 83 per cent of our staff (989 people) participated in our employee engagement survey. Overall employee engagement was 80 per cent, up from 76 per cent in 2018-19, which places us among the most highly engaged workplaces in Australia. During the COVID-19 pandemic, increased leadership visibility has been a priority in maintaining connection and workplace engagement from our people.

Throughout 2019-20, Workplace, our online collaboration network, supported Melbourne Water's values of care, courage and integrity through targeted campaigns and employee-generated content. We celebrated efforts of our essential workers by sharing 'stories from the frontline', to highlight the value of their work in protecting the community during COVID-19, and used it as a way to help people feel engaged and connected while working remotely.



Photo taken prior to the commencement of physical distancing rules in March 2020.

Building the capability of our workforce

In 2019-20, a priority has been delivering on our commitment to mature as a learning organisation. Attracting and retaining talent, enabling diverse and effective learning experiences, and building employee engagement and satisfaction are critical to our success.

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. We delivered a People Leader Essentials online program to upskill our new people leaders to the business, supplemented by People Leader clinics. A total of 104 leaders, ranging from new to experienced senior managers have completed the program.

Our Unite Women in Leadership program for our high performing female-identifying employees resulted in 19 per cent of the 21 participants gaining a promotion, and 43 per cent attaining a stretch opportunity or new role at the same level (compared with 5 per cent and 35 per cent of non-program participants respectively).

The capability of our people has been further built through a significant number of our team participating in personal or group coaching (depending on level), and also through our mentoring program.

The technical capability of our workforce is critical and we continue to invest in developing our people via vocational education and training (VET) programs. In 2019-20, 14 Water Operators successfully completed Certificate III in Water Industry Operations.

Currently, 74 employees are enrolled in the Melbourne Water Leadership Programs. These are our nationally accredited, tailored programs with our partner Swinburne University. The programs optionally provide accreditation in a Graduate

Certificate in Applied Business (14 currently active, seven completed), Diploma of Leadership and Management (60 currently active, 11 completed). We also had 26 employees (seven in Strategic Leadership Program, 19 in Operational Leadership Program) who attended these programs on a non-accredited basis.

We supported our high performing staff in a range of industry leadership programs with Future Focus Group, Peter Cullen Trust, International Water Centre and Chief Executive Women. We also ran internal workshops to support newly formed teams to reach their high-performance potential.

We actively develop a range of pathways for people to work at Melbourne Water. In 2019-20 these included:

- creation of 110 new jobs as a result of the Victorian Government's \$500 million Working for Victoria initiative to support workers affected by COVID-19. A significant number of these roles are focussed on essential work caring for the city's waterways
- continued investment in our two-year Graduate Development Program
- continued investment in our industry-based learning program (IBL), with three IBL students placed within the business
- in partnership with not-for-profit organisation WPC Group and Holmesglen Institute we established a new traineeship program for the Waterways and Land Delivery team. The 18-month program has provided an opportunity for 18 trainees to commence a career in the water industry, while completing a Certificate III in Conservation and Land Management. In October 2020, 10 trainees are due to complete their traineeship, with the remaining eight trainees to complete theirs in April 2021.

Valuing diversity and inclusion

Melbourne Water values and supports individual differences and is committed to fostering an environment where everyone can contribute and realise their full potential.

Over the past year we have made significant progress in building an inclusive workplace culture. This is evidenced by our 2019-20 Culture and Engagement Survey results, which found that 89 per cent of our staff agree with the statement that 'Melbourne Water supports a diverse and inclusive workplace'. Our people demonstrated that they understood the benefits of diversity and inclusion, and felt that our senior leaders actively support greater diversity and inclusion.

Our *Diversity and Inclusion Strategy* outlines our approach to addressing barriers to diversity and inclusion. Several tailored action plans have been developed to deliver this strategy. Our three priority areas are: gender equity, reconciliation (enabling participation for Aboriginal and Torres Strait Islanders) and accessibility inclusion (enabling participation for people with disability).

The strategy and plans reflect our commitment to fostering a more inclusive workplace culture 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.

Melbourne Water champions diversity and inclusion more broadly in the water sector, through participation in joint committees and working groups, including the VicWater Diversity and Inclusion Committee and through sharing resources. In 2019-20 Melbourne Water led the development of a suite of e-learn modules to increase employee capability to work with individuals from diverse backgrounds. The four modules were shared across the Victorian water sector.

Supporting a gender-balanced workforce

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 to create a more gender-balanced workforce.

Several targeted campaigns have been undertaken over the last 12 months to increase the representation of women in male-dominated areas of the business. Of the Waterways and Land Delivery trainees recruited in the last cohort, 40 per cent were female, and a campaign featuring women in firefighting roles resulted in 25 per cent of the 24 firefighters recruited being female.

At the end of 2019-20 our Board and executive team are now 33 per cent female. In addition to our Unite Program (see page 50), our employees are involved in the Gems in STEM Program, to address the decline in secondary students - especially young

women - taking up STEM (Science, Technology, Engineering and Maths) subjects. The program promotes engineering, the water industry and STEM across schools in Victoria.

Melbourne Water remains committed to regularly reviewing pay data, identifying and resolving any instances of pay inequity. This year we updated the Melbourne Water Recruitment Policy to provide greater flexibility in salary recommendations on promotion, allowing for appropriate acknowledgement of capability and skill regardless of time in the role. In addition, remuneration for all individuals previously impacted by the policy was adjusted for fairness. Melbourne Water achieved 98 per cent pay equity overall as at November 2019 (measured using the Workplace Gender Equality Agency's Calculator Tool).

Reconciliation

Our 2020 employee engagement survey indicates that Melbourne Water currently employs 16 people who identify as Aboriginal or Torres Strait Islander. This is in addition to six of the 18 trainees currently completing their Certificate III in Waterways and Land Management who identified as Aboriginal or Torres Strait Islander.

We are working with the Wurundjeri Woi wurrung Narrap Rangers to create opportunities for Aboriginal people to have culturally meaningful work that supports professional development and the continued management of Country. Following a robust procurement process, Melbourne Water awarded a contract to the Narrap Rangers in April 2020. This agreement will see the Narrap Team deliver Minor Field Services to Melbourne Water at culturally sensitive sites using natural resource management, which is the integrated management of the natural resources making up our landscapes, including land, water, soil, plants and animals.

In 2019-20 we continued to focus on increasing the knowledge and awareness of Aboriginal culture within our workforce. This included launching a video resource to complement our internal policies relating to acknowledgements and Welcome to Country protocols; naming six meeting rooms using Traditional language names and installing acknowledgement plaques for all Melbourne Water buildings. We also provided further opportunities for employees and Board members to participate in smoking ceremonies with Wadawurrung at the Western Treatment Plant and the Wurundjeri Woi wurrung at the Upper Yarra dam wall worksite.

We have continued to engage Victorian Aboriginal and Torres Strait Islander businesses to deliver cultural awareness training, and Traditional Owner groups have been engaged to facilitate on-Country learning opportunities (see 'Reconciliation Action Plan' on page 10). Melbourne Water led the development of the First Nations e-learn module, featuring a number of Aboriginal and/or Torres Strait Islander people employed across the water sector. This module was an opportunity to collaborate broadly across the sector and has been shared with all organisations within the Victorian water sector to build our collective capacity to create culturally safe work environments. Mentoring has been offered to Aboriginal and Torres Strait Islander employees to ensure cultural safety and support in the workplace, with six employees participating in this program. An Aboriginal business has been engaged to support the program's delivery.

LGBTIQ+ inclusion

Melbourne Water has an active LGBTIQ+ and ally employee network, Refract, which works with the Diversity and Inclusion team to build awareness and support inclusion of the LGBTIQ+ community.

This year, Melbourne Water played an active role in the establishment of the Pride in Water network and led Victorian Pride in Water members' participation in the annual Midsumma Pride March. Key events such as Wear it Purple and International Day Against Homophobia, Biphobia, Interphobia and Transphobia (IDAHOBIT) are now part of our annual calendar and provide valuable opportunities to increase employees' awareness and understanding of LGBTIQ+ issues.

Accessibility inclusion

Our Accessibility Inclusion Plan (2018-2021) is designed to create opportunities for people with disability to participate within the Melbourne Water workforce and remove barriers that prevent people with disability from participating in, and accessing, Melbourne Water's services. The plan supports Melbourne Water's compliance with the *Disability Act (2006)*.

In 2019-20, the number of employees voluntarily self-reporting a type of disability increased to 9.7 per cent (up from 7.7 per cent in 2018-19).

We formally launched our disability employee network, Kaleidoscope, which has been instrumental in advocating for people with disability through the network's support of training

and events, including Carers Week and International Day for People with Disability. The group helped develop an interactive and accessible e-learn module, which has been completed by almost half of Melbourne Water employees and has been shared with all organisations within the Victorian water sector.

In late 2019, the Victorian Government Enablers Network recognised Melbourne Water as a leading employer in accessibility inclusion following a nomination by our own employees with disability.

Flexible working

Our longstanding commitment to flexible work and driving greater equality is a key element of our employee value proposition. Nearly 30 per cent of our workforce has formal flexible working arrangements in place, up from 25.7 per cent in 2018-19. At the onset of the COVID-19 pandemic, we were able to quickly transition to the majority of our people working remotely, while continuing to safely deliver essential services. This was a result of the strong flexible working foundation already in place, and our established ability to harness productivity from a flexible workforce.

With Victorian schools closed for some months and almost half of our employees having some form of significant care responsibility, flexible work has been critical. Our employees reported feeling well supported during this time, with 88 per cent agreeing in engagement survey responses that the person they report to genuinely supports them to use flexible work arrangements (up from 86 per cent in 2018-19).

Case Study



Melbourne Water's Pathways Program



Melbourne Water is committed to growing the diversity of our workforce and contributing to a more inclusive organisation and society. Our Pathways Program provides supported employment and training for culturally diverse

skilled migrants who experience barriers to employment in Australia. The minimum three years' paid employment with Melbourne Water and our partner organisations provides participants with vital experience in their field of expertise. The program is one of the ways we are working to make sure our industry reflects the communities we serve.

The aim is to build participants' skills and broaden their professional networks throughout the water industry, leading to ongoing and sustainable employment. The program also facilitates an uplift in the capability of managers, mentors and employees to work with others from diverse backgrounds.

In July 2019, 10 qualified participants from migrant backgrounds joined Melbourne Water for an initial 12 months to gain valuable skills and local work experience.

Participants will then complete a further two rotations over two years with partner organisations Downer, Abergeldie, Stantec, Aqua Metro Services, Water for Good and Jacobs.

The program is being run in collaboration with Jesuit Social Services (JSS), an organisation that sources and supports skilled migrants and increases their readiness to work within Australian organisations. JSS provided training to both participants and managers and is continuing to provide support as participants progress through the program.

"Recruiting staff from culturally diverse backgrounds benefits our wider workforce. It gives us access to a talented pool of people that have struggled to find roles for some time, despite their technical skills and qualifications. Programs like this are part of our commitment to tackling barriers to employment, growing the diversity of our workforce and becoming a more inclusive organisation that leverages the talents of our different backgrounds and skillsets."

Michael Wandmaker, Managing Director

Continuous Improvement

Melbourne Water embraces an agile and innovative approach to improving the way we do business, so that we always aim to exceed customer and community expectations.



Taking a digital approach

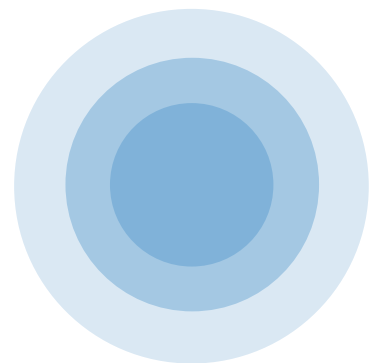
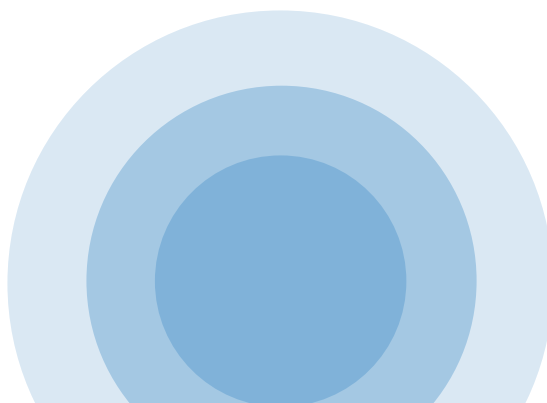
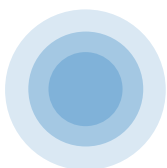
Over recent years, Melbourne Water has improved our digital culture supported by digital tools and capabilities that allow our business to continually evolve and experiment, positioning us as a utility of the future.

We refreshed our *Digital Strategy* this year, with a focus on increasing automation of our service delivery, sharing information with our customers and stakeholders, and integrating analytics into our operations to achieve greater optimisation of our assets and resources.

In a digital transformation journey, making the right choices around technology architecture and platforms is crucial. We have made major investments in cloud and mobility technology to enable anywhere, anytime working. During 2019-20, we increased this capability through enabling collaboration via audio/video conferencing, and launching our online collaboration network Workplace as our internal communications platform.

As our business responded to COVID-19, use of our remote working systems increased rapidly, with more than 85 per cent of our workforce working remotely and effectively in their roles within 10 days.

By the time Stage 3 restrictions were implemented in March 2020, 98 per cent of our people were working remotely, which required digital solutions for those business areas which had not traditionally worked remotely. Examples include flood modellers accessing specialist high-power computing located at their office workstations from home, and an operations team working as if onsite via mobile connectivity. More than 80 per cent of employees reported in a recent survey that digital tools enabled them to perform their roles easily, up from 50 per cent in 2019.



Extending business capabilities

A focus for 2019-20 was to embed digital innovation across our operations, by building innovation capability within our workforce, and taking advantage of new and emerging technologies such as AI, digital engineering and the IoT.

This year we launched a new digital engineering program to better define, deliver and access our asset information. Within this program Melbourne Water developed a prototype 'digital twin' of a number of assets in the ETP Galleries. This prototype integrates information from multiple systems into a fully interactive 3D model. Through this advanced technology, we can search and discover our vast amount of asset information within seconds, prioritise maintenance scheduling, and support safer working environments through digital hazard assessments. We are now collaborating with State, national and global industry partners, Victorian Digital Asset Strategy (VDAS), WSAA and BIM4Water UK to develop a strategic, aligned approach to managing digital assets across the water industry.

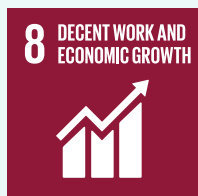
During 2019-20 we introduced a range of new smart technology initiatives to improve our operations including:

- the design and build of 3D models of our new infrastructure, including a water treatment plant at Yan Yean reservoir and a new infrastructure asset at ETP. Using a live design collaboration tool, the model allows for multi-user feedback, driving significant efficiencies. A standard safety review in early design enabled 58 issues to be resolved in one day, delivering a 75 per cent reduction in design effort. This tool has proven to significantly reduce stakeholder effort during COVID-19, and ensure Melbourne Water personnel are informed early in the design process and provides certainty on issue tracking for all parties
- a new field mobility solution to enable dam inspections and a consolidated platform for completing 17 types of inspections, including the ability to capture images, report a problem and send safety alerts. This was successfully implemented for Silvan and Cardinia dams and will be rolled out into our broader asset maintenance program in 2021
- an in-house designed machine-learning system to optimise the cost of ozone generation at ETP. The automated system chooses whether to source the required oxygen for the generation process from onsite machines or externally supplied liquid oxygen to meet process requirements at any given time, and offers substantial potential to reduce the annual cost of ozone generation, depending on weather/climate conditions.

Case Study



WORC – Workforce Organisational Roll Call



As part of Melbourne Water's response to COVID-19, our primary focus has been the health and welfare of our employees and contractors. It is critical that we understand the location and working arrangements for all our

employees and contractors at any given time and capture this information at an individual, local and enterprise level.

Our People and Capability and Information Technology teams collaborated on the development of an online tool called WORC (Workforce Organisational Roll Call) to capture this data. Due to the serious nature of the pandemic situation, the tool's development was prioritised and completed in under two weeks utilising our in-house software development teams. The tool enables employees and contractors to update their working arrangements, which they are required to do on a weekly basis.

WORC incorporates reporting functionality that enables leaders to access dashboards and real time reporting for their business unit. As well as daily attendance data capture, the easy-to-use tool analyses productivity, supporting leaders in their discussions with remotely based staff who may have difficulties, or increased caring responsibilities due to COVID-19.

The information captured in WORC continues to be critical for the People and Capability and Incident Management Team to proactively manage our Business Continuity Plan and incident response. In addition to our internal incident management processes, Melbourne Water is required to report to DELWP regarding our workforce and business critical functions. The data from WORC is incorporated into the weekly reports in a de-identified format.

The development of WORC has provided many benefits to Melbourne Water, and we have shared our knowledge about its development and use with a number of other organisations that are faced with similar challenges.

Driving innovation through targeted research

Melbourne Water works closely with universities, research centres, regional water authorities and other key partners to improve outcomes through scientific excellence, innovation and the adoption of new technology. This year, our Melbourne Waterway Research-Practice Partnership with The University of Melbourne won the 'Building Knowledge in Waterway Management' category at the 2019 River Basin Management Society Awards. In 2019-20 we invested \$6.8 million in our broader research program, much of this in collaborative projects. Our activities included:

- in partnership with the Arthur Rylah Institute for Environmental Research, Melbourne Water is contributing to a Wurundjeri Woi wurrung led project to understand the current distribution, ecology and major threats to freshwater mussel species within Melbourne streams. The project forms part of the Wurundjeri Woi wurrung *Umalek Murrup Ngark Yaluk Ba Bik* project that includes an objective of further involving Wurundjeri Woi wurrung people in waterway research and restoration, and a long-term view of reintroducing freshwater mussels into suitable waterways
- collaborating with The University of New South Wales, Monash University, University of Innsbruck, EPA Victoria, Knox City Council, and the Australian Research Council to improve understanding of urban water pollution patterns and sources in residential and industrial areas within the Dandenong Creek catchment. Low cost sensors measuring water level, clarity, salinity and temperature have been deployed throughout drainage networks within industrial and urban catchments draining to upper Dandenong Creek to more quickly detect and isolate major sources of pollution in our stormwater drainage systems. As well as substantially reducing costs, the technology significantly improves our water quality monitoring capability, and ability to rapidly mobilise pollution response crews if required. This is an important focus in our efforts to reduce industrial pollution in this area through the Enhancing Our Dandenong Creek project
- two projects involving WTP's large anaerobic lagoons to improve our environmental performance and extend the life of our assets. The first is focussed on improving the biological processing of sewage flows underneath the lagoon covers, through the use of sophisticated hydrodynamic and biochemical modelling. This data is assisting improved biogas production, electricity production and process stability. The second is exploring the use of drone footage from repeated aerial surveys, noting the variance of the shape of covers above the water level to assess cover condition and strain. This supports better lifecycle management of our built assets, in a much safer way for our workforce
- developing a 3D-hydrodynamic reservoir model to improve the performance of aerators in our water supply system. We use aerators within our drinking water storages to ensure good water quality although they are costly to run due to high energy and maintenance demands. Our research team's 3D model proved that including staged interventions of intermittent use of aerators over a six-month period produced the same water quality outcomes as continuous use. A successful trial at Sugarloaf Reservoir delivered an overall annual reduction of \$13,500 in maintenance and infrastructure costs. Automation of intermittent aeration regimes is planned next year for at least two other Melbourne reservoirs.

Improving the way we do business

Our continuous improvement culture means we are constantly monitoring our performance and seeking to make meaningful changes in light of feedback. We are committed to the ongoing evolution of our services and delivery, with a focus on efficiency, engagement and enhanced value.

The pace of changing customer expectations, increasing regulation and evolving risks created an opportunity for us to embark on a multi-year information management transformation program.

In 2019-20, the program's first phase included establishing governance structures, designing new and updated business rules, prototyping new and exciting technologies, and enhancing capability. The second phase will execute these changes throughout our business, empowering our people, customer and

the community with access to the right information at the right time, now and into the future.

Our annual procurement spend is approximately \$650 million and is governed by rigorous processes, many of which are labour-intensive in nature. Greater use of technology provides us with the opportunity to reduce manual processing, while continuing to focus on value for money and potentially unlocking greater efficiencies through improved timeliness, automation and data analysis capability.

As well as implementing our new e-procurement solution, Zycus in 2020, we are streamlining procurement processes, reviewing contracts and upskilling our people to achieve the best value for Melbourne Water when buying goods and services.

Business Sustainability

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

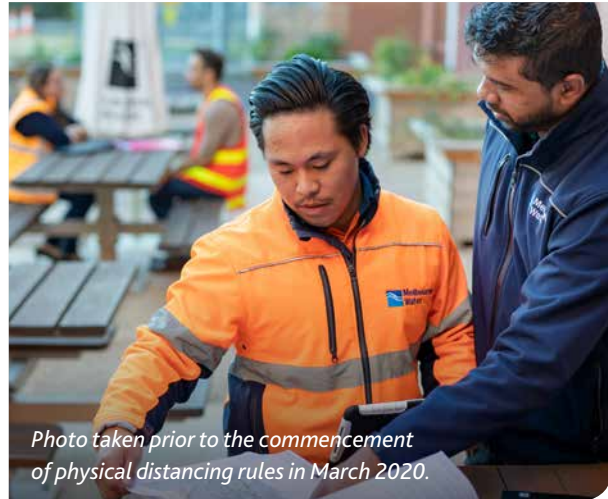


Photo taken prior to the commencement of physical distancing rules in March 2020.

Financial Sustainability

Our financial decisions have business efficiency and a commercial focus at their core to ensure customer affordability.

Financial sustainability is well embedded into Melbourne Water's 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 shareholder.

In 2019-20 Melbourne Water has again delivered a solid financial performance, achieving a positive net profit after tax result of \$203.3 million.

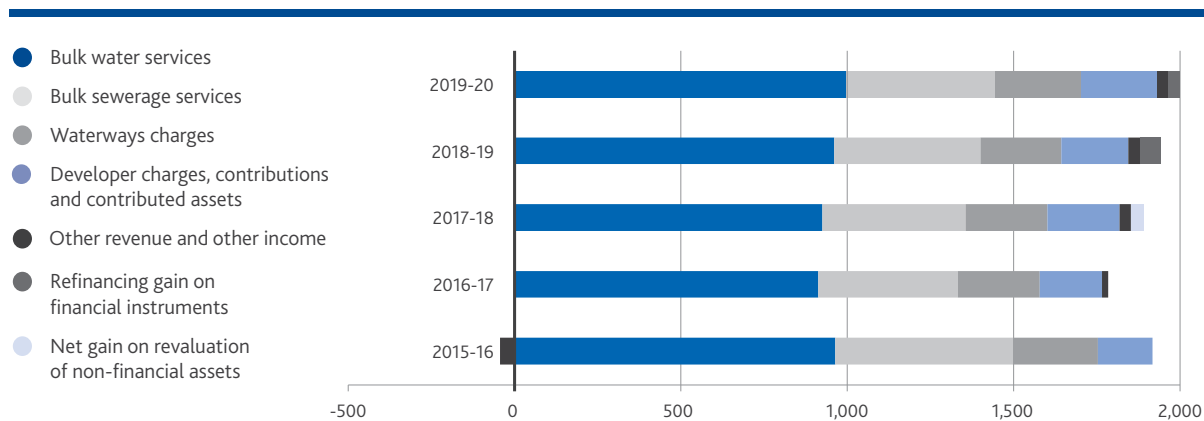
Our revenues for bulk water and sewerage reflect demand for these services which has been driven by population growth. Waterways and drainage services revenue has increased on the prior year due to an increase in customer numbers. As in prior years, the strong performance of revenues associated with land development services has continued due to Melbourne's ongoing growth. Our strong financial performance means we contribute to the ongoing prosperity of Victoria.

In 2019-20 Melbourne Water participated in a national benchmarking study of water industry operating expenditures that was undertaken with WSAA. The results noted that our operating costs for a number of our core activities and business processes were in the first quartile and, as part of the Melbourne metropolitan region, are among the lowest in Australia. This is a testament to our commitment to running an efficient business for the benefit of our customers.

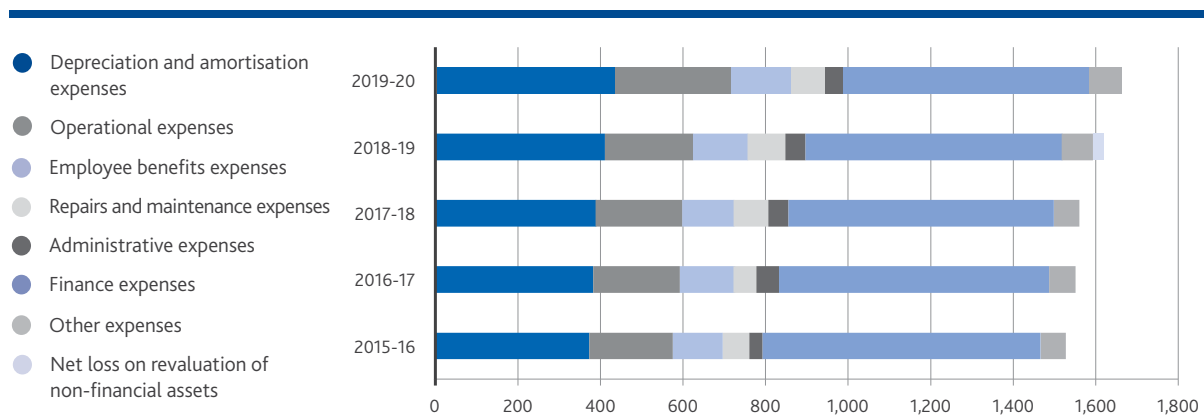
As we work towards delivering our next Pricing Submission in 2021, we are focussed on keeping water bills low and ensuring that customer feedback is shaping the delivery of our services. We are committed to our ongoing focus on excellence in financial management and making commercial decisions to achieve this objective. This includes active management of our debt portfolio to minimise risks to both the State and our business and keep financing costs low. We are also focussing on improvements to our procurement practices, including enhancements to our systems for contract management, achieving efficiency targets across a range of operating and capital initiatives, and uplifting commercial skills across the business in procurement activities.

We are increasingly adopting new technologies, such as robotic process automation, AI and data analytic tools in managing our finances, to enable process efficiencies and the delivery of actionable improvement insights to the business.

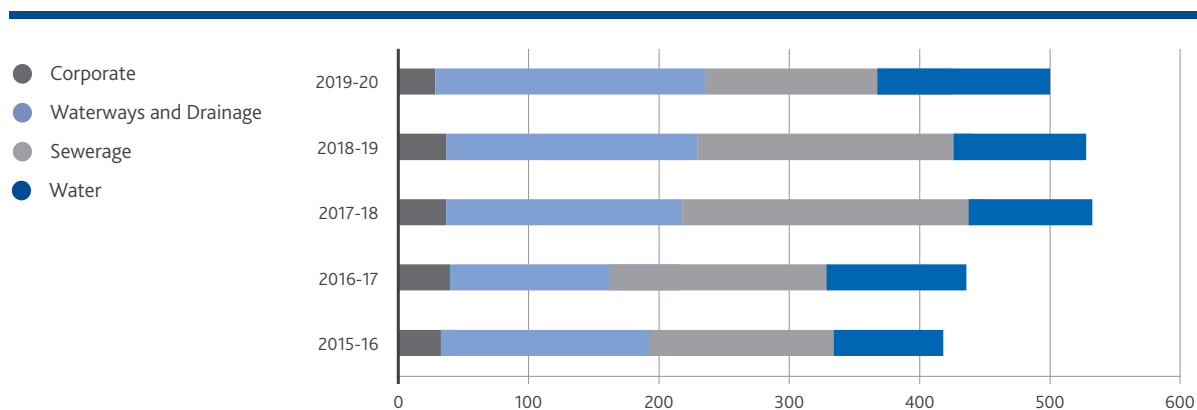
Revenue (\$M)



Expenditure (\$M)



Capital expenditure (\$M)



Five-Year Financial Summary

Summary of Financial Results

Statement of Profit or Loss For the year ended 30 June - Extract	2020 \$M	2019 \$M	2018 \$M	2017 \$M	2016 \$M
Total revenue	1,997.6	1,938.8	1,890.4	1,791.4	1,871.6
Operating and other expenses	(636.2)	(595.1)	(525.2)	(512.4)	(481.8)
Depreciation and amortisation expenses	(434.7)	(408.1)	(392.1)	(383.8)	(373.8)
Finance expenses	(601.8)	(618.2)	(645.3)	(657.2)	(676.7)
Net profit from operations before tax	324.9	317.3	327.7	237.9	339.3
Tax expense	(121.6)	(116.4)	(118.9)	(87.5)	(185.9)
Net profit for the period after tax	203.3	201.0	208.8	150.4	153.4

Statement of Financial Position as at 30 June - Extract	2020 \$M	2019 \$M	2018 \$M	2017 \$M	2016 \$M
Current assets	143.6	153.4	115.7	95.6	103.8
Non-current assets	15,246.8	15,125.5	15,212.9	14,786.5	14,717.2
Total assets	15,390.4	15,278.9	15,328.6	14,882.1	14,821.0
Current liabilities	1,073.5	1,163.5	1,216.4	1,032.7	1,018.7
Non-current liabilities	8,443.4	8,372.4	8,497.2	8,579.3	8,656.5
Total liabilities	9,516.9	9,535.9	9,713.6	9,612.0	9,675.2
Net assets/Total equity	5,873.5	5,743.0	5,615.0	5,270.1	5,145.8

Statement of Cash Flows for the year ended 30 June - Extract	2020 \$M	2019 \$M	2018 \$M	2017 \$M	2016 \$M
Net cash inflow from operating activities	555.3	534.9	465.8	439.7	526.0
Net cash outflow from investing activities	(455.6)	(513.0)	(446.2)	(444.4)	(357.7)
Net cash (outflow)/inflow from financing activities	(103.0)	(6.3)	(21.2)	5.9	(207.1)

Summary of Financial Performance

Key Financial Performance Indicators

Performance Indicators	2020 \$M	2019 \$M	2018 \$M	2017 \$M	2016 \$M
Cash Interest Cover	2.2	2.1	1.9	2.0	2.1
Gearing Ratio	50.8%	51.2%	52.6%	53.6%	53.6%
Internal Financing Ratio	98.0%	93.4%	78.6%	89.0%	135.3%
Current Ratio	0.15 times	0.15 times	0.10 times	0.09 times	0.10 times
Return on Assets	6.0%	6.1%	6.4%	6.0%	6.9%
Return on Equity	3.5%	3.5%	3.8%	2.9%	3.1%
EBITDA Margin	68.1%	69.3%	72.2%	71.4%	74.2%

Explanatory notes:

Refer to the Performance Report for definitions of financial performance indicators and reporting of all 2019-20 performance indicators (financial and non-financial) against targets with supporting explanations for any significant variations.

Social Sustainability

Social Procurement Framework

In line with the Victorian Government's Social Procurement Framework, Melbourne Water has developed a social procurement strategy aligned to our *Strategic Direction*. We are committed to all social and sustainable objectives to build a fair and inclusive Victoria through procurement. We have prioritised a number of objectives including opportunities for Victorian Aboriginal people, women's equality and safety, opportunities for disadvantaged Victorians and environmentally sustainable outputs. These objectives are considered in the full lifecycle, from the planning stage right through to contract management.

We are providing opportunities for social enterprises such as Marriott Support Services, supporting employment outcomes through the Pathways Program, and contributing to Indigenous empowerment for Victorian Aboriginal businesses with our membership of Kinaway, the Victorian Aboriginal Chamber of Commerce. In July 2019 we held a workshop with Kinaway, 'Creating Shared Value Through Supplier Diversity' for buyers in our business and our key delivery partners.

Modern Slavery Act

The Social Procurement Working Group, chaired by Melbourne Water, has been driving a proactive, industry-wide response to the *Modern Slavery Act 2018*. The response considers action to prevent modern slavery in terms of human trafficking, slavery, servitude, forced marriage, forced labour, debt bondage, deceptive recruiting for labour or services and child labour.

In 2019-20 we completed a high-level risk assessment of our supply chains and held workshops to prioritise our efforts to address and manage modern slavery risks.

Case Study



Wara Paring Business Training Program



Leon Egan is an Indigenous educator, former policeman and now Indigenous and Multicultural Relationship Manager at the AFL Players' Association. Along with Daniel Charles and David George, Leon is part of a new Indigenous

civil construction team working on Melbourne Water projects. Melbourne Water, together with our delivery partner, AquaMetro Services is supporting Indigenous employment opportunities through the Wara-Paring (Come Walk The Path) Indigenous Business Training.

In 2018 Leon facilitated a series of highly successful Cultural Awareness training workshops to the executive leaders in Melbourne Water and Aqua Metro Services construction teams, to support stronger diversity outcomes in the procurement management process. What followed was

a commitment to innovate beyond standard inclusion practices for Indigenous opportunities within both businesses, and the idea of Wara-Paring Business began.

The Wara-Paring Business is an 'Indigenous Business Startup' designed to level the playing field for Indigenous businesses and support Indigenous economic development in Victoria.

Delivered in partnership with Aqua Metro Services, Melbourne Water's Wara-Paring program has provided foundational business training and capability building for Leon and his team to help launch a sustainable 100 per cent Indigenous owned business, and then with Melbourne Water's assistance, be awarded with long-term legitimate contracts. The future vision is to expand the business to create employment opportunities for Indigenous young people in the water industry.

Environmental Sustainability

As a business we are mindful that our operations consume resources and have the potential to create environmental impacts.

We are committed to minimising these impacts to enhance our contribution to the environmental sustainability of greater Melbourne. Our *Environmental Stewardship Strategy* sets out how we will achieve this.

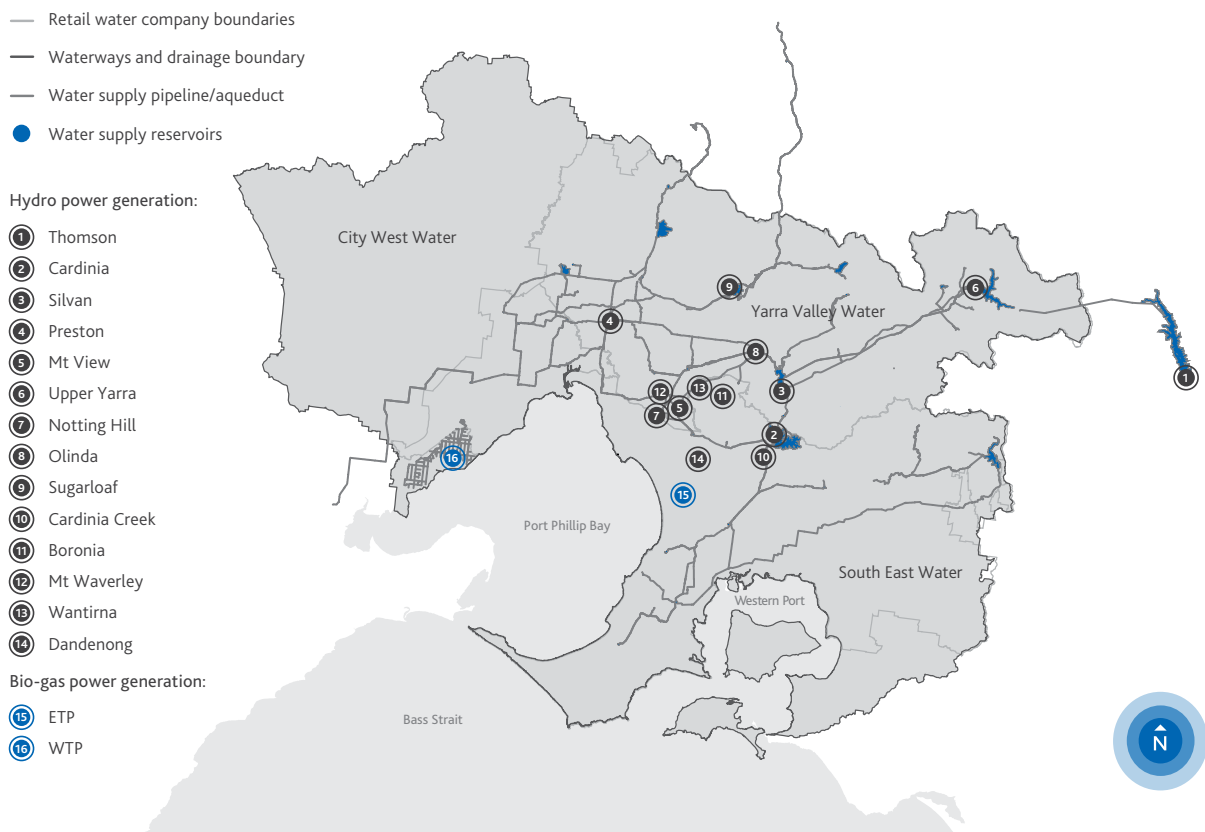
Melbourne Water is one of the largest greenhouse gas emitters in Victoria, as we manage wastewater on behalf of most Melburnians. We have an important role in reducing emissions and helping meet Victorian and Australian greenhouse targets. See pages 62-63 for details on our emissions reduction program.

For many years, we have undertaken 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.

We strive to foster ways to make the water sector as a whole more efficient. This year, we concluded an innovation competition that sought creative solutions to the problem of scope 1 emissions abatement and measurement, which are generated as a natural part of the sewage treatment process.

Melbourne Water has an integrated, compliant and cost-effective approach to reducing over 30 streams of waste across the business. In the past 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



Case Study



Inspiring innovative solutions to reduce emissions in sewage treatment



The majority of Melbourne Water's scope 1 emissions are generated through the biological processes used to treat sewage. Finding ways to reduce these direct emissions is a priority for us in our quest to reduce our environmental impact.

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

Melbourne Water ran a competition to uncover innovative ideas to reduce our scope 1 greenhouse gas emissions. After a highly competitive selection process involving Australian and international entrants, Melbourne Water selected the submission by Cranfield University/AECOM/RMIT group as the winner. The submission proposed

an alternative treatment methodology based on non-biological processes and anaerobic treatment, which has the potential to reduce the production of scope 1 emissions from the sewage treatment process by an impressive 90 per cent.

Competition funding will be used to test aspects of the proposal at laboratory scale at RMIT in Melbourne, working closely with Cranfield University (based in the UK) and other global utilities which are considering aspects of this new technology.

This is an exciting example of how Melbourne Water is contributing to a thriving culture of innovation in both our own operations and the water industry more broadly.

Climate change and adaptation

Climate change creates resilience challenges for Melbourne Water's services. Extreme weather events, rising sea levels, reduced rainfall and increasing temperatures are already affecting our infrastructure, natural environment and water supplies. Melbourne Water is working to address both market transition climate risks (such as carbon prices) and physical impacts of climate change.

Melbourne Water's *Climate and Resilience Plan* tracks our responses to climate change, and is helping to build the knowledge and capability of our people. In 2019-20, we continued to deliver on our actions in the plan and have further enhanced our disclosures, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

To ensure we are prepared for the future, we address climate change in all our service strategies and incorporate improved understanding of the impacts of climate change in periodic strategy updates. These strategies use scenario planning to explore and help prepare for a wide range of potential future conditions, which we have incorporated in our operational and long-term asset management plans for 2019-20 and beyond.

Scenario planning is an ongoing process. We use the Intergovernmental Panel on Climate Change RCP 8.5 scenario to assess 'worst case' climate scenarios, and we also consider 'best case' climate futures including limited or no change to the current climate. Population growth scenarios are used to understand future service requirements. Scenarios are also used to understand transition risks. These include potential

emissions changes associated with population growth and operation of infrastructure, and potential changes to Renewable Energy Certificate and carbon offset prices.

In partnership with major universities, we undertook a research and modelling program in 2019-20 which is building understanding of priority climate impacts, and informing our adaptation and greenhouse gas reduction programs.

At an industry level, DELWP's *Water Sector Climate Change Adaptation Action Plan* highlights priority adaptation challenges for the Victorian water sector. As part of our co-delivery of the pilot in 2019-20, Melbourne Water participated in the Steering Committee and co-delivered several actions. We are working with DELWP to identify areas where we can assist with the next phase of action delivery.

This year we supported a DELWP review of the *Guidelines for Assessing the Impact of Climate Change on Water Supplies in Victoria*, providing input on integrated water management and urban supply challenges. We continue to use the guidelines for detailed climate impact assessments.

We recognise climate change as an area for continuous learning and improvement, and we are integrating climate and adaptive thinking across our operations. The activities highlighted in this year's report are part of an ongoing program to build knowledge and capacity, and work with stakeholders to adapt. We are now reviewing outcomes and learning from our current *Climate and Resilience Plan* and developing a new round of actions to build on progress.

Some climate and resilience highlights from the 2019-20 delivery program by service

Functional business area – from Water Services Association of Australia 2016 Climate Change Adaptation Guidelines

Service Area	Source waters and Demand	Built Assets	Natural Environment	People and Workplace	Interdependencies	Customer and Product Delivery
Water						
<ul style="list-style-type: none"> developed the annual Desalinated Water Order Advice to support long term water security for all Victorians continued to investigate options for future additional water sources including recommissioning water sources, optimising long term desalinated water volumes, harvesting stormwater, and more use of reclaimed water invested in research to better understand climate impacts on hydrology and water supply, and options for maintaining water security and quality through climate variability and extreme events such as fire, drought and algal blooms consulted with government on guidelines for urban water strategies, drought preparedness plans, and water supply adaptation planning that respond to climate change. 	●				●	●
	●				●	●
	●		●	●	●	●
	●					●
Sewerage						
<ul style="list-style-type: none"> identified where and how our sewer transfer network and treatment plants may be affected by increasing flows, floods and sea level rise explored opportunities to generate more renewable energy and recover useful resources to support a climate adapted Victorian economy looked for ways to reduce the direct emissions from our sewage treatment plants and contribute to Victoria's goal of achieving net zero emissions, including funding a global research competition to uncover options to reduce scope 1 emissions. 		●	●		●	
			●		●	●
			●			●
Drainage and flood management						
<ul style="list-style-type: none"> mapped climate change impacts on flooding in catchments across Port Phillip Bay and Western Port, including supporting work to model the impacts of sea level rise supported councils to consider climate change flood risks in their local planning scheme participated in regional coastal risk assessments to understand erosion and other impacts delivered future flood and coastal inundation information to new urban development planning. 		●				
		●		●		
		●	●			
		●		●		
Waterways						
<ul style="list-style-type: none"> identified opportunities to retain more water in the urban landscape to reduce stormwater impacts on waterways while supporting greener, cooler neighbourhoods researched the effects of climate change on key waterway and riparian species, and forested catchments investigated the role of Melbourne Water owned land, waterways and wetlands to support biodiversity across the region in a warmer, drier future supported waterways that act as critical drought refuges through drought periods. 	●		●			
	●		●			
			●		●	
			●			

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. examining a path to net zero by 2030.

The Victorian water sector represents the single largest contributor to total State Government carbon emissions, and Melbourne Water accounts for 51 per cent of this output.

The biggest source of emissions within Melbourne Water is associated with sewage treatment and management, producing around 80 per cent of our total emissions, in comparison to the water supply system which uses a relatively low amount of energy and has low fugitive emissions.

In 2019-20 we progressed our emissions reduction commitments by:

- progressing planning for solar plants at Winneke and Eastern Treatment Plants to reduce our net greenhouse gas emissions and generate revenue that enhances affordability for our customers and the community. Construction at both sites is on track to commence in 2020-21
- progressing our transition to a zero emissions vehicle fleet within 10 years. We are continuing to upgrade infrastructure at larger Melbourne Water sites to accommodate the first cohort of electric vehicle charging stations, as well as replacing our internal combustion vehicles with appropriate electric vehicles. During the year we took delivery of six new Hyundai Kona vehicles, the leading compact SUV in the Australian electric car market. As an early adopter of electric vehicles in Australia, our commitment continues as we wait for the introduction of fit for purpose electric vehicles for our entire fleet
- expanding the capture of methane-rich biogas by installing more generators at the Western Treatment Plant (WTP). This source of renewable energy already meets 80 per cent of the treatment plant's energy demands, expanding the generation of hydroelectricity through our water transfer system, which already produces nearly 70,000 megawatt hours per year – enough to power more than 14,000 homes
- taking innovations identified through an initiative to tap into global knowledge regarding measuring and reducing fugitive emissions from sewage treatment plants through to trial
- constructing a network of weather stations to gather data at the WTP as part of a research project with the University of Western Australia. The data will better inform our understanding of the production of greenhouse gases in non-aerated wastewater lagoons, and the transfer of those gases across the water-atmosphere interface to improve our greenhouse gas modelling.

Biosolids re-use

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

In 2019-20 Melbourne Water re-used the remaining stockpiled clay-rich biosolids, approximately 70,000 dry tonnes from the Eastern Treatment Plant (ETP) to help rehabilitate a landfill site in outer Melbourne. This completed a six-year project that beneficially reused 1.3 million dry tonnes.

Land application of biosolids as a soil conditioner is a widely adopted mature biosolids reuse method used by water authorities across Australia and the world. Melbourne Water expanded our biosolids reuse program to agricultural properties in 2019-20. Application of biosolids from the WTP increased from 4200 dry tonnes in 2018-19 to over 50,000 dry tonnes in 2019-20. Our focus for this land application program will now shift from expansion to consolidation to ensure consistent year on year reuse of 100 per cent of biosolids generated annually from the WTP.

Melbourne Water will also test a number of new treatment processes to determine suitable reuse pathways that provide benefits to our customers and the community and future-proof our reuse program.

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 *Healthy Waterways Strategy*.

Biodiversity conservation management

As waterways manager and a significant landowner, Melbourne Water has a critical role in managing the waterways, estuaries and wetlands which are essential to the survival of much of our region's biodiversity.

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. With about 100 Orange-bellied Parrots left in the wild, 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. In 2019-20 Orange-bellied parrots received a boost to their winter habitat from a project using boulders to protect coastal saltmarsh from disturbances at nearby roads and tracks. This protection has led to a significant amount of regeneration of saltmarsh species, and a number of the parrots have been regularly observed feeding on the abundant food sources in the last three survey periods.

Our significant \$1.2 million investment at the WTP to support land management and biodiversity conservation also included pest animal and plant control; environmental watering; direct seeding of native grasses for roadside management; fencing to facilitate integrated use of livestock in weed and biomass management; species monitoring; research, and meeting legislative requirements across the 10,500 hectare site. The site is managed in consultation with our advisory committee, comprising community group representatives, experts, agencies and adjacent land managers.

The Ramsar-listed Edithvale-Seafood Wetlands are the largest remaining part of the former Carrum Carrum Swamp and home to many bird species, including the endangered Australasian Bittern. Works in 2019-20 concentrated on vegetation management to maintain shorebird foraging habitat, working in collaboration with councils and community groups. Our comprehensive bird monitoring program continued for the 34th year and shows that significant bird populations and activities, such as breeding, are being maintained at these wetlands.

The regional *Healthy Waterways Strategy*, released in late 2018, requires an extensive program of research, on-ground works, community engagement, collaboration and monitoring to protect and enhance key environmental waterways values. These include native fishes, frogs, birds, vegetation and the platypus.

During 2019-20 comprehensive monitoring plans were developed for the conditions and values of streams, wetlands and estuaries. Satellites, drones and LiDAR (Light Detection and Ranging) are being used and/or investigated to ascertain what data we can reliably and accurately obtain remotely. Monitoring native species through environmental DNA is another use of new technologies. We are working collaboratively with The University of Melbourne, RMIT and others to trial these technologies.

In 2019-20, Melbourne Water began implementing DELWP's Growling Grass Frog (GGF) Masterplan Program for habitat creation and management in Melbourne's urban growth areas. The program meets development approval conditions under Commonwealth environmental legislation and is funded from a habitat compensation levy collected by DELWP. As urban development occurs over the next 30 years, Melbourne Water will construct about 80 GGF breeding wetlands (on average 0.3 hectare in size) and take on the management of around 2000 hectares of land in GGF conservation areas. This year we finalised the technical standards for this new type of habitat and assisted DELWP and the developer to design and construct the first GGF wetland.

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 2019-20 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.

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 notice issued to Melbourne Water in 2015-16 regarding the requirement to clean up polluted silt removed from Stony and Kororoit creeks has been revoked. The pollution was caused by historical activities in the creek catchments.

Following major industry audits from the EPA for WTP in 2018 and ETP in 2019, Melbourne Water is responding to four notices requiring the review of Melbourne Water's risk management and monitoring approach for per- and polyfluoroalkyl substances (PFAS) as well as soil and land contamination.

Two directives relate to PFAS concentration and monitoring programs at WTP and ETP. A review of potential sources (historical and current) is underway and will inform the revised risk-based approach to assessing and monitoring PFAS at these sites.

A review of the soil monitoring program at ETP is underway and updates will include a risk-based rationale for selection of current and planned sampling locations, frequency, analytes, and review of criteria for compliance assessments.

The EPA identified data gaps in the current soil and groundwater monitoring programs at WTP. Melbourne Water is working to complete an Auditor Verified Environmental Site Assessment on contamination in soil, sediment, surface water and groundwater to continue to meet compliance against EPA licence land conditions. This is due for completion in late 2021.

Corporate Governance

Melbourne Water is committed to ensuring that our corporate governance framework, policies and practices are of a high standard. Delivering on this commitment requires Melbourne Water to have a sound understanding of current governance requirements and practices, as well as being attuned to emerging governance trends and shifting stakeholder expectations.



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 regarding the identification of actual and potential conflicts of interest. These documents are regularly updated. The Company 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 made available to our employees.

Powers and accountability

Melbourne Water operates under the *Water Act 1989 (the Act)*.

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 Act relating to licensed private water diversions from waterways to Melbourne Water, effective as of 1 July 1999. The Act and by-laws are available at www.legislation.vic.gov.au.

The Honourable Lisa Neville Member of Parliament, Minister for Water, was the Minister responsible for Melbourne Water from 1 July 2019 to 30 June 2020. Melbourne Water works with officers of 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:

- ensuring the Board meets frequently enough to fulfil its duties and obligations, holding 10 Board meetings during 2019-20, and an additional two full-day strategy workshops, three professional development workshops facilitated by an external advisor, and a site visit. 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 respectively. The Managing Director and the relevant General Manager attend meetings of committees by invitation. The Board approves the charters for 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
- reviewing and monitoring the Enterprise Risk Profile, and emerging sources of risks and the mitigation measures in place to deal with those risks, including in relation to IT security and climate change
- 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 2019 to 30 June 2020. A report about the activities of the Audit, Risk and Finance Committee 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
- workplace culture
- strategic human resources (including but not limited to diversity and inclusion, change management, employee engagement)
- organisational 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 2019 to 30 June 2020. 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 of Directors 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 2019 to 30 June 2020. 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 was appointed to the Board on 1 October 2015. He is the Chair of Melbourne Water.

Mr Thwaites is a Professorial Fellow at Monash University and the Chair of the ClimateWorks Australia, BehaviourWorks Australia, the Monash Sustainable Development Institute and a Director of Fairtrade Australia New Zealand.

Mr Thwaites was a Co-Chair of the Leadership Council of the United Nations 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. He was also previously the Chair of the Peter Cullen Water and Environment Trust, the Australian Building Codes Board, President of the Australian Centre for the Moving Image (ACMI) and a director of the Australian Green Building Council.

Mr Thwaites is the Chair of the National Sustainable Development Council, which has developed the Transforming Australia: SDGs Progress Report 2018. He was previously Chair of the National Sustainability Council, an independent Council appointed by the Australian Government, which produced the Sustainable Australia Report in 2013.

He is 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 to the development and implementation of the Sustainable Development Goals.

In 2013, Mr Thwaites was named as one of the 100 Global Sustainability Leaders by ABC Carbon Express. In 2015, he was awarded the Planning Champion Award by the Planning Institute of Australia and in 2016 was awarded the Richard J Evans Award for Excellence, in recognition of outstanding contributions to planning in Victoria.

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. He is a Fellow of the Australian Institute of Company Directors.

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 on 1 October 2015. She is the Chair of the ARFC.

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, Australian Red Cross Lifeblood, CareSuper and the Medical Indemnity Protection Society and as Deputy President at CPA Australia Ltd. She was previously Chair and CEO of Auditing and Assurance Standards Board, a Director of VicSuper, a Member, International Auditing and Assurance Standards Board and Financial Reporting Council, and a Commissioner at the 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. She is also a Fellow of the Australian Institute of Company Directors, Chartered Accountants Australia & New Zealand and CPA Australia.

Board of Directors (continued)

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 as 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 the 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 and Technology Committee and the People and Remuneration Committee, Bank of Queensland where she is a member of the Information Technology, Human Resources and Remuneration and the Nomination and Governance Committees, and Monash College where she chairs the Audit and Risk Committee.

Ms Bailey-Lord is also a Fellow of the Australian Institute of Company Directors (AICD) and a member of the Australian Institute of Company Directors' Victorian Council and its Technology, Governance and Innovation Panel. She is 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. He brings to the directorship significant experience in the areas of energy policy and regulation, together with broad experience in the operations and management of utility businesses.

Mr Gleeson is currently a director of Energy Queensland where he chairs the Regulatory Committee and is a member of the Risk and Compliance Committee, the Ausgrid Partnership, the Collgar Windfarm and GDI (EEI) Pty Ltd (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 is currently a director of Monash Health, where she is a member of the Audit and Risk Committee, Population and Primary Health Committee, and Community Engagement Committee.

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.

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 Bannellong 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 currently serves as a non-executive director of Macquarie Life Limited, Commonwealth Private Limited, Commonwealth Financial Planning Limited, Infrastructure Specialist Asset Management Ltd., and St Vincent's Institute of Medical Research. She is also a Member of the Independent External Compliance Committee of Franklin Templeton Investments Australia Limited and panel member of the Australian Securities and Investment Commission Financial Services and Credit Panel.

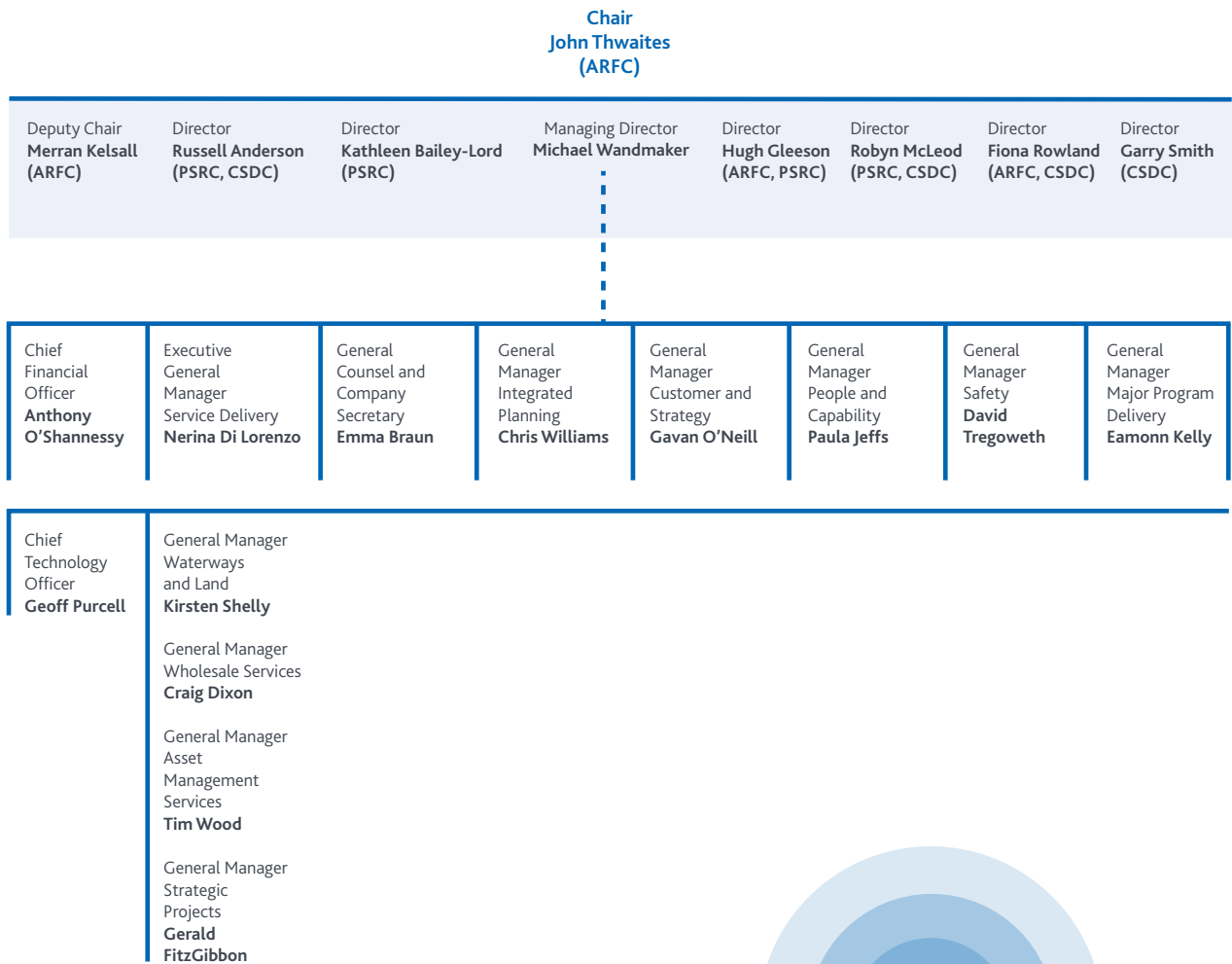
Ms Rowland holds a Bachelor of Arts, a Bachelor of Law (Honours) and is admitted as a legal practitioner in Victoria. She is also a graduate of the Australian Institute of Company Directors.

Garry Smith, Director

Garry Smith was appointed to the Board in October 2012. He is the 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 Chair 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^[2]

(2) Nerina Di Lorenzo appointed 12 August 2019
Kirsten Shelly appointed to the role 29 June 2020
Tim Wood appointed to the role 3 February 2020
Gerald FitzGibbon appointed to the role 3 February 2020

Risk and Emergency Management

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



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.

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*.

Melbourne Water's *Enterprise Risk Management Framework* comprises 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
- embedding physical and transition climate risks in our risk management process. These climate risks are considered by the Board at strategy workshops and regular risk briefings
- ongoing education and development of risk capability across the organisation 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 our *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 2019-20 financial year were:

John Thwaites (Chair)
 Michael Wandmaker (Managing Director)
 Merran Kelsall (Deputy Chair)
 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 67-68 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 (Chair)	10	10	4	4	-	-	-	-
Michael Wandmaker (Managing Director) ^(a)	9	10	4	4	4	4	4	4
Merran Kelsall (Deputy Chair)	10	10	4	4	-	-	-	-
Garry Smith	10	10	-	-	-	-	4	4
Kathleen Bailey-Lord	10	10	-	-	4	4	-	-
Hugh Gleeson	10	10	4	4	4	4	-	-
Robyn McLeod	9	10	-	-	4	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.

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 Committee meetings		Special Customer and Service Delivery Committee meetings	
	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held
John Thwaites (Chair)	-	-	1	1	-	-	-	-
Michael Wandmaker (Managing Director) ^(a)	-	-	1	1	-	-	-	-
Merran Kelsall (Deputy Chair)	-	-	1	1	-	-	-	-
Garry Smith	-	-	-	-	-	-	-	-
Kathleen Bailey-Lord	-	-	-	-	-	-	-	-
Hugh Gleeson	-	-	1	1	-	-	-	-
Robyn McLeod	-	-	-	-	-	-	-	-
Fiona Rowland	-	-	1	1	-	-	-	-
Russell Anderson	-	-	-	-	-	-	-	-

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

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 2020 or at any other time) with:

- the Corporation
- 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 2019-20 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 wholesale 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 capacity 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 \$203.3 million.

Review of operations

The directors' review of the Corporation's operations during the financial year ended 30 June 2020 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 2020.

Melbourne Water Financial Management Compliance Attestation

I, John Thwaites, on behalf of the Board, certify that Melbourne Water has no Material Compliance Deficiency with respect to the applicable Standing Directions under the *Financial Management Act 1994* and Instructions.



John Thwaites
Chair

28 August 2020



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 2020. The following structure provides users with information about the Corporation's stewardship of resources entrusted to it.

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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 2020 and the financial position of the Corporation as at 30 June 2020.

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 28 August 2020.

On behalf of the Board



John Thwaites
Chair

28 August 2020



Michael Wandmaker
Managing Director

28 August 2020



Anthony O'Shannessy
Chief Financial Officer

28 August 2020

Statement of Profit or Loss and Other Comprehensive Income

For the year ended 30 June 2020

		(\$ thousands)	
	Notes	2020	2019
Revenue			
Revenue from contracts with customers	2.1	1,954,962	1,864,918
Other income	2.2	4,516	14,267
Refinancing gain on financial instruments	5.1.2	38,142	59,609
Total revenue		1,997,620	1,938,794
Expenses			
Depreciation and amortisation expenses	4.1.3	(434,687)	(408,091)
Operational expenses	3.1	(291,465)	(217,979)
Employee benefits expenses	3.2	(140,409)	(134,762)
Repairs and maintenance expenses	3.3	(83,200)	(91,987)
Administrative expenses	3.4	(43,294)	(48,528)
Finance expenses	5.1	(601,800)	(618,237)
Government rates and taxes	3.5	(33,772)	(27,560)
Asset transfers to Council	3.6	(35,814)	(33,530)
Other expenses	3.7	(8,270)	(14,980)
Net loss on revaluation of non-financial assets	4.1.2.1	-	(25,801)
Total expenses		(1,672,711)	(1,621,455)
Net profit from operations before tax		324,909	317,339
Tax expense	3.8.1	(121,596)	(116,373)
Net profit for the period after tax		203,313	200,966
Other comprehensive income after tax			
Items that will not be reclassified to profit or loss			
Actuarial loss on defined benefit superannuation plan asset ^(a)	7.1	(781)	(2,832)
Revaluation decrease of land, buildings and infrastructure ^(b)	4.1.2	-	(160,800)
Decrease in asset revaluation reserve due to disposal of land, buildings and infrastructure ^(c)		(12,244)	(6,073)
Asset revaluation reserve transferred to retained profits on disposal of land, buildings and infrastructure		13,218	6,073
Other comprehensive (loss)/income for the period after tax		193	(163,632)
Total comprehensive income for the period after tax		203,506	37,334

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 139.

Note:

(a) Pre-tax actuarial loss on defined benefit superannuation plan asset \$1.1 million (2018-19: loss of \$4.0 million).

(b) Pre-tax revaluation decrease of land, buildings and infrastructure in 2018-19 was \$171.0 million.

(c) Pre-tax decrease in asset revaluation reserve due to disposal of land, buildings and infrastructure \$13.2 million (2018-19: decrease of \$6.1 million).

Statement of Financial Position

As at 30 June 2020

		(\$ thousands)	
	Notes	2020	2019
Assets			
Current assets			
Cash and cash equivalents		14,324	17,603
Receivables	2.3	101,749	97,797
Other current assets	3.10	18,462	16,422
Non-financial assets held for sale	4.3	9,086	21,619
Total current assets		143,621	153,441
Non-current assets			
Land, buildings, infrastructure, plant and equipment	4.1	15,127,888	15,053,474
Intangible assets	4.2	51,406	57,021
Right of use assets	4.4	55,558	-
Defined benefit superannuation plan asset	7.1	11,907	14,993
Total non-current assets		15,246,759	15,125,488
Total assets		15,390,380	15,278,929
Liabilities			
Current liabilities			
Trade, other payables and unearned revenue	3.9	395,288	379,521
Interest bearing liabilities	5.1	613,915	710,837
Provisions	3.11	4,183	8,309
Current tax liability	3.8.1	12,824	24,981
Employee benefits provision	3.2	47,262	39,885
Total current liabilities		1,073,472	1,163,533
Non-current liabilities			
Trade, other payables and unearned revenue	3.9	467	1,431
Interest bearing liabilities	5.1	7,200,813	7,108,380
Provisions	3.11	1,223	728
Net deferred tax liabilities	3.8.2	1,225,818	1,246,337
Employee benefits provision	3.2	15,062	15,501
Total non-current liabilities		8,443,383	8,372,377
Total liabilities		9,516,855	9,535,910
Net assets		5,873,525	5,743,019
Equity			
Contributed equity		507,914	507,914
Reserves		2,931,600	2,943,844
Retained profits		2,434,011	2,291,261
Total equity		5,873,525	5,743,019

The above Statement of Financial Position should be read in conjunction with the accompanying notes on pages 81 through to 139.

Statement of Changes in Equity

For the year ended 30 June 2020

	Notes	Contributed equity	Asset revaluation reserve	Retained profits	Total
(\$ thousands)					
Balance at 1 July 2019		507,914	2,943,844	2,291,261	5,743,019
Comprehensive income for the period after tax					
Net result for the period after tax		-	-	203,313	203,313
Other comprehensive (loss)/income for the period after tax		-	(12,244)	12,437	193
Total comprehensive income for the period after tax		-	(12,244)	215,750	203,506
Transactions with equity holders					
Dividends paid ^(a)		-	-	(73,000)	(73,000)
Total transactions with owners		-	-	(73,000)	(73,000)
Balance at 30 June 2020		507,914	2,931,600	2,434,011	5,873,525
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

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes on pages 81 through to 139.

Note:

(a) During 2019-20 the Corporation paid total dividends of \$73.0 million (2018-19 \$24.4 million). Dividends are determined by the Treasurer of Victoria after consultation with the Corporation's Board of Directors and the Minister for Water.

(b) No change in contributed equity for 2019-20 (2018-19 net increase of \$5.5 million made up of contributed assets received \$33.4 million less payment of capital repatriations of \$27.9 million).

Statement of Cash Flows

For the year ended 30 June 2020

		(\$ thousands)	
	Notes	2020	2019
Cash flows from operating activities			
Receipts from contracts with customers (inclusive of Goods and Service Tax)		2,055,021	1,966,569
Payments to suppliers and employees (inclusive of Goods and Service Tax)		(736,379)	(687,553)
Income tax paid		(152,964)	(127,434)
Interest received		79	70
Interest and other costs of finance paid		(610,471)	(621,645)
Other receipts		2,652	4,959
Payments for low value, short term and variable lease payments		(2,625)	-
Net cash inflow from operating activities	5.2	555,313	534,966
Cash flows from investing activities			
Payments for property, plant and equipment and intangibles		(492,274)	(546,508)
Proceeds from sales of property, plant and equipment and intangibles		36,698	33,472
Net cash (outflow) from investing activities		(455,576)	(513,036)
Cash flows from financing activities			
Proceeds from borrowings ^(a)		53,200	110,021
Repayments for the Victorian Desalination Plant (VDP) service concession liability		(77,070)	(64,046)
Repayments of lease liabilities		(6,146)	-
Dividends paid	7.4	(73,000)	(24,400)
Capital repatriation paid	7.4	-	(27,910)
Net cash (outflow) from financing activities		(103,016)	(6,335)
Net (decrease)/increase in cash and cash equivalents		(3,279)	15,595
Cash and cash equivalents at the beginning of the financial year		17,603	2,008
Cash and cash equivalents at the end of the financial year		14,324	17,603

The above Statement of Cash Flows should be read in conjunction with the accompanying notes on pages 81 through to 139.

Note:

(a) 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 2020. 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 service concession asset and liability and operating commitments (refer to 4.1 and 5.4)
- timing of satisfaction of performance obligations (refer note 2.1)
- determining transaction price and amounts allocated to performance obligations (refer note 2.1)
- for leases, determining whether the arrangement is in substance a short-term arrangement and estimating discount rate when not implicit in the lease (refer to note 4.4)
- the impacts of COVID-19 on the financial report and going concern (refer below).

COVID-19 and Going Concern

The spread of novel coronavirus (COVID-19) was declared a public health emergency by the World Health Organisation on 31 January 2020 and upgraded to a global pandemic on 11 March 2020. The rapid rise of the virus has seen an unprecedented global response by Governments, regulators and industry sectors. The Australian Federal Government enacted its emergency plan on 29 February 2020 which has seen the closure of Australian borders from 20 March, an increasing level of restrictions on corporate Australia's ability to operate, significant volatility and instability in financial markets and the release of a number of government stimulus packages (i.e. JobKeeper and JobSeeker) to support individuals and businesses as the Australian and global economies face significant slowdowns and uncertainties. The Victorian Government's additional key responses have included: declaration of a State of Emergency; different stages of restrictions on Victorian communities; creation of jobs working for Victoria to fund new jobs and direction to Victorian Government entities to make earlier payments to suppliers and provide rent relief.

When Stage two COVID-19 restrictions were announced in early March, the Corporation immediately activated our business continuity plans and set up an incident management team to ensure we minimised the impacts of COVID-19 on our services to customers and community, while keeping our people safe. We have transitioned the workforce to a remote working environment, with a small number of staff remaining on site where necessary and in accordance with the restrictions in place.

About this Report (continued)

COVID-19 and Going Concern (continued)

The Corporation adopted the Victorian Government Direction in March 2020 to make our payments to suppliers earlier (note 3.9) and to provide rent relief (note 7.6). In cooperation with the Victorian Government's working for Victoria the Corporation has also created in excess of 100 new jobs (commencing in 2020-21) for those in the community impacted by COVID-19.

Other account balances affected by COVID-19 due to management's judgements and assumptions about the future and estimation uncertainty include: recoverability of receivables (note 2.3), infrastructure asset valuation (note 4.1.2.1) and impairment (note 4.1.3).

The Corporation has reviewed the 2020-21 future budgets and forecasts to reflect expectations about the future. The Corporation does not anticipate any significant impact in our current or future operations or financial position as a result of COVID-19. Therefore it remains appropriate to prepare these financial statements on a going concern basis.

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*.

As defined in AASB 101 and explained further in the joint Australian Accounting Standards Board and Australian Auditing Standards Board guidance bulletin *Climate-related and other emerging risks disclosures: assessing financial statement materiality using AASB/IASB Practice Statement 2*, information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about the Corporation. Climate related risk is a risk for the Corporation. The impacts of climate change create resilience challenges for our services. Extreme weather events, rising sea levels, reduced rainfall and increasing temperatures are already affecting our infrastructure, natural environment and water supplies. We expect these changes to continue, and therefore we are taking action now to ensure we are prepared for the future. We have considered the impact of climate related risks and determined there is no material financial impact to the 2019-20 financial statements other than through uncertainty to significant future forecasting assumptions determining infrastructure asset fair value (note 4.1.2.1) and asset impairment (note 4.1.3). Climate change is also a consideration in determining asset useful life assumptions (note 4.1.3), provisions (note 3.11) and contingent liabilities (note 6.3).

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 16 Leases and AASB 1059 Service Concession Arrangements are applied. The new standards are both applicable from 1 July 2019 for the Corporation.

AASB 16 was issued in February 2016 and replaces AASB 117 Leases. It will result in almost all leases being recognised on the balance sheet, as the distinction between operating and finance leases is removed for lessees. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay the obligation for lease payments are recognised. The Corporation has adopted AASB 16 as at 1 July 2019 and has applied the new rules to all leases on a modified retrospective basis as mandated by the Department of Treasury and Finance (DTF) through FRD 123 Transitional requirements on the application of AASB 16 Leases. As a result, comparatives for 2018-19 in our 30 June 2020 accounts have not been restated. There was no impact to equity from the transitional adjustments.

As AASB 16 has been adopted on a modified retrospective basis, no third balance sheet has been presented for the adoption of these standards.

AASB 1059 sets out accounting for service concession arrangements from the grantor's perspective. These are arrangements that involve an operator providing public services related to a service concession asset on behalf of a grantor for a specified period of time and managing at least some of those services under its own discretion. While the application date of AASB 1059 has been deferred to 1 January 2020, DTF has mandated early adoption of AASB 1059 using a full retrospective approach, applicable for annual reporting periods commencing on or after 1 January 2019 through FRD 124 Transitional requirements. Therefore, the Corporation has adopted AASB 1059 for the VDP arrangement as at 1 July 2019 using a full retrospective approach with 1 July 2018 being the date of initial application. As a result, all comparative information in the financial statements has been prepared as if AASB 1059 had always been in effect.

A third balance sheet has not been presented for the adoption of AASB 1059 as there are no financial impacts of adoption, only reclassification and disclosure changes.

Changes to significant accounting policies are described in further detail under Note 4.4, 5.4 and 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	83
2.2	Other income	85
2.3	Receivables	86

2.1 Revenue from contracts with customers

(\$ thousands)

	2020	2019
Bulk water services	996,467	960,206
Bulk sewerage services	452,045	439,702
Waterways and drainage charges	250,896	243,024
Developer contributions	192,232	181,106
Developer contributed assets	38,512	18,683
Net gain on disposal of property, plant, equipment and intangibles	15,207	12,571
Other revenue	9,603	9,626
Total Revenue from contracts with customers	1,954,962	1,864,918

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 seven 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 by the developer 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

	(\$ thousands)	
	2020	2019
Interest revenue	79	70
Rental income	3,012	3,133
Government grants	1,425	11,064
Total other income	4,516	14,267

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)	
	2020	2019
Contractual receivables		
Trade debtors ^(a)	40,983	31,510
Other receivables ^(a)	47,397	50,673
Less: allowance for expected credit losses	-	-
Total contractual receivables	88,380	82,183
Statutory receivables		
Net GST receivable from the ATO	13,369	15,614
Total current receivables	101,749	97,797

(a) 2018-19 other receivables have been re-classified to include accrued revenue of \$12.8 million previously included in trade debtors.

Trade debtors and other receivables (including accrued revenue) 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. This assessment took into consideration COVID-19 with no expected material impact on the future recoverability of debtors. As such, there is no allowance for expected credit losses as at 30 June 2020 (2018-19: nil).

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)				Total
	Current	Past due but not impaired			
30 June 2020	0-30 days	31-60 days	61-90 days	91 days+	
Receivables					
Trade debtors ^(a)	20,089	7,821	2,594	10,479	40,983
Other receivables	47,397	-	-	-	47,397
Total contractual receivables	67,486	7,821	2,594	10,479	88,380
30 June 2019	Current	Past due but not impaired			Total
	0-30 days	31-60 days	61-90 days	91 days +	
Receivables					
Trade debtors and accrued revenue ^(a)	17,968	3,721	1,434	8,387	31,510
Other receivables	50,673	-	-	-	50,673
Total contractual receivables	68,641	3,721	1,434	8,387	82,183

(a) The majority of the aged receivables relate to waterways and drainage charges guaranteed by a lien on a property to ensure that any outstanding amounts are recovered upon sale of the property.

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 2020.

Structure

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3.10	Other current assets	94
3.11	Provisions	95

3.1 Operational expenses

	(\$ thousands)	
	2020	2019
VDP operating expenses	186,045	126,975
Energy expenses	47,282	36,980
External professional services expenses	22,511	19,382
Research and development expenses	8,051	7,433
Materials and chemicals expenses	10,896	11,129
Grants and contributions expenses	8,038	9,253
Transport expenses	3,492	3,877
Insurance expenses	4,787	2,612
Other expenses	363	338
Total operational expenses	291,465	217,979

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)

	2020	2019
Salary and wages expenses	107,312	102,212
Annual, long service and shift leave expenses	14,765	14,644
Defined contribution plans (superannuation accumulation fund) expense	9,879	9,570
Defined benefit superannuation plan expense	1,565	1,254
Other employee expenses	6,888	7,082
Total employee benefits expenses	140,409	134,762

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 (i.e payroll tax, WorkCover (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)

	2020	2019
Current		
Accrued salaries and wages		
Accrued salaries and wages	5,247	3,836
Annual leave		
Unconditional and expected to settle within 12 months	9,155	7,392
LSL		
Unconditional and expected to settle within 12 months	2,864	2,679
Unconditional and expected to settle after 12 months	18,634	17,121
On-costs		
Unconditional and expected to settle within 12 months	1,681	1,431
Unconditional and expected to settle after 12 months	2,760	2,536
Other employee benefits	6,921	4,890
Total current employee benefits and on-costs	47,262	39,885
Non-current		
Long service leave	4,754	5,060
On-costs on long service leave	704	749
Other employee benefits	9,604	9,692
Total non-current employee benefits and on-costs	15,062	15,501
Total employee benefits and on-costs	62,324	55,386

Reconciliation of movement in on-cost provision

	(\$ thousands)	
	2020	2019
Opening balance	4,716	4,014
Additional provisions recognised	2,025	2,465
Additions due to LSL transfers	27	7
Reductions arising from payments/other sacrifices of future economic benefits	(1,623)	(1,770)
Closing balance	5,145	4,716
Current	4,441	3,967
Non-current	704	749

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
- 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).

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
- 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 seven 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, WorkCover, workers' compensation and termination benefits. The WorkCover and workers' compensation provisions are based on independent actuarial assessments. A provision of \$12.7 million (2018-19 \$11.8 million) has been made for outstanding claims incurred and not settled, and for claims incurred but not reported at 30 June 2020. The value of the bank guarantee to the Victorian WorkCover Authority (as part of the Corporation's WorkCover self insurance commitments) at 30 June 2020 is \$8.8 million (2018-19: \$8.4 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)

	2020	2019
Repairs and maintenance	75,463	84,905
Information technology maintenance	7,737	7,082
Total repairs and maintenance expenses	83,200	91,987

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)

	2020	2019
Waterways charges billings and collection	14,122	13,566
Information technology and telecommunication expenses	17,358	16,928
Rental and lease expenses ^(a)	-	8,482
Short term lease expenses	252	-
Low value lease expenses	13	-
Variable lease payment expenses	2,360	-
Education and training expenses	2,514	3,072
Legal expenses	1,056	794
Other expenses	5,619	5,686
Total administrative expenses	43,294	48,528

(a) From 2019-20, rental and lease expenses are treated differently with the implementation of AASB 16. Refer to notes 4.4 and 7.9.

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. Expenses relating to short term, low value or variable lease payments are not included in the lease liability and are expensed in the year they are incurred. For further details and practical expedients applied under AASB 16 in relation to short term leases, low value leases and variable lease payments, refer to note 4.4.

3.5 Government rates and taxes

(\$ thousands)

	2020	2019
Government rates and taxes	33,772	27,560
Total government rates and taxes	33,772	27,560

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)

	2020	2019
Asset transfers to council	35,814	33,530
Total asset transfers to council	35,814	33,530

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)	
	2020	2019
Assets written off/written down	2,916	1,422
CSO adjustments for purchased land	3,157	11,369
Allowance for expected credit loss	-	-
Other expenses	2,197	2,189
Total other expenses	8,270	14,980

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, Community Service Obligation (CSO) adjustments for purchased land based on VGV valuation and allowance for expected credit loss. 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 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)	
	2020	2019
Current tax	141,004	144,187
Deferred tax relating to temporary differences	(19,114)	(27,275)
Adjustments for current tax of prior periods	(294)	(539)
Total tax expense	121,596	116,373

Reconciliation of income tax to prima facie tax payable	(\$ thousands)	
	2020	2019
Profit before income tax	324,910	317,339
Tax at the Australian tax rate of 30% (2018-19: 30%)	97,473	95,202
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:		
Adjustment in respect of income tax of previous year	(294)	(539)
Non assessable and non deductible for income tax purposes	20,774	17,057
Assessable income not booked	3,643	5,418
Research and development tax incentive	-	(765)
Income tax as reported in the Statement of Profit or Loss and Other Comprehensive Income	121,596	116,373

Income tax payable	(\$ thousands)	
	2020	2019
Current tax payable	12,824	24,981
Total income tax payable	12,824	24,981

Income tax recognised in other comprehensive income	(\$ thousands)	
	2020	2019
Deferred tax arising on items recognised in other comprehensive income		
Decrement in deferred tax on land & buildings revalued	-	(10,201)
Reversal of deferred tax on disposal of land previously revalued	(974)	(61)
Actuarial losses on the defined benefit plan	(334)	(1,214)
Total income tax recognised in other comprehensive income	(1,308)	(11,476)

3.8.2 Net deferred tax liabilities - non-current

(\$ thousands)

	2020	2019
Amounts recognised in Profit or Loss		
Property, plant and equipment	196,680	224,770
Employee entitlements	(12,165)	(11,090)
Developer contributions	619	1,147
Provisions	(2,220)	(1,814)
Revenue in advance	(20,086)	(21,704)
VDP service concession liability	95,919	84,380
Other	(5,532)	(3,263)
Total recognised in Profit or Loss	253,215	272,426
Amounts recognised in Other Comprehensive Income		
Gain on revaluation of land and buildings	56,709	57,683
Net gains/losses on revaluation of infrastructure assets	907,585	907,585
Actuarial gain on the defined benefit plan	8,309	8,643
Total recognised in Other Comprehensive Income	972,603	973,911
Net deferred tax liability	1,225,818	1,246,337

Movements

(\$ thousands)

	2020	2019
Opening balance	1,246,337	1,238,064
Credited to Profit or Loss	(19,114)	(27,275)
Debited to Other Comprehensive Income	(1,308)	(11,476)
Adjustment in respect of VDP service concession arrangement Accounting Standard change (AASB 9)	-	67,793
Adjustment in respect of developer contributions - Accounting Standard change (AASB 15)	-	(21,424)
Adjustment in respect of deferred tax of prior period	(97)	655
Closing balance	1,225,818	1,246,337
Net deferred tax liabilities to be recovered after more than 12 months	1,255,946	1,278,708
Net deferred tax liabilities to be recovered within 12 months	(30,128)	(32,371)
Total non-current liabilities - deferred tax liabilities	1,225,818	1,246,337

The Cost of Delivering Our Services (continued)

3.9 Trade, other payables and unearned revenue

(\$ thousands)

	2020	2019
Current trade, other payables and unearned revenue		
Trade creditors	84,981	71,191
Interest payable	37,479	45,062
Accruals	194,382	177,881
Unearned revenue from contracts with customers	66,523	71,036
Other unearned revenue	7,097	9,370
Other payables	4,826	4,981
Total current trade, other payables and unearned revenue	395,288	379,521
Non-current other payables		
Other payables	467	1,431
Total non-current other payables	467	1,431
Total trade, other payables and unearned revenue	395,755	380,952

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. Since 23 March 2020, the Corporation has fast tracked the payment of invoices to be within 10 business days as part of the State Government's *Economic Survival and Jobs Package*.

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.

Unearned revenue from contracts with customers

(\$ thousands)

	2020	2019
Unearned revenue at the beginning of the financial year	71,036	70,380
Consideration received in the year before performance obligations are satisfied	183,043	171,477
Performance obligations satisfied during the period and recognised as revenue (net of interest)	(187,556)	(170,821)
Unearned revenue from contracts with customers	66,523	71,036

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.

3.10 Other current assets

(\$ thousands)

	2020	2019
Prepayments	8,507	7,358
Inventories	9,955	9,064
Total other current assets	18,462	16,422

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.

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 (10 business days since 23 March 2020 as per note above under Trade Creditors in accordance with contract terms).

Unearned revenue from contracts with customers

(or 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.

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

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

3.11 Provisions

(\$ thousands)

	2020	2019
Current		
Insurance claims	842	1,161
Other provisions	3,341	7,148
Total provisions - current	4,183	8,309
Non-current		
Insurance claims	1,223	728
Total provisions - non-current	1,223	728
Total provisions	5,406	9,037

Reconciliation of movement in provisions

(\$ thousands)

	Insurance claims	Other provisions	Total
Carrying amount at 1 July 2019	1,889	7,148	9,037
Provisions recognised/(de-recognised)	1,210	-	1,210
Amounts utilised during the year	(1,034)	(3,807)	(4,841)
Carrying amount at 30 June 2020	2,065	3,341	5,406
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

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.

The recognition of provisions requires significant estimates and assumptions such as requirements of the relevant legal and regulatory frameworks, timing, cost estimation, legal disputes and climate related risks. These uncertainties may result in future actual expenditure differing from the amounts currently provided. Provisions are periodically reviewed and updated based on the facts and circumstances available at the time.

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 deductible. 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

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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	Crown land	Freehold land	Buildings	Leasehold improvements	Plant and equipment	Fleet vehicles	Infrastructure	VDP service concession asset ^(d)	Capital works in progress
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 ^(a)	(1,139)	-	-	-	35	(13)	-	(1,161)	-	-
Assets classified as held for sale	(4,968)	-	125	(5,093)	-	-	-	-	-	-
Revaluation decrements ^(b)	(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
Year ended 30 June 2020										
Opening balance	15,053,474	111,540	1,374,358	22,065	8,330	14,981	12,436	8,801,118	4,149,448	559,198
Purchased additions	3,743	-	-	-	-	-	3,743	-	-	-
Developer contributed assets	38,512	-	-	-	-	-	-	38,512	-	-
Disposals and write-offs	(51,841)	(33)	(16,752)	(5,132)	-	(6)	(513)	(28,816)	-	(589)
Depreciation and amortisation	(405,314)	-	-	(1,011)	(416)	(6,423)	(2,001)	(317,910)	(77,553)	-
Transfers between classes ^(a)	-	(87)	1,940	-	(6,769)	6,888	-	(1,972)	-	-
Assets classified as held for sale	12,533	-	7,440	5,093	-	-	-	-	-	-
Revaluation increments	-	-	-	-	-	-	-	-	-	-
Revaluation decrements ^(b)	(3,157)	-	(3,157)	-	-	-	-	-	-	-
Capital expenditure ^(c)	479,903	-	-	-	-	-	-	-	-	479,903
Capitalisation of works in progress	35	-	4,243	6,727	-	2,348	-	382,207	-	(395,490)
Closing carrying amount	15,127,888	111,420	1,368,072	27,742	1,145	17,788	13,665	8,873,139	4,071,895	643,022
At 30 June 2020										
Gross carrying amount	16,846,390	111,420	1,368,072	30,968	2,441	98,264	21,643	9,907,767	4,662,793	643,022
Accumulated depreciation	(1,718,502)	-	-	(3,226)	(1,296)	(80,476)	(7,978)	(1,034,628)	(590,898)	-
Carrying amount	15,127,888	111,420	1,368,072	27,742	1,145	17,788	13,665	8,873,139	4,071,895	643,022

Note:

(a) Includes transfers to intangible assets, refer to 4.2 and for 2019-20 also includes reclassification of leasehold improvements to plant and equipment.

(b) 2019-20 pre-tax revaluation decrement recognised in the income statement as other expenses \$3.2 million (relates to Community Service Obligation discount applied for purchased land based on VGV valuation). 2018-19 pre-tax revaluation decrement recognised in the income statement as other expenses \$11.5 million, net loss on revaluation of non-financial assets \$25.8 million and other comprehensive income \$171.0 million. Decrements are expensed in the profit and loss when the reserve balance is exhausted.

(c) Represents total capital expenditure, exclusive of intangibles \$18.7 million (refer to 4.2) and fleet vehicles \$3.7 million.

(d) Refer to Note 7.9 for transitional disclosures in adopting AASB 1059. 2018-19 comparatives for the VDP infrastructure have been re-classified to VDP service concession asset.

Assets Available to Support Output Delivery (continued)

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

	(\$ thousands)	
	2020	2019
Land	863,470	858,657
Buildings	33,069	31,227
Infrastructure assets - owned	6,614,396	6,422,371
VDP service concession asset	4,071,895	4,149,448
Total	11,582,830	11,461,703

Initial recognition

All non-financial physical assets (except for service concession assets) are measured and recognised initially at cost. Service concession assets are recognised initially at current replacement cost in accordance with the cost approach to fair value in AASB 13 (Fair Value). 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.

Items with a cost or value in excess of \$500 (2018-19: \$500) and a useful life of more than one 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 (2018-19: \$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 and VDP service concession asset

Revaluations are conducted either independently every five years (as required under *FRD 103H Non-Financial Physical Assets*) or in the intervening years 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 on land and buildings. Fair value assessment is performed annually for all other property, plant and equipment as a managerial valuation, utilising external experts to conduct the infrastructure and service concession asset valuation annually. Managerial valuation movements are booked if material in accordance with FRD 103H. 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
- 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)

	2020	Fair value measurements		
		Level 1 ^(a)	Level 2 ^(a)	Level 3 ^(a)
Non-financial assets held for sale	9,086	-	9,086	-
Non-specialised land	58,715	-	58,715	-
Specialised land	1,420,778	-	-	1,420,778
Total land	1,488,579	-	67,801	1,420,778
Non-financial assets held for sale	-	-	-	-
Non-specialised buildings	578	-	578	-
Specialised buildings	27,164	-	-	27,164
Total buildings	27,742	-	578	27,164
Leasehold improvements	1,145	-	-	1,145
Plant and equipment	17,788	-	-	17,788
Fleet vehicles	13,665	-	-	13,665
Infrastructure assets	8,873,139	-	-	8,873,139
VDP service concession asset	4,071,895	-	-	4,071,895
Total other	12,977,632	-	-	12,977,632
Total land, buildings, infrastructure, plant and equipment	14,493,953	-	68,379	14,425,574

(\$ thousands)

	2019	Fair value measurements		
		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
VDP service concession asset	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

Note:

(a) Classified in accordance with the fair value determination of non-financial physical assets

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
- 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.

2019-20 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 no material change in asset values (2018-19: \$196.8 million net decrease).

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 2019-20 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 2020 are summarised below:

- nominal after tax discount rate in the range of 4.6% to 5.3% (2018-19: 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 of 3.0% (2018-19: 3.0%)
- developer contributions growth at 2.5% (2018-19: 2.5%) applied post initial five-year pricing
- long term growth rate of 3.25% (2018-19: 3.25%) – representing inflation and volume growth
- a 10-year explicit cash flow projection period, with cash flows beyond the projection period reflected in the terminal value (2018-19: 10 years)
- normalised terminal capex used for steady state \$540.0 million (2018-19: \$470.0 million)
- the valuation considers climate change through forecast cash flows, growth and terminal capital expenditure assumptions (as noted above). While scenario planning is used to explore and help prepare for a wide range of potential future conditions, there is a risk that the assumptions made may not reflect the actual impact of climate-related emerging risks in the future. Table 4.1.2.3 highlights sensitivity of fair value measurement to changes in these significant unobservable inputs
- impacts from COVID-19 have been incorporated into the cashflow forecasts. The direct impacts are expected to be relatively minor. The extent and duration of future macroeconomic measures (such as GDP, inflation and interest rates) remain uncertain. As a result, the inherent risk associated with the macroeconomic uncertainty has increased and is reflected in the discount rate.

The **VDP service concession** asset is valued using the current replacement cost method under AASB 13 (Fair Value), as required by AASB1059 and adjusted for the associated depreciation. Under the previous leasing approach the VDP assets were measured at fair value under the income approach under AASB 13, and depreciated over their useful lives.

The fair value of the VDP service concession assets was assessed by management with assistance from external valuation experts who provided an indicative fair value estimate at both 30 June 2020 and 1 July 2018 and it was determined that there is no material difference between the carrying asset value and the indicative fair value. The VDP service concession will be independently valued by external experts for the 2020-21 reporting period.

The VDP service concession asset value 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 current replacement cost approach at 30 June 2020 are summarised below:

- indirect method used by applying equipment-specific inflation factors to historical costs based on indices obtained from the Australian Bureau of Statistics (ABS)
- economic useful lives provided by DELWP
- physical useful lives based on asset specific industry benchmarks
- functional obsolescence assuming the VDP is representative of the latest technologies available in relation to design, construction and materials used.

The VDP service concession asset is classified as level 3 fair value measurement as it contains significant unobservable inputs and adjustments.

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

	(\$ thousands)	
	2020	2019
Total net (loss)/gain on revaluation of non-financial assets	-	(25,801)

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
			2019 and 2020	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	\$5-\$8,500	\$11-\$8,600	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 (63 years weighted average)	5-150 years (71 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-\$0.5M per unit	\$500-\$4.2M 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-\$3.5M per unit	\$500-\$1.0M 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 (11 years weighted average)	3-50 years (8 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-\$223,000 per unit	\$5,600-\$242,000 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 (6 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
			2019 and 2020	2019	
Infrastructure assets	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 an increase of \$2,274.5 million in 2019-20 (2018-19: \$1,698.3 million) and decrease by \$1,691.2 million in 2019-20 (2018-19: \$1,329.2 million)
		Terminal value capital expenditure (excluding growth)	\$540.0 million	\$470.0 million	If the quantum of the terminal value capital expenditure had changed by +/- \$50 million that would result in a \$1,618.6 million decrease in fair value in 2019-20 (2018-19: \$1,292.4 million) or \$1,618.6 million increase in fair value in 2019-20 (2018-19: \$1,292.4 million)
		Weighted average cost of capital (WACC)	4.6-5.3%	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 \$1,966.9 million in 2019-20 (2018-19: \$1,252.1 million) and increase by \$2,667.6 million in 2019-20 (2018-19: \$2,441.2 million)
		Useful life	2-245 years (78 years weighted average)	2-245 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
VDP service concession asset	Current replacement cost	Useful life	9-100 years	9-100 years	A significant increase or decrease in estimated useful life of the asset would result in a significantly higher or lower fair value
		Equipment-specific inflation factors	12%	12%	A significant increase or decrease in equipment-specific inflation factors 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	Infrastructure	VDP service concession asset
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
Opening balance 1 July 2019	1,428,516	21,430	8,330	14,981	12,436	8,801,118	4,149,448
Purchased additions	-	-	-	-	3,743	-	-
Developer contributed assets	-	-	-	-	-	38,512	-
Disposals and write-offs	(2,436)	(5,132)	-	(6)	(513)	(28,816)	-
Depreciation and amortisation	-	(954)	(416)	(6,423)	(2,001)	(317,910)	(77,553)
Transfers between classes	(5,607)	5,093	(6,769)	6,888	-	(1,972)	-
Transfers in/(out) of level 3	(782)	-	-	-	-	-	-
Revaluation increments	-	-	-	-	-	-	-
Revaluation decrements	(3,157)	-	-	-	-	-	-
Capital contributions	-	-	-	-	-	-	-
Capitalisation of works in progress	4,243	6,727	-	2,348	-	382,207	-
At 30 June 2020	1,420,777	27,164	1,145	17,788	13,665	8,873,139	4,071,895

4.1.3 Depreciation, amortisation and impairment

		(\$ thousands)	
		2020	2019
Depreciation			
Buildings	4.1.1	1,011	1,097
Leasehold improvements	4.1.1	416	1,164
Plant and equipment	4.1.1	6,423	8,960
Fleet vehicles	4.1.1	2,001	2,054
Infrastructure assets	4.1.1	317,909	298,777
VDP service concession asset ^(a)	4.1.1	77,553	77,550
Right of use assets	4.4	7,915	-
Total depreciation		413,228	389,602
Amortisation			
Intangible assets	4.2	21,459	18,489
Total amortisation		21,459	18,489
Total depreciation and amortisation		434,687	408,091

(a) 2018-19 comparatives have been reclassified to depreciation on VDP service concession assets for consistency.

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.

Physical, economic and environmental factors are taken into consideration in assessing the useful lives of the assets, including but not limited to asset condition and obsolescence, technology changes, capital planning and renewals, and climate-related emerging risks.

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 (2018-19: 5 to 150 years)
Leasehold improvements	3 to 15 years (2018-19: 3 to 15 years)
Plant and equipment	3 to 50 years (2018-19: 3 to 50 years)
Infrastructure assets	2 to 245 years (2018-19: 2 to 245 years)
Fleet vehicles	1 to 15 years (2018-19: 1 to 15 years)
Intangible assets	2 to 25 years (2018-19: 2 to 25 years)
VDP service concession asset	9 to 100 years (2018-19: 9 to 100 years)
Right of use assets	3 to 8 years (2018-19: not applicable)

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.

The recoverable value estimates used in the impairment of assets analysis considers forecast cash flows, growth and terminal capital expenditure assumptions. The recoverable value estimates demonstrate that assets are not impaired. While scenario planning is used to explore and help prepare for a wide range of potential future conditions (including climate change and the impacts of COVID-19), there is a risk that the assumptions made may not reflect the actual impact of emerging risks in the future.

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)

	2020	2019
Intangible assets	185,358	169,911
Less: accumulated amortisation and impairment	(133,952)	(112,890)
Total intangible assets	51,406	57,021

Reconciliation of movements in intangible assets

(\$ thousands)

	Total	RECs ^(b)	Other
Carrying amount at 1 July 2019	57,021	3,428	53,593
Additions	7,389	7,389	-
Disposals	(10,104)	(8,965)	(1,139)
Amortisation	(21,459)	-	(21,459)
Impairment ^(c)	(94)	(94)	-
Capital expenditure	18,653	-	18,653
Carrying amount at 30 June 2020	51,406	1,758	49,648
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

Note:

(a) Includes transfers to physical assets, refer to 4.1.1.

(b) Renewable Energy Certificates (RECs).

(c) Impairment recognised in the income statement as other expenses \$0.1 million (2018-19 : nil).

Intangible assets consist primarily of information technology software and 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 end 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)	
	2020	2019
Land	9,086	16,526
Buildings	-	5,093
Total non-financial assets held for sale	9,086	21,619

The Corporation currently holds land for sale mainly as part of the Riverwalk Estate (Werribee) development. As at 30 June 2020, 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 Western 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.

Assets Available to Support Output Delivery (continued)

4.4 Right of use assets and leases

This note provides information for leases where the Corporation is a lessee.

(i) Amounts recognised in the Statement of Financial Position

	(\$ thousands)	
The Statement of Financial Position shows the following amounts relating to leases:	2020	2019
Right of use assets		
Buildings	54,567	-
Equipment	476	-
Other	515	-
Total right of use assets	55,558	-
Lease liabilities		
Current	6,551	-
Non-current	50,893	-
Total lease liabilities	57,444	-

There were no additions to the right-of-use assets during the 2019-20 financial year.

In the previous year, the only finance lease recognised by the Corporation was the VDP arrangement as per the requirements under *AASB 117 Leases*. The Corporation has reclassified the VDP finance lease assets and liabilities to service concession assets and liabilities as per *AASB 1059 Service Concession Arrangements*. Refer to notes 4.1, 5.4 and 7.9 for service concession assets and liabilities and adoption of new accounting standards.

(ii) Amounts recognised in the Statement of Profit or Loss

	(\$ thousands)	
The Statement of Profit or Loss shows the following amounts relating to leases:	2020	2019
Depreciation charge of right-of-use assets		
Buildings	7,679	-
Equipment	151	-
Other	85	-
Total	7,915	-
Administrative expenses		
Expense relating to short-term leases	252	-
Expense relating to leases of low-value assets that are not short-term leases	13	-
Expense relating to variable lease payments not included in lease liabilities	2,360	-
Total	2,625	-
Finance expenses		
Buildings	1,373	-
Equipment	11	-
Other	9	-
Total	1,393	-

The total cash outflow for leases in 2019-20 was \$7.5 million.

(iii) The Corporation's leasing activities and how these are accounted for:

The Corporation leases buildings, a rooftop space for a telecommunication tower, minor equipment and various network connection assets.

Rental contracts are typically made for fixed periods of 3 to 15 years, but may have extension options as described below.

Contracts may contain both lease and non-lease components. The Corporation allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants.

From 1 July 2019 leases are recognised as a Right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by Corporation.

Initial recognition

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate
- amounts expected to be payable by the lessee under residual value guarantees
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the profit and loss over the lease period to produce a constant periodic rate of interest on the remaining balance of the liability for each period. Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the Corporation's incremental borrowing rate. Treasury Corporation of Victoria (TCV)/ Department of Treasury's (DTF) calculator is used to determine the incremental borrowing rate.

Right-of-use assets include the following components:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date, less any lease incentives received
- any initial direct costs
- restoration costs.

The Corporation is exposed to future cash outflows that are not reflected in the measurement of lease liabilities. This includes:

- variable lease payments
- extension options and termination options
- leases not yet commenced to which the lessee is committed.

Assets Available to Support Output Delivery (continued)

4.4 Right-of-use assets and leases (continued)

(iii) The Corporation's leasing activities and how these are accounted for:

Subsequent re-measurements

The right-of-use assets are subject to revaluation. In addition, the right-of-use assets are periodically reduced by impairment losses, if any and adjusted for certain remeasurements of the lease liability.

Depreciation

The Corporation depreciates the right-of-use assets on a straight-line basis from the lease commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

Variable lease payments

Variable lease payments are recognised as administrative expenses in the profit and loss. Variable lease payments include overhead charges and congestion levies associated with the building and parking leases.

Extension and termination options

Extension and termination options may be included in the leases. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by Corporation and not by the respective lessor.

Residual value guarantees

The Corporation is not exposed to any lease residual value guarantees.

Critical judgements in determining the lease term

In determining the lease term, the Corporation considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. The assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment. During the current financial year there were no changes in circumstances to impact the assessment of exercising extension and termination options.

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:

	(\$ thousands)	
	2020	2019
Within 1 year	1,837	2,005
Later than 1 year but not later than 5 years	5,679	6,035
Later than 5 years	1,996	3,154
Total operating lease receivable	9,512	11,194

During 2019-20 the Corporation provided rental waivers to approved applicants (\$0.1 million) as part of the COVID-19 hardship program as directed by the Victorian Government. This has been reflected in the commitments receivable numbers and also in ex-gratia disclosures at note 7.6.

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

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5.1 Interest bearing liabilities

	(\$ thousands)	
	2020	2019
Current interest bearing liabilities		
VDP service concession liability ^(a)	38,064	74,737
Lease liabilities	6,551	-
Borrowings	569,300	636,100
Total current interest bearing liabilities	613,915	710,837
Non-current interest bearing liabilities		
VDP service concession liability ^(a)	3,564,920	3,643,380
Lease liabilities	50,893	-
Borrowings	3,585,000	3,465,000
Total non-current interest bearing liabilities	7,200,813	7,108,380
Total interest bearing liabilities	7,814,728	7,819,217

a) Refer to Note 7.9 for transitional disclosures in adopting AASB 1059. 2018-19 comparatives for the VDP finance lease liability have been re-classified to VDP service concession liability.

Interest bearing liabilities come from borrowings raised through the Treasury Corporation of Victoria (TCV), along with VDP service concession liability and leases. 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.

Financial liabilities for the VDP service concession liability were initially measured at the fair value of the service concession asset. The liability has remained unchanged on transitioning to AASB 1059. Any modifications to the debt repayments are considered with reference to the guidance within AASB 9. Refer to Note 5.1.2.

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.

5.1.1 Breakdown of finance costs

	(\$ thousands)	
	2020	2019
Interest expense	147,817	149,578
VDP service concession liability	413,197	426,842
Lease liabilities	1,393	-
Financial Accommodation Levy	39,393	40,534
Significant financing component - contracts with customers	-	1,283
Total	601,800	618,237

Financing Our Operations (continued)

5.1 Interest bearing liabilities (continued)

Finance costs include interest on short-term and long-term borrowings, finance charges associated with the VDP service concession liability, interest on leases, 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)

	2020	2019
Total refinancing gain on financial instruments	38,142	59,609

The refinancing gain relates to the VDP service concession arrangement (refer Note 5.4) and is accounted for under AASB 9.

Debt modification assessment

When there is a refinancing gain, AASB 9 requires an assessment to be conducted to determine if the modification of debt is substantial, meaning the difference is at least 10% or greater between the present value of the modified cash flow and original cash flow, being the both discounted at the original effective interest rate. Substantial debt modification is to be treated as an extinguishment of the existing debt and a recognition of a new liability.

In conducting the 2019-20 debt modification assessment, the State has adjusted the methodology applied to previous refinancing transactions which was based on calculating the cumulative cashflow change from all previous refinancing activities. The updated methodology compares the post modification cashflows against those immediately before the refinancing transaction. The change in methodology does not impact the prior year assessment and the calculation of the previous debt modifications.

For 2019-20, the refinancing gain is not considered to be a substantial modification to the existing debt as the change is less than 10% and as such, AASB 9 requires the resulting gain from refinancing to be recognised in the Statement of Profit or Loss immediately and reduces the future liability and interest expense profile. The 2018-19 refinancing gain was also not considered to be a substantial modification to the existing debt.

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 three 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)

	2020	2019
Profit for the period after tax	203,313	200,966
Plus/(less) non cash items:		
Depreciation and amortisation	434,687	408,091
Net gain on sale of non-current assets (including RECs)	(15,207)	(12,571)
Assets written off/written down and asset transfers to Council	38,730	36,537
Developer contributed assets received	(38,512)	(18,683)
Defined benefit superannuation plan expense	1,565	1,254
Defined contribution superannuation plan expense	406	3,733
RECs received	(8,813)	(5,108)
Net loss/(gain) on revaluation of non-financial assets	-	25,801
Refinancing (gain)/loss on financial instruments	(38,142)	(59,609)
Changes in operating assets and liabilities (net of investing items):		
(Increase)/Decrease in trade and other receivables	(3,951)	(16,481)
Decrease/(Increase) in other assets	(925)	23,924
(Decrease)/Increase in trade and other payables	15,162	(38,817)
Increase/(Decrease) in provisions and employee benefits provisions	3,307	8,327
Increase/(Decrease) in other liabilities	(3,631)	141
Increase/(Decrease) in current tax liability	(12,157)	15,559
(Decrease)/Increase in deferred tax liabilities	(20,519)	(38,098)
Net cash provided by operating activities	555,313	534,966

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)	
	2020	2019
Capital expenditure commitments		
Total capital expenditure contracted for the construction of water, sewerage and waterways and drainage infrastructure:		
Less than 1 year	230,220	234,777
1 year but less than 5 years	257,263	94,696
5 years or more	141	-
Total capital expenditure commitments	487,624	329,473

The Corporation as lessee

Operating lease commitments^{a)}

The Corporation leases buildings 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
1 year but less than 5 years	46,470
5 years or more	39,406
Total operating and lease commitments	96,277

a) From 2019-20 operating lease commitments are no longer reported as these are now captured as lease assets and liabilities in the statement of financial position. Refer to note 4.4.

Other operating commitments

Other operating commitments relate to operating contracts including energy, IT, research and development etc (excluding leases).

Refer to note 5.4 for other operating commitments relating to the VDP service concession arrangement.

Total other operating expenditure contracted for at balance date are as follows:

Less than 1 year	34,551	32,095
1 year but less than 5 years	75,348	71,410
Later than 5 years	56,164	64,881
Total other operating commitments	166,063	168,386

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 Sustainable Energy Infrastructure. The Corporation delivers biogas extracted from the treatment process to Sustainable Energy Infrastructure, who in turn provides this generated electricity exclusively to the Corporation. The arrangement expires on 31 December 2020.

Less than 1 year	2,303	4,580
1 year but less than 5 years	-	2,318
Total Build, Own and Operate commitment	2,303	6,898

Financing Our Operations (continued)

5.4 VDP service concession arrangement

Victorian Desalination Project Arrangement

The State of Victoria entered into a 30-year Public Private Partnership (PPP) arrangement with the AquaSure consortium (AquaSure) on 30 July 2009. The Victorian Desalination Project was initiated to design, build, finance and operate a desalination plant, transfer pipeline and 220 kV underground power cable capable of supplying 150GL of water per annum into the Melbourne network. Construction of the Victorian Desalination Project began in 2009 and the lease term commenced in 2012 upon successful commissioning. AquaSure is required to transfer the project assets to the State at the end of the project term for no additional payment by the State and the Corporation has purchased the rights to acquire the assets at that time.

Under the arrangement, the State has an obligation to make Water Security Payments (WSPs) to the consortium provided the plant is maintained to the appropriate standard. The WSPs have two components: capital payments for the project assets and other expenses for operating, maintenance and lifecycle costs. The state will also make Water Usage Payments (WUPs) for any water that is ordered and delivered to the required standard. Water can be ordered annually for flexible amounts from 0GL to 150GL (in set increments).

An arrangement was entered into by the State and the Corporation, where a *Statement of Obligations (SoO)* was issued to the Corporation under section 4I of the Water Industry Act 1994 that required the Corporation to pay all monies as required by the State under the project deed with AquaSure. This includes payment of the WSPs and WUP in accordance with the Project Deed. The Corporation makes these payments to DELWP who are managing the contract with AquaSure on behalf of the State.

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 State, DELWP and the Corporation.

Service Concession Assessment and Policy

DELWP has assessed the agreements between AquaSure, DELWP (on behalf of the State) and the Corporation, and concluded that the agreements are connected and should form one single commercial arrangement. Under the combined arrangement, the Corporation is considered the ultimate grantor under AASB 1059 (Service Concession Arrangements), and AquaSure the private sector operator that provides public services on behalf of the Corporation. Accordingly, the Corporation has adopted AASB 1059 to apply to the VDP arrangement. Previously the arrangement was accounted for under AASB 117 (Leases). Refer to Note 7.9 for disclosure of the impacts of adoption of AASB 1059. Service concession assets are recognised under Property plant and equipment in section 4.1 and related liabilities are disclosed under Interest bearing liabilities under section 5.1 respectively.

Changes in arrangement occurring in the current year

As at 30 June 2020 AquaSure had produced the 125GL for the 2019-20 water order.

On 24 March 2020 the Minister for Water issued the 2020-21 Supply Notice with a Required Annual Water Volume for 125GL in 2020-21 and non-binding forecasts of 150GL for 2021-22 and 2022-23.

In December 2019, the State approved AquaSure to refinance its external debt, including the introduction of Treasury Corporation Victoria as a financier. The refinancing resulted in the State being entitled to a refinancing benefit under the VDP Project Deed. The VDP Project Deed entitles the State to an adjustment to the water service payments from those in the original financial model to reflect the changes in refinancing costs incurred by AquaSure.

In June 2020, the full transaction documentation was updated which included the financial model and the WIA. This was undertaken to reflect the change in the State's financial risk exposure which was required to complete the December 2019 debt restructure of the VDP. The refinancing resulted in a \$283 million reduction in DELWP's liability under the VDP Project Deed and a \$38 million reduction in the Corporation's service concession arrangement liability, which was recognised as a net gain on refinancing. DELWP recognised the residual amount of \$245 million as a net gain on refinancing. Refer to Note 5.1.2 for further details of the refinancing gain and debt modification impact assessment.

5.4 VDP service concession arrangement liability

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

	(\$ thousands)			
	Minimum future payments		Present value of minimum future payments	
	2020	2019	2020	2019
VDP service concession arrangement liability				
Less than 1 year	441,738	490,202	38,064	74,737
1 year but less than 5 years	1,743,898	1,768,468	160,098	151,817
Later than 5 years	6,931,746	7,414,049	3,404,822	3,491,563
Minimum future liability payments	9,117,382	9,672,719	3,602,984	3,718,117
Less: Future finance charges	(5,514,398)	(5,954,602)	-	-
Total liability	3,602,984	3,718,117	3,602,984	3,718,117
Representing finance lease liability:				
Current (refer to 5.1) ^(a)			38,064	74,737
Non-current (refer to 5.1) ^(a)			3,564,920	3,643,380
Total liability			3,602,984	3,718,117

Note:

(a) The present value of the minimum future payments have been discounted to 30 June of the respective financial years using the weighted average interest rate of 11.28% (2018-19: 11.28%). These payments exclude finance charges.

VDP service concession arrangement – 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. These payments are for costs related to the VDP's operation, maintenance and lifecycle costs. The arrangement also 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 are controlled by the State and not recognised by the Corporation.

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. The 2018-19 15 GL water order and \$10.361 million of the 2019-20 125 GL water order was funded from the sale of surplus banked RECs, 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.

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

	(\$ thousands)	
	2020	2019
Less than 1 year	239,059	235,020
1 year but less than 5 years	650,464	610,662
Later than 5 years	3,307,587	3,413,353
Total other commitments (inclusive of GST)^(a)	4,197,110	4,259,035
Less GST recoverable from the Australian Taxation Office	(381,555)	(387,185)
Total other commitments (exclusive of GST)	3,815,555	3,871,850
Present value of other commitments^(b)	1,552,895	1,659,903

Note:

(a) 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'.

(b) The present value of the 'Other commitments' has 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 of the commitment is 9.99% (2018-19: 9.99%) which is the nominal pre-tax discount rate representative of the overall risk of the project at inception.

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

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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 principal financial instruments are contractual in nature and comprise:

- cash and cash equivalents
- trade debtors and other receivables
- trade creditors, accruals and interest payable
- VDP service concession liability
- lease liabilities
- other payables
- borrowings (including short term, floating rate notes and fixed interest).

The Corporation's 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 service concession liability
- lease liabilities
- other payables
- borrowings (including short term, floating rate notes and fixed interest).

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 2020 (2018-19: Nil).

Categories of financial instruments	(\$ thousands)	
	2020	2019
Financial assets		
Cash and cash equivalents	14,324	17,603
Trade debtors ^(a)	40,983	31,510
Other receivables ^(a)	47,397	50,673
Total financial assets	102,704	99,786
Financial liabilities		
Trade and other payables ^(b)	322,135	300,546
VDP service concession liability	3,602,984	3,718,117
Lease liabilities	57,444	-
Short term borrowings	289,300	206,100
Floating rate notes	325,000	400,000
Fixed interest	3,540,000	3,495,000
Total financial liabilities	8,136,863	8,119,763

a) 2018-19 other receivables have been re-classified to include accrued revenue previously included in trade debtors.

b) 2018-19 comparatives have been restated to exclude unearned revenue for consistency with the current year.

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.

Risk management (continued)

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 2019-20 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 2019-20 of \$4,383.0 million (2018-19: \$4,208.4 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 2020 was 50.8% (2018-19: 51.2%) and interest cover cash ratio was 2.2 times (2018-19: 2.1 times). There was no material impact from the adoption of AASB 16 on the 30 June 2020 gearing and interest cover ratios.

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 2020, the Corporation did not have any interest Rate Swaps (30 June 2019: 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.

6.1.1 Interest rate risk

Interest rate exposure as at 30 June 2020					(\$ thousands)
	Weighted average	Floating interest	Fixed interest	Non-interest bearing	Total carrying amount
Financial assets					
Cash and cash equivalents	0.65%	14,324	-	-	14,324
Trade debtors	-	-	-	40,983	40,983
Other receivables	-	-	-	47,397	47,397
Total financial assets		14,324	-	88,380	102,704
Financial liabilities					
Trade and other payables	-	-	-	322,135	322,135
VDP service concession liability ^(a)	11.28%	-	3,602,984	-	3,602,984
Lease liabilities	2.29%	-	57,444	-	57,444
Short term borrowings	0.42%	289,300	-	-	289,300
Floating rate notes	1.05%	325,000	-	-	325,000
Fixed interest	3.62%	-	3,540,000	-	3,540,000
Total financial liabilities		614,300	7,200,428	322,135	8,136,863

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	-	-	-	31,510	44,347
Other receivables ^(b)	-	-	-	50,673	37,836
Total financial assets		17,603	-	82,183	99,786
Financial liabilities					
Trade and other payables ^(c)	-	-	-	300,546	300,546
VDP service concession liability ^(c)	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	300,546	8,119,763

Note:

(a) The weighted average interest rate for the VDP service concession arrangement is the interest rate implicit in the arrangement. AASB9 requires gains or losses from VDP refinancing activities 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'.

(b) 2018-19 other receivables have been re-classified to include accrued revenue previously included in trade debtors.

(c) 2018-19 comparatives have been restated to exclude unearned revenue for consistency with the current year.

Risk management (continued)

Interest rate risk sensitivity analysis					(\$ thousands)
2020	Profit or Loss		Equity		
	-50 basis points	+50 basis points	-50 basis points	+50 basis points	
Cash and cash equivalents	(10)	10	(10)	10	
Interest Bearing Liabilities	3,072	(3,072)	3,072	(3,072)	
Total	3,061	(3,061)	3,061	(3,061)	

					(\$ 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)	

Exposures arise predominately from liabilities bearing variable interest rates as the Corporation intends to hold fixed rate liabilities to maturity. At 30 June 2019 and 30 June 2020, 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 2020, the Corporation did not have any Forward Foreign Exchange Contracts (30 June 2019: 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 Corporation's exposure to commodity price risk is minimal. If at any time the Corporation is exposed to a commodity price risk from business operations, this is immediately identified, quantified and hedged appropriately to minimise risk. Hedging of the risk is mostly performed through supply and service contracts to provide certainty over timing and quantity (i.e. contracts for electricity, chemicals and procurement process to deliver capital works).

There is also low level price risk associated with Renewable Energy Certificates (RECs) for the potential decline in market value. This risk is managed through sale of RECs to minimise balance held given they are no longer required by the Corporation.

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 comprised 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 seven days. The second part is an availability charge that is invoiced monthly and paid within 14 days.
- Waterways and Drainage customers. 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.

Other Receivables primarily consist of accrued revenue in relation to our services.

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 will not 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.

Risk management (continued)

Undiscounted maturity analysis of financial liabilities

(\$ thousands)

2020	Total carrying amount	Total contractual cash flows	Total		
			1 year or less	1 to 5 years	Over 5 years
Non-interest bearing	322,135	322,135	321,668	467	-
Variable rate	614,300	617,317	431,848	185,470	-
Fixed rate	7,200,428	14,129,201	901,111	3,670,690	9,557,400
Total	8,136,863	15,068,654	1,654,626	3,856,627	9,557,400

2019	Total carrying amount	Total contractual cash flows	Total		
			1 year or less	1 to 5 years	Over 5 years
Non-interest bearing ^(a)	300,546	300,546	299,115	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	8,119,763	15,616,962	1,614,337	4,034,234	9,968,391

a) 2018-19 comparatives have been restated to exclude unearned revenue for consistency with the current year.

6.1.6 Other matters

Net holding gain/(loss) on financial instruments

by category

(\$ thousands)

2020	Refinancing gain	Interest revenue/ expenses)	Net total
Financial liabilities at amortised cost	38,142	(601,800)	(563,658)
Total	38,142	(601,721)	(563,579)

2019	Refinancing gain	Interest revenue/ expenses)	Net total
Financial liabilities at amortised cost	59,609	(618,237)	(558,628)
Total	59,609	(618,167)	(558,558)

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).

	(\$ thousands)			
	2020		2019	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Cash and cash equivalents	14,324	14,324	17,603	17,603
Trade debtors ^(a)	40,983	40,983	31,510	31,510
Other receivables ^(a)	47,397	47,397	50,673	50,673
Total financial assets	102,704	102,704	99,786	99,786
Financial liabilities				
Trade and other payables ^(b)	322,135	322,135	300,546	300,546
VDP service concession liability	3,602,984	3,602,984	3,718,117	3,718,117
Lease liabilities	57,444	57,444	-	-
Short term borrowings	289,300	289,300	206,100	206,100
Floating rate notes	325,000	325,715	400,000	401,224
Fixed interest	3,540,000	3,870,461	3,495,000	3,796,836
Total financial liabilities	8,136,863	8,468,039	8,119,763	8,422,823

a) 2018-19 other receivables have been re-classified to include accrued revenue previously included in trade debtors.

b) 2018-19 comparatives have been restated to exclude unearned revenue for consistency with the current year.

Risk management (continued)

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 (eg: potential litigation or climate-related risks).
- 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)	
	2020	2019
Contingent assets	15,257	19,345
Contingent liabilities ^(a)	45,146	30,410

Note:

(a) Contingent liabilities primarily relate to compulsory land acquisitions where the Corporation will receive an equivalent land asset. Compulsory land acquisitions have not been included as contingent assets. Given the significant estimation uncertainty, compulsory land acquisitions are not treated as provisions. The Corporation only recognises assets and liabilities once the Notice of Acquisition has been issued to the landowner. Total compulsory land acquisitions for 2019-20 are \$40.9 million (2018-19: \$30.3 million).

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

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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.

Other Disclosures (continued)

7.1 Superannuation - Defined benefit plan (continued)

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 three 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 lower 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.

Reconciliation of the present value of the defined benefit superannuation obligation

	(\$ thousands)	
	2020	2019
Present value of defined benefit obligation at beginning of the year	62,381	61,265
Current service cost	2,126	5,502
Interest cost	713	1,481
Contributions by Plan participants	581	616
Benefits paid	(4,846)	(8,772)
Taxes and premiums paid	(292)	(293)
Actuarial losses/(gains) arising from changes in demographic assumptions	4,021	-
Actuarial (gains)/losses arising from changes in financial assumptions	(42)	4,162
Actuarial (gains)/losses arising from liability experience	(2,047)	1,891
Contributions to accumulation section ^(a)	(345)	(3,211)
Contributions to accumulation section in relation to prior year ^(a)	-	(260)
Present value of the defined benefit obligation at year end	62,250	62,381

Reconciliation of the fair value of Plan assets

	(\$ thousands)	
	2020	2019
Fair value of Plan assets at beginning of the year	77,374	85,030
Contributions by Plan participants	581	616
Benefits paid	(4,846)	(8,772)
Taxes and premiums paid	(292)	(293)
Interest income	868	1,996
Actual return on Plan assets less interest income	817	2,008
Contributions to accumulation section ^(a)	(345)	(3,211)
Fair value of Plan assets at year end^(b)	74,157	77,374

Reconciliation of the assets and liabilities recognised in the Statement of Financial Position

	(\$ thousands)	
	2020	2019
Net defined benefit (asset)/liability at start of year	(14,993)	(23,765)
Current service cost	2,126	5,502
Net interest	(155)	(515)
Actual return on Plan assets less interest income ^(c)	(817)	(2,008)
Actuarial losses/(gains) arising from changes in demographic assumptions	4,021	-
Actuarial losses/(gains) arising from changes in financial assumptions ^(c)	(42)	4,162
Actuarial losses/(gains) arising from liability experience ^(c)	(2,047)	1,891
Contributions to accumulation section in relation to prior year	-	(260)
Net defined benefit asset at year end	(11,907)	(14,993)

(a) Includes contributions of \$0.3 million (2018-19: \$3.2 million) 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 \$1.1 million (2018-19: losses of \$4.0 million) and after tax losses of \$0.8 million (2018-19: losses of \$2.8 million).

Other Disclosures (continued)

7.1 Superannuation – Defined benefit plan (continued)

The Corporation has recognised an asset in the Statement of Financial Position in respect of its defined benefit superannuation Plan arrangements at 30 June 2020 (2018-19: 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 2019-20, the contributions rate continued to be zero due to sufficient surplus in the Plan (2018-19: zero).

Significant actuarial assumptions at the balance sheet date

	(\$ thousands)	
	2020	2019
Assumptions to determine defined benefit cost		
Discount rate	1.20%	2.50%
Expected salary increase rate	2.60%	3.25%
Expected pension increase rate	2.50%	2.50%
Assumptions to determine defined benefit obligation		
Discount rate	0.80%	1.20%
Expected salary increase rate*	2.00%	2.60%
Expected pension increase rate	2.00%	2.50%
Pension take up rate	25.0%	0.0%

* 2% per annum for the next five years and 2.5% per annum thereafter.

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 2019 to 30 June 2020
Chair	John Thwaites	1 July 2019 to 30 June 2020
Managing Director	Michael Wandmaker	1 July 2019 to 30 June 2020
Deputy Chair	Merran Kelsall	1 July 2019 to 30 June 2020
Director	Kathleen Bailey-Lord	1 July 2019 to 30 June 2020
Director	Hugh Gleeson	1 July 2019 to 30 June 2020
Director	Robyn McLeod	1 July 2019 to 30 June 2020
Director	Garry Smith	1 July 2019 to 30 June 2020
Director	Russell Anderson	1 July 2019 to 30 June 2020
Director	Fiona Rowland	1 July 2019 to 30 June 2020

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:

Income Band (\$)	Total Remuneration	
	2020	2019
	Number	Number
40,000 - 49,999	2	2
50,000 - 59,999	5	5
90,000 - 99,999	1	1
530,000 - 539,000	1	1
Total numbers	9	9
Total remuneration (\$000)	993	976

Other Disclosures (continued)

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)	
	2020	2019
Short-term employment benefits	3,805	3,487
Post-employment benefits	248	228
Other long-term benefits	94	79
Termination benefits	-	-
Total remuneration^(a)	4,147	3,794
Total number of executives	13	13
Total annualised employee equivalent^(b)	12	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.

	(\$ thousands)	
Compensation of KMP	2020	2019
Short-term employment benefits	1,334	1,336
Post-employment benefits	81	79
Other long-term benefits	23	21
Termination benefits	-	-
Total ^(a)	1,438	1,436

Note:

(a) 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 arm's length basis with a materiality threshold set at \$0.1 million.

	(\$ thousands)	
Lisa Neville MP - Minister for Water	2020	2019
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)	754,667	675,538
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	168	227
Hugh Gleeson - Director		
Hugh Gleeson is a Director of Energy Queensland Limited. Ergon Energy Queensland is a subsidiary of Energy Queensland Limited. All dealings with this agency were on normal terms and conditions during the reporting period.		
Total payments received from Ergon Energy Queensland	759	-

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.

Other Disclosures (continued)

Significant transactions with related parties

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 Plant. 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 (2018-19: \$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
- Monash University
- Holmesglen Institute
- Department of Education and Training
- Department of Transport

Other related parties with arm's-length transactions greater than \$0.1 million have been disclosed above. In the following summaries, all other related parties transactions and payable balances below \$0.1 million have also been included.

Material transactions with related parties

(\$ thousands)

	2020	2019
Receipts from related parties (inclusive of GST)		
DELWP	12,060	3,736
City West Water	425,386	408,898
South East Water	624,717	602,042
Yarra Valley Water	628,837	605,545
Western Water	10,031	9,354
Barwon Water	2,111	214
TCV	-	15
Development Victoria	13,077	14,132
Other related parties	6,086	4,401
Receipt of contributed assets		
DELWP	-	34,040

(\$ thousands)

	2020	2019
Payments to related parties (inclusive of GST)		
DELWP	754,667	675,538
DTF	196,823	196,248
City West Water	5,680	5,240
South East Water	6,526	5,393
Yarra Valley Water	6,698	5,596
Western Water	165	192
Barwon Water	29	3
TCV	155,401	151,816
Development Victoria	5	-
Other related parties	21,692	16,005
Dividend paid		
DTF	73,000	24,400
Repayment of equity contributions		
DTF	-	27,910
Transfer of contributed assets		
DELWP	-	610

Other Disclosures (continued)

Outstanding balances arising from sales/purchases of goods and services	(\$ thousands)	
	2020	2019
Receivables		
City West Water	17,511	9,390
South East Water	18,345	8,611
Yarra Valley Water	16,398	10,555
Barwon Water	96	122
Other related parties	-	207
Payables		
DELWP	3,602,984	3,718,117
DTF	22,392	33,974
City West Water	3	6
South East Water	-	406
Yarra Valley Water	526	92
Western Water	-	3
TCV	4,191,779	4,146,162
Other related parties	1,605	187

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)	
	2020	2019
Audit of financial report by the Victorian Auditor-General's Office	184	179
Total amount paid/payable	184	179

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 2019-20, the Corporation incurred \$73,172 ex-gratia expenses (2018-19: \$0) due to rental waivers provided to approved applicants as part of the Victorian Government's COVID-19 hardship program.

7.7 Subsequent events

As of midnight Wednesday 8 July 2020, the Victorian Government announced the return of Stage three 'stay-at-home' restrictions for residents of Metropolitan Melbourne. On 2 August 2020, the Victorian Government introduced a State of Disaster and announced that Stage 4 restrictions would apply to residents of Metropolitan Melbourne and stage 3 restrictions to the rest of Victoria for at least six weeks. The Corporation is a permitted business. Our current segregation plans and working from home arrangements have prepared us for these events and our essential services are able to continue uninterrupted. These subsequent events do not significantly change our COVID-19 impact assessment (refer to Note 1) and, therefore, it remains appropriate to continue to prepare these financial statements on a going concern basis.

No other 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.

7.8 Prospective accounting and reporting changes

There are no significant new standards or interpretations that will impact the Corporation.

7.9 Change in accounting standards

This note explains the impact of the adoption of *AASB 16 Leases* and *AASB 1059 Service concession arrangements* on the Corporation's financial statements.

AASB 16 Leases

The Corporation has transitioned to AASB 16 Leases from 1 July 2019. In accordance with the transition provisions in AASB 16 and as mandated by FRD 123 Transitional requirements on the application of AASB 16 the new requirements have been adopted retrospectively (under the modified retrospective method). Comparatives for the 2018-19 financial year have not been restated. The reclassifications and the adjustments arising from the new leasing rules are, therefore, recognised in the opening balances of assets and liabilities on 1 July 2019. The Corporation has applied this approach to transition consistently to all of its leases for which it is a lessee.

On adoption of AASB 16, the Corporation recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of AASB 117 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 July 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 July 2019 was 2.9%. On transition, DTF mandates measurement of Right of Use (ROU) assets at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet as at 30 June 2019.

The measurement principles of AASB 16 are only applied after that date. During the financial year there was no measurement or re-measurement adjustments for residual value guarantees, variable lease payments, lease liabilities and right of use assets. AASB 16 accounting policies are disclosed in Note 4.4.

Other Disclosures (continued)

7.9 Change in accounting standards (continued)

(i) Practical expedients applied

In applying AASB 16 for the first time, the Corporation has used the following practical expedients to all its contracts as permitted by the standard and as mandated by the DTF:

- applying a single discount rate to a portfolio of leases with reasonably similar characteristics
- relying on previous assessments on whether leases are onerous as an alternative to performing an impairment review – there were no onerous contracts as at 1 July 2019
- accounting for leases with a remaining lease term of less than 12 months as at 1 July 2019 as short-term leases
- excluding initial direct costs from the measurement of the right-of-use asset at the date of initial application
- using hindsight in determining the lease term where the contract contains options to extend or terminate the lease
- accounting for low value leases.

The Corporation has also elected not to reassess whether a contract is, or contains a lease at the date of initial application (except for the VDP arrangement which was reassessed as a service concession asset). Instead, for contracts entered into before the transition date the Corporation relied on its assessment made applying AASB 117 and Interpretation 4 Determining whether an arrangement contains a lease.

Reconciliation of operating lease commitment to lease liability^(a)

1 July 2019
(\$ thousands)

Operating lease commitments disclosed as at 30 June 2019	96,277
Less: payments not recognised as a lease liabilities ^(b)	(27,455)
Add: contracts reassessed as lease contracts	1,118
Discounted using the lessee's incremental borrowing rate at the date of initial application (weighted average 2.29%)	(6,384)
Operating lease commitments disclosed as at 1 July 2019	
Lease liability recognised as at 1 July 2019	63,556
Of which are:	
Current lease liabilities	6,112
Non-current lease liabilities	57,444

* (includes GST, variable overhead costs and Government levies)

(a) There were no low value or short term leases included as lease commitments as at 1 July 2019.

(b) Includes GST, variable overhead costs and Government levies.

AASB 1059 Service Concession Arrangements: Grantors

Prior to the issuance of AASB 1059, there was no definitive accounting guidance in Australia for service concession arrangements, which include a number of public private partnership (PPP) arrangements. The AASB issued the new standard to address the lack of specific accounting guidance and based the content thereof broadly on its international equivalent: International Public Sector Accounting Standard 32: Service Concession Arrangements: Grantor.

The Corporation has early adopted AASB 1059 for the 2019-20 financial year as mandated by *DTF FRD 124 Transitional requirements*.

The Corporation has applied the standard using a full retrospective approach to prior reporting periods from 1 July 2018 (transition date) as mandated by FRD 124. As a result, all comparative information in the financial statements have been prepared as if AASB 1059 had always been in effect. Comparative information has been restated in the financial statements and there were no adjustments to retained equity at 1 July 2018.

The Corporation has assessed the VDP arrangement as being a public service and within the scope of AASB 1059. Given the Corporation is a government entity with accounting control of the service concession asset, the financial obligation to fund the asset and the public service obligation; it is considered the grantor to the arrangement.

On initial recognition, the service concession asset is measured at current replacement cost in accordance with AASB 13. The requirement to fair value the asset is consistent with the Corporation's current accounting policy and does not result in any additional valuation requirements, beyond the current policy.

The fair value of the VDP service concession asset was assessed by management with assistance from external valuation experts who provided an indicative fair value estimate at both 30 June 2020 and 1 July 2018 and it was determined that there is no material difference between the carrying value and the indicative fair value.

The VDP service concession asset value has not been adjusted and the carrying amount is deemed to be the fair value.

Any modifications to the debt repayments are considered with reference to the guidance within AASB 9. This is consistent with the Corporation's current accounting policy for modifications and, therefore, application of AASB 1059 does not change the accounting outcome.

Note 5.4 contains information about the service concession arrangements of the Corporation and the AASB 1059 accounting policies. Note 4.1 contains information on the accounting for the VDP service concession asset.

Other Disclosures (continued)

7.9 Change in accounting standards (continued)

Transition impact on financial statements - AASB 1059 and AASB 16

The following tables show the adjustments recognised for each individual line for both AASB 1059 and 16. 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 tables.

AASB 1059

Impact of AASB 1059 on the Statement of Profit or Loss and Other Comprehensive Income (increase/decrease):

		(\$ thousands)	
Statement of Profit or Loss and Other Comprehensive Income (extract)	Note	30 June 2020	30 June 2019
Depreciation and amortisation expenses	4.1.3	-	-
VDP service concession asset	4.1.3	77,553	77,550
VDP infrastructure assets under finance lease	4.1.3	(77,553)	(77,550)
Finance expenses	5.1	-	-
VDP service concession liability	5.1	413,197	426,842
VDP finance lease interest	5.1	(413,197)	(426,842)

Impact of AASB 1059 on the Statement of Financial Position (increase/decrease):

Statement of Financial Position (extract)	Note	30 June 2020	30 June 2019	1 July 2018
Non-current assets				
Land, buildings, infrastructure, plant and equipment	4.1	-	-	-
VDP service concession asset	4.1	4,071,895	4,149,448	4,226,998
VDP infrastructure	4.1	(4,071,895)	(4,149,448)	(4,226,998)
Current liabilities	-	-	-	-
Interest bearing liabilities	5.1	-	-	-
VDP service concession liability	5.1	38,064	74,737	70,339
VDP finance lease	5.1	(38,064)	(74,737)	(70,339)
Non-current liabilities				
Interest bearing liabilities	5.1	-	-	-
VDP service concession liability	5.1	3,564,920	3,643,380	3,999,385
VDP finance lease	5.1	(3,564,920)	(3,643,380)	(3,999,385)

The Statement of Cash Flows required one category reclassification as a result of AASB 1059. Repayments for the Victorian Desalination Plant (VDP) finance lease liability have been renamed to repayments for the VDP service concession liability.

AASB 16

Impact on the Statement of Financial Position due to the adoption of AASB 16 is illustrated with the following reconciliation between the restated carrying amounts at 30 June 2019 and the balances reported under the new accounting standards at 1 July 2019:

Statement of Financial Position (extract)	Note	(\$ thousands)		
		Before new accounting standard opening 30 Jun 2019	Impact of new accounting standard - AASB 16	After new accounting standard opening 1 July 2019
Non-current assets				
Right of use assets	4.4	-	63,556	63,556
Total non-current assets		15,125,488	63,556	15,189,044
Total assets		15,278,929	63,556	15,342,485
Current liabilities				
Interest bearing liabilities	5.1	710,837	6,112	716,949
Total current liabilities		1,163,533	6,112	1,169,645
Non-current liabilities				
Interest bearing liabilities	5.1	7,108,380	57,444	7,165,824
Total non-current liabilities		8,372,377	57,444	8,429,821
Total liabilities		9,535,910	57,444	9,593,354
Net assets		5,743,019	-	5,743,019
Total Equity		5,743,019	-	5,743,019

Independent Auditor's Report

To the Board of the Melbourne Water Corporation

Opinion	<p>I have audited the financial report of the Melbourne Water Corporation (the corporation) which comprises the:</p> <ul style="list-style-type: none"> • statement of financial position as at 30 June 2020 • 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. <p>In my opinion, the financial report presents fairly, in all material respects, the financial position of the corporation as at 30 June 2020 and its financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Part 7 of the <i>Financial Management Act 1994</i> and applicable Australian Accounting Standards.</p>
Basis for Opinion	<p>I have conducted my audit in accordance with the <i>Audit Act 1994</i> 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.</p> <p>My independence is established by the <i>Constitution Act 1975</i>. 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.</p> <p>I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.</p>
Key audit matters	<p>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.</p>

Key audit matter	How I addressed the matter
Recognition and Measurement of Service Concession Arrangement assets and liabilities - the Victorian Desalination Plant (the VDP)	
<i>Note 5.4 – VDP Service Concession Arrangements</i>	
<p>VDP Service Concession Assets: \$4.072 billion</p> <p>VDP Service Concession liability: \$3.603 billion</p> <p>VDP Refinancing gains: \$38.142 million</p> <p>VDP commitment disclosures:</p> <ul style="list-style-type: none"> ➔ Minimum future payments: \$9.117 billion ➔ Other expense commitments: \$4.197 billion <p>I considered this to be a key audit matter because:</p> <ul style="list-style-type: none"> ➔ the VDP assets, liability and future commitments are financially significant ➔ the contractual rights and obligations are complex ➔ the corporation places significant reliance on the Department of Environment, Land, Water and Planning (DELWP) for information to account for and disclose its financial liability and commitments ➔ the service concession arrangement (SCA) liability and commitments model is highly complex, involves significant management judgements and is underpinned by various subjective assumptions ➔ the first-year adoption of AASB 1059 <i>Service Concession Arrangements: Grantors</i> involves significant management judgement, and the accounting and disclosures are complex and require interpretation ➔ the SCA liability's carrying value and commitments are sensitive to small changes in the contractual terms and conditions, including refinancing amendments ➔ the commitment disclosures involve significant management judgements and estimates, and amendments were required in prior years. 	<p>My key procedures included:</p> <ul style="list-style-type: none"> ➔ reviewing the key contractual changes for the current year ➔ reviewing and assessing management's accounting policy for the first-time adoption of AASB 1059 and the re-financing adjustments against the requirements of AASB 9 <i>Financial Instruments</i> ➔ engaging a subject matter expert to assist in obtaining sufficient, appropriate audit evidence for the SCA liability and commitment disclosures, including the: <ul style="list-style-type: none"> - reasonableness and consistency of the liability model assumptions - identification of any model or assumption changes - reasonableness of model inputs, with specific reference to underlying data and supporting documentation - model's computational accuracy - appropriateness of re-financing adjustments - appropriateness of all related financial report disclosures as required by AASB 1059 - engaging a subject matter expert to review and assess the approach used by the corporation in determining the current replacement cost of the VDP asset, including the appropriateness and reasonableness of the assumptions ➔ evaluating both the subject matter expert's reports, 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
<p>The Fair Value Estimate of Infrastructure Assets</p>	
<p><i>Note 4.1 – Land, Buildings, Infrastructure, Plant and Equipment</i></p>	
<p>Fair value estimate of Infrastructure assets: \$8.873 billion.</p> <p>I considered this to be a key audit matter because:</p> <ul style="list-style-type: none"> → infrastructure assets are financially significant to the corporation → the fair value estimate is derived from an income- based valuation approach that uses a discounted cashflow (DCF) model → 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 → accounting standard AASB 13 <i>Fair Value Measurement</i> (AASB 13) and the Assistant Treasurer issued Financial Reporting Direction 103H <i>Non-financial physical assets</i> (FRD 103H) both require extensive financial report disclosures. 	<p>My key procedures included:</p> <ul style="list-style-type: none"> → obtaining an understanding of management's approach to estimating the fair value of infrastructure → 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: <ul style="list-style-type: none"> - the appropriateness of using an income-based valuation approach - the reasonableness and consistency of all the assumptions used in the DCF model - identification of 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 workings and concluding the work was adequate for the purposes of our audit.
<p>Board’s responsibilities for the financial report</p>	<p>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 <i>Financial Management Act 1994</i>, 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.</p> <p>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.</p>

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
4 September 2020



Paul Martin

as delegate for the Auditor-General of Victoria



Performance Reporting

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Performance Report

Financial Performance Indicators

KPI Number [1]	Key Performance Indicator	2018-19 Result	2019-20 Result	2019-20 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	2.1	2.2	2.0	2.9%		8.0%	
F2	Gearing Ratio Total Debt (including service concession liabilities and leases) / total assets * 100	51.2%	50.8%	51.2%	0.7%		0.8%	
F3	Internal Financing Ratio Net operating cash flow less dividends / net capital expenditure * 100	93.4%	98.0%	74.5%	4.9%		31.5%	[2]
F4	Current Ratio Current assets / current liabilities (excluding long-term employee provisions and revenue in advance)	0.15 times	0.15 times	0.08 times	0.0%		87.5%	[3]
F5	Return on Assets Earnings before net interest and tax / average assets * 100	6.1%	6.0%	5.1%	-1.6%		17.6%	[4]
F6	Return on Equity Net profit after tax / average total equity * 100	3.5%	3.5%	1.8%	0.0%		94.4%	[5]
F7	EBITDA Margin Earnings before interest, Tax, Depreciation and Amortisation / total revenue * 100	69.3%	68.1%	67.7%	-1.7%		0.6%	

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.
- [2] The 2019-20 result is above the target range and in line with business expectations. It is anticipated that future year on year variances will fluctuate in line with expected revenue and capital expenditure profile.
- [3] The favourable variance to target is due to higher current assets being cash balance (\$14.3 million), trade and other receivables (\$43.4 million) and assets held for sale (\$9.1 million).
- [4] The favourable variance to target is due to higher earnings before net interest and tax during the year of (\$133.7 million) compared to plan. Improved performance is mainly due to higher revenue from developer contributions (\$82.2 million) and VDP refinancing gain (\$38.1 million).
- [5] The favourable variance to target is due to higher net profit after tax of (\$99.6 million) compared to plan. Improved performance is mainly due to higher revenue from developer contributions (\$82.2 million) and VDP refinancing gain (\$38.1 million), partially offset by a higher tax expense (\$44.6 million).

Performance Report (continued)

Water, sewerage and other service performance indicators

KPI Number [1]	Key Performance Indicator	2018-19 Result	2019-20 Result	2019-20 Target	Variance to prior year	Notes	Variance to target	Notes
WQ1	Water Quality Compliance with Bulk Water Service Agreement (BWSA): Microbiological Standards — <i>E. coli</i>	100.0%	100.0%	100.0%	0.0%		0.0%	
WQ2	Water Quality Compliance with BWSA: Aesthetics — Turbidity	95.9%	97.9%	91.5%	2.1%		7.0%	[2]
CRM1	Customer Responsiveness Complaints referred to EWOV responded to within EWOV established time	100.0%	100.0%	100.0%	0.0%		0.0%	
EM1	Non-Compliance with other EPA Victoria Licence and SEPP parameters — Sewerage system failure Zero spills due to sewerage system failure	2.0	0.0	0.0	100.0%	[3]	0.0%	
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	431,346	513,696	404,654	-19.1%	[4]	-26.9%	[4]
WW1	Waterways — Drainage and Flood protection % reduction in flood effects achieved by projects in delivery by Melbourne Water	0.0%	2.45%	2.5%	100.0%	[5]	-2.0%	
WW2	Waterways condition Waterways that have undergone active management will be maintained or improved against an established baseline	95.0%	100.0%	80.0%	5.3%	[6]	25.0%	[6]

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 per cent for financial performance indicators and 5 per cent for non-financial performance indicators have been further explained within these notes.
- [2] The positive variance compared to last year was due to increased water supplied from the Victorian Desalination Plant and decreased water supply from O'Shannassy Reservoir due to dam upgrade works.
- [3] The favourable variance to last year is in accordance with the broader Enhancing Our Dandenong Creek (EODC) program and Better Environment Plan developed with EPA. As part of the EODC project the Emergency Release Structures (ERS) are responding as designed and have achieved the required level of service for the asset. Historically ERS spills for EODC were reported as non-compliance.
- [4] There were a number of operational factors contributing to higher CO2 emissions than target and last year's results. These factors included higher electricity usage for water treatment and pumping due to higher rainfall and increased throughput at the Eastern and Western Treatment plants. Melbourne Water has pledged to reduce its greenhouse gas emission and energy use by 50 per cent by 2025 (with yearly targets being toward this overall goal). A range of measures have been undertaken to reduce long term impacts including transitioning to zero emissions vehicle fleet, 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.
- [5] The favourable variance to 2018-19 is due to completion of planned flood mitigation projects in 2019-20.
- [6] The positive result for 2019-20 is due to 100 per cent of waterways that have undergone active management being on track to achieve condition improvement trajectories compared to their expected response trajectory target of 80 per cent. The positive variance compared to last year is due to one project not meeting its expected response trajectory in 2018-19.

Water, sewerage and other service performance indicators (continued)

KPI Number [1]	Key Performance Indicator	2018-19 Result	2019-20 Result	2019-20 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 Water Supply Agreement							
RW1.1	Volume demands	100.0%	100.0%	100.0%	0.0%		0.0%	
RW1.2	Reliability	97.2%	99.8%	100.0%	2.7%		-0.2%	
RW1.3	Quality	100.0%	99.3%	100.0%	-0.7%		-0.7%	
RW2	Recycled Water ETP recycled water schemes fully compliant with regulatory obligations and their contractual requirements, as outlined in the relevant Bulk Water Supply Agreement							
RW2.1	Volume demands	100.0%	100.0%	100.0%	0.0%		0.0%	
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 per cent for financial performance indicators and 5 per cent for non-financial performance indicators have been further explained within these notes.

Certification of Performance Report for 2019-20

We certify that the accompanying Performance Report of Melbourne Water Corporation in respect of the 2019-20 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 *2019-20 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.



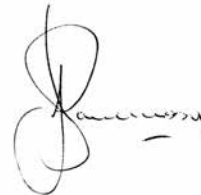
John Thwaites
Chair

28 August 2020



Michael Wandmaker
Managing Director

28 August 2020



Anthony O'Shannessy
Chief Financial Officer

28 August 2020

Dated this 28th day of August 2020

Independent Auditor's Report

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 2020, which comprises the:

- financial performance indicators
- water and sewerage service performance indicators
- other service performance indicators
- certification of performance report.

In my opinion, the performance report of the Melbourne Water Corporation in respect of the year ended 30 June 2020 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. 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 the 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 the 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
4 September 2020



Paul Martin
as delegate for the Auditor-General of Victoria



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Appendix A – Disclosure index

The *Melbourne Water Annual Report 2019-20* 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

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Appendix B – Corporate Information

Consultancy Expenditure

The following is a summary of consultancy expenditure by Melbourne Water over the 2019-20 financial year. Details of individual consultancies are outlined at melbournewater.com.au.

Consultancies valued at \$10,000 or greater

In 2019-20, there were twenty one consultancies engaged during the year where the total fees payable to the consultants were \$10,000 or greater. The total expenditure incurred during 2019-20 in relation to these consultancies was \$1,361,270 (2018-19: \$1,268,460) (excl. GST).

Consultancies valued at less than \$10,000

In 2019-20, 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 2019-20 in relation to these consultancies was \$13,810 (2018-19: \$25,314) (exc GST).

Advertising campaigns

In 2019-20, Melbourne Water participated in one advertising campaign with total media spend of \$100,000 or greater (2018-19: Nil). This campaign was delivered in partnership with City West Water, Yarra Valley Water and South East Water. The values disclosed in this report relate to Melbourne Water's contribution to this campaign.

All values excluding GST (\$ 000)

Name of Campaign	Campaign summary	Start/end date	Advertising (media) expenditure	Creative and campaign development expenditure	Research and evaluative expenditure	Print and collateral expenditure	Other campaign expenditure	Total expenditure
Making Every Drop Count	The campaign was designed to raise awareness of water security and promote water efficient user behaviour	December 2019-March 2020	375	120	20	0	0	515

ICT Expenditure

For the 2019-20 reporting period, Melbourne Water had a total ICT expenditure of \$56,912,777 (2018-19 \$55,207,118) with details shown below.

All values excluding GST* (\$ 000)

Business as usual (BAU) ICT expenditure	Non-business as usual (non-BAU) ICT expenditure		Non-BAU ICT expenditure (operational expenditure)	Non-BAU ICT expenditure (capital expenditure)
	Operational and capital expenditure			
45,349	11,564	-	11,564	

*Includes \$11.9M of BAU capital expenditure. In prior years all capital expenditure was included as non-BAU.

Notes: Non-BAU ICT expenditure is a subset of ICT expenditure that relates to extending or enhancing current ICT capabilities and are usually run as projects.

BAU ICT expenditure typically relates to ongoing activities to operate and maintain the current ICT capability.

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 2020. Details of contracts can be viewed at www.melbournewater.com.au/about/customer-service/our-customers/suppliers-and-procurement

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 (ESC) 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 legal actions pending or completed during the reporting period for anti-competitive behaviour.

Pricing

Melbourne Water's wholesale water and sewerage prices increased approximately by 2.8 per cent plus inflation in 2019-20 reflecting the ESC Price Determination for 2019-20 with updates to cost of debt and desalination plant costs. The annual residential waterways and drainage charge increased only by inflation in 2019-20 to \$102.08.

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 Mr J Thwaites Chair, Melbourne Water Board	Authorised Officer Ms K Croker Corporate Paralegal, Freedom of Information Officer and Privacy Officer
--------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------

Requests

We received 39 freedom of information requests. We finalised 12. Of the remaining requests, seven were satisfied outside the FOI Act, four did not proceed, four were withdrawn, and 12 were still in progress.

32 requests were from members of the public, six from law firms and one from a planning consultant. No requests were for personal information.

We released 328 documents, 315 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 12	Other requests 27
<p>Access outcomes:</p> <ul style="list-style-type: none"> Access in full: 6 Access in part: 2 No documents: 3 Access denied: 1 	<p>Outcomes:</p> <ul style="list-style-type: none"> Not proceeded with: 4 Withdrawn: 4 Not yet finalised: 12 Outside the act: 7
<p>Related to:</p> <ul style="list-style-type: none"> Asset Management: 3 Property: 1 Property development: 5 Flood information: 3 	<p>Related to:</p> <ul style="list-style-type: none"> Environment and Planning: 7 Asset Management: 10 Property development: 7 Human Resources: 1 Flood information: 2

Reviews and complaints

One review was received from the Information Commissioner and finalised. Three complaints from the same complainant were received from the Information Commissioner and the complainant agreed to close these complaints. No Victorian Civil and Administrative Tribunal applications in relation to reviews of decisions or complaints were received.

Access to documents

People wanting access to Melbourne Water documents under the FOI Act may use our online Freedom of Information application on our website.

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).

General enquiries about Freedom of Information may be made by contacting the Freedom of Information Officer on (03) 9679 7050 between 9am and 5pm Monday to Friday or via email to foi@melbournewater.com.au.

Information required under Part 2 of the FOI Act (Information Statement) is available at melbournewater.com.au.

The statement includes information about Melbourne Water functions, decision making, consultation arrangements and publications. It also outlines how to make a Freedom of Information 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 2 Information Statement on our website.

Appendix B – Corporate Information (continued)

Building Compliance

Melbourne Water continues to work towards compliance with the *Building Act 1993* across our substantial property and building portfolio.

Melbourne Water has developed and is implementing a compliance program to obtain relevant statutory building documentation, and is working to update its Asset Management System to ensure Essential Safety Measure assets are identified and have maintenance regimes specified and executed. Building Practitioners are engaged 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 on 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 2019-20:

The number of major works projects undertaken (greater than \$50,000) was:	2
The number of building permits, occupancy permits or certificate of final inspection issued in relation to buildings owned by the entity was:	2 building permits 1 occupancy permits 1 certificates of final inspection
The number of emergency orders and building orders issued in relation to buildings was:	0 emergency orders 0 building orders
The 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 (Cwlth)*, and is committed to protecting the privacy of personal and health information we collect and handle. 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 our 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 03 9679 7100 (within the rest of Australia) or write to:

Privacy Officer
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 *FOI Act*.

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 melbournewater.com.au

Public Interest Disclosure

The *Public Interest Disclosure Act 2012* (PID Act) assists people to expose wrongdoing in public life and protects them from any reprisals. The PID 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 disclose such conduct. Melbourne Water is committed to ensuring transparency and accountability in our administrative and management practices and supports 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 Public Interest 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 public interest disclosure?

You can make a public interest 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 public interest disclosures. Melbourne Water has had no confirmed incidents of corruption in 2019-20.

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 public interest disclosure about Melbourne Water or its employees. You can access our procedures at melbournewater.com.au.

Contacts

Emma Braun
General Counsel and Company Secretary
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
Phone: 1300 735 135

See the Independent Broad-based Anti-corruption Commission 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:

- Association of Land Development Engineers Australia
- Australian Alliance for Water Efficiency
- Australian Network on Disability
- Australian Water Association
- CEDA – Committee for the Economic Development of Australia
- Climate Research Centre for Water Sensitive Cities
- Committee for Melbourne
- CPA Australia
- Diversity Council of Australia
- Engineers Australia
- Global Compact Network
- Institute of Water Administration
- Melbourne Forum
- Stormwater Victoria
- Urban Development Institute of Australia (EnviroDevelopment)
- VicWater
- WaterAid
- Water Research Australia
- Water Services Association of 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 PEHs 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 2019-20 (i) Total inflows ^(a) ; (ii) Total storage volumes ^(b) ; and (iii) Total outflows ^(c)	N/A	Clause 15.1 (a) (i). 487,423 ML (ii). 459,268 ML (iii). 387,841 ML	Clause 14.1 (a) (i). 808 ML (ii). No storage is available in Silver and Wallaby (iii). 808 ML	Clause 15.1 (a) (i). 170,725 ML (ii). 580,247 ML (iii). 36,045 ML	Clause 15.1 (a) (i). 20,259 ML (Tarago) 2,196 ML (Bunyip) (ii). 27,762 ML (Tarago) No storage is available in Bunyip (iii). 12,509 ML (Tarago) 2,196 ML (Bunyip)
Compliance with the diversion limit	419,083 ML ¹	Clause 15.1 (b) 382,230 ML ³	Clause 14.1 (b) 1,921 ML ⁶	Clause 15.1 (b) 36,045 ML ⁸	Clause 15.1 (b) 14,554 ML (Tarago) ¹⁰ 2,192 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 2020)	N/A	Clause 15.1 (f) Greater Yarra System – Thomson River Pool ⁴ 130,301 ML (City West Water) 176,315 ML (South East Water) 187,850 ML (Yarra Valley Water) 13,676 ML (Barwon Water) 855 ML (South Gippsland Water) 855 ML (Westernport Water) 15,599 ML (Western Water)	Clause 14.1 (f) N/A	Clause 15.1 (f) N/A	Clause 15.1 (f) 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 2020 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 2019-20.

Yarra River

2. Melbourne Water holds the Bulk Entitlement (Yarra River – Melbourne Water) Order 2014 – WSE000185.

3. This is the volume diverted in 2019-20.

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 2019-20.

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 2019-20	Clause 19.1 (b), 85 ML
Compliance with the five-year rolling average annual bulk entitlement diversion limit of 1,096 ML	384 ML
Melbourne Water's share of flow into Rosslynne Reservoir in 2019-20	Clause 19.1 (a.iii), 517 ML
Melbourne Water's share of storage volume in Rosslynne Reservoir at 30 June 2020	Clause 19.1 (a.ii), 256 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 2019-20	Clause 19.1 (a.i), 0 ML
Releases from Melbourne Water's share of flow to meet minimum flows	Clause 19.1 (a.v), 140 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 3 transfers of licences were made: one licence transferred; one licence amalgamated; and one minor licence amendment undertaken. None were transferred to Victorian Environmental Water Holder.

Appendix D – Private Diversion Licences

Melbourne Water manages 1811 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 (i.e. licences for uses such as irrigation) is 1195 with a combined volume of 40,466.6 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 2019-20.

Licence Totals	No. Licences	Volume (ML)	Metered Usage (ML)
Farm Dam Registrations	523	6775.5	3.6
Farm Dam Licences	45	1019.5	202.4
Take and Use Licences Yarra	1147	39,340.6	5416.4
Take and Use Licences Maribyrnong	48	1126.0	126.9
Stormwater Licences	48	3081.7	743.6
Environmental Water Licence	7	1611.2	0

Risk-Based Compliance Priorities 2019-20

	Number of Investigations
Major Risk - Still Under investigation	10
Moderate Risk - Still Under investigation	4
Minor Risk - Still Under investigation	4
Number Resolved 2019-20	33
Total number Still Under investigation	18
Total number of suspected compliance breaches	51

Activities undertaken in response to these priorities

For those 33 investigations resolved, Melbourne Water has taken the following actions:

Dismissed - not enough evidence	1
Referred	0
Advisory letter issued	3
Warning notice issued	16
Statutory notice issued	0
Customer restriction	0
No further action required	21

Risk-Based Compliance and Enforcement Policy

Melbourne Water has an existing Waterways Enforcement Policy supplemented with a Risk Enforcement Matrix and Compliance Procedure Manual. All these documents were completed according to our delegation policy in 2014.

After the DELWP updated the Statewide Compliance and Enforcement Policy in March 2020, Melbourne Water updated our policy according to our delegation policy in June 2020. The associated Risk Enforcement Matrix and Compliance Procedure Manual is expected to be finalised by the end of 2020.

Appendix D – Private Diversion Licences (continued)

Information on Compliance and Enforcement on Corporation's Webpage

During 2019-20 a funding agreement was finalised between the DELWP and Melbourne Water for Non-Urban Water Compliance and Enforcement Strategies. With this agreement in place, our webpage will be updated as part of this communication strategy. There is currently no information on Melbourne Water's webpage in regards to compliance and enforcement.

Public Information and Education Campaigns on Enforcement during 2019-20

No campaigns were delivered in 2019-20. Delivery of campaigns is planned to proceed before the end of 2020 in line with a funding agreement between the DELWP and Melbourne Water for Non- Urban Water Compliance & Enforcement Strategies.

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⁽¹⁾ and is available by calling Melbourne Water on 131 722 at any time or via an automated SMS services to subscribed customers.

During 2019-20, we sent out 4471 text messages to 235 subscribed customers advising them on waterway pumping restrictions and/or bans.

Summary of bans and restrictions 2019-20

Catchment	Restriction Days	Ban Days	Licence Ban Days	Days Available
Arundel Creek	N/A	36		366
Cockatoo Shepherds Creek (SFMP)	69	5		292
Darebin Creek	N/A	72		294
Diamond Creek	N/A	196		170
Dixons Creek (SFMP)	N/A	129	213	24
Don River (SFMP)	N/A	20		346
Gardiners Creek	N/A	24		342
Hoddles Creek (SFMP)	N/A	137		229
Kororoit Creek	N/A	3		363
Little Yarra River (SFMP)	72	14		280
Maribyrnong River (All Year)	N/A	37		329
Maribyrnong River (Winterfill)	N/A	39	243	84
McCrae Creek (SFMP)	147	45		174
Merri Creek	N/A	11		355
Moonee Ponds Creek	N/A	36		330
Mullum Mullum Creek	N/A	42		324
Olinda Creek (Lower) - SFMP	30	8		328
Olinda Creek (Upper) - SFMP	6	29		331
Pauls Creek (SFMP)	N/A	140	213	13
Plenty River	N/A	53		313
Steels Creek (SFMP)	N/A	122	213	31
Stringybark Creek (Lower) - SFMP	N/A	42		324
Stringybark Creek (Upper) - SFMP	N/A	79		287
Wandin Yallock Creek (SFMP)	N/A	20		346
Watsons Creek	N/A	29		337
Watts River	N/A	0		366
Woori Yallock Creek (SFMP)	17	12		337
Yarra River (Lower)	105	0		261
Yarra River (Upper)	88	0		278

(1) <https://www.melbournewater.com.au/water/waterway-diversions/restriction-and-ban-status>

Appendix E – Flooding and Drainage

	2019-20	2018-19	2017-18	
Underground Drains				
Total Length of Melbourne Water Assets	1720	1700	1672	km
Total Length of Melbourne Water Assets excluding drainage scheme areas	1085	1076	1065	km
Mapped 100yr ARI	576	588	977	km
Percentage Mapped	53	55	91	%
Mapped 20yr ARI	426	437	627	km
Percentage Mapped	39	41	59	%
Mapped 10yr ARI	304	259	306	km
Percentage Mapped	28	24	29	%
Mapped 5yr ARI	296	255	264	km
Percentage Mapped	27	24	25	%
Natural Waterways				
Total Length of Melbourne Water Assets	8696	8688	8665	km
Total Length of Melbourne Water Assets excluding drainage scheme areas, forested areas and French Islands	6610	6532	6425	km
Mapped 100yr ARI	4292	4275	4270	km
Percentage Mapped	65	65	66	%
Mapped 20yr ARI	518	565	309	km
Percentage Mapped	8	9	5	%
Mapped 10yr ARI	500	547	302	km
Percentage Mapped	8	8	7	%
Mapped 5yr ARI	502	438	281	km
Percentage Mapped	8	7%	7	%
Channels				
Total Length of Melbourne Water Channels	1885	1870	1860	km
Mapped 100yr ARI (underground drains)	128	115	138	km
Mapped 100yr ARI (waterways)	1501	1344	1416	km
Mapped 100yr ARI (total)	1629	1459	1554	km
Percentage Mapped	86	78	84	%
Total				
Total length of Melbourne Water Assets	12,301	12,258	12,197	km
Total length of Melbourne Water Assets excluding drainage scheme areas, forested areas and French Island	9580	9478	9350	km
Mapped 100yr ARI	6497	6322	6801	km
Percentage Mapped	68	67	73	%

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	133,369	0	43,060	0	0	0	0	43,060	32.29%	42,843	N/A
Sewerage treatment and management	405,911	0	0	0	102,981	0	0	102,981	25.37%	3,321	N/A
Waterways	15,738	0	0	0	0	0	0	0			
Transport	9,370										
Other (office, workshops, depots etc.)											
Offsets		0	0	0	0	0	0	0			
Total	564,389	0	43,060	0	102,981	0	0	146,042	28.83%	46,164	25.00%

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 CO ₂ -e						Variance (%)	Commentary
	Baseline	2018-19 Result	2019-20 Projected Emissions	2019-20 Result				
			total emissions	Scope 1 Emissions	Scope 2 Emissions	Total Emissions		
Water Treatment and Supply	N/A	54,134	N/A	211	91,041	91,252	68.57% [1]	Increased volumes of water pumped and treated
Sewerage Treatment and Management	N/A	371,303	N/A	247,574	169,989	417,563	12.46% [1]	Increased sludge treatment
Transport	N/A	2,531	N/A	2361		2361	-6.72% [1]	Operational variance
Waterways	N/A	3,378	N/A	1120	1402	2522	-25.35% [1]	Reduction in stationary energy usage
Total Emissions	408,860	431,346	404,654	251,266	262,431	513,697	26.95% [2]	Melbourne Water is committed to emissions reduction please refer to 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. 2019-20 reportable emissions were higher than the nominal target. Increased emissions are the result of higher volumes of water pumping and treatment thereby using more electricity from the grid. Increased sludge treatment at waste water plants. Melbourne Water is committed to achieving the committed 50% reduction by 2024-25 and has several initiatives underway to deliver on this commitment. See page 63 for further information on these initiatives.

Melbourne Water Corporate Consumption

Melbourne Water's corporate water consumption for 2019-20 was 412.04kL or 0.57kL/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.

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	1096	529	48.3	333	30.4	862	78.6
2019-20	1132	426	37.6	247	21.8	673	59.5

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
2019-20	5	0.44

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
2019-20	79,392

Types of Injury

	2017-18	2018-19	2019-20
Lost time injury (LTI)	3	7	7
Restricted work injury (RWI) / Medical treatment injury (MTI)	10	9	4
First Aid	74	59	47
Total	88	75	58

Total lost days in 2019-20 were 40.

Appendix G – Workforce Statistics (continued)

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.

Employee profile 2019-20

Year	Full-time permanent employees (Headcount)	Part-time permanent employees (Headcount)	Permanent employees (Headcount)	Fixed-term and casual employees (Headcount)	Permanent employees	Fixed-term and casual employees (FTE)
June 2019	874	170	1044	127	1004	92
June 2020	897	185	1082	116	1038	94

Employee profile by type 2018-19 – June 2019

	June 2019						
	All Employees		Ongoing			Fixed-term and casual	
	Number Headcount	FTE	Full-Time Headcount	Part-Time Headcount	FTE	Number Headcount	FTE
Gender							
Male	732	710	620	44	658	68	52
Female	439	386	254	126	346	59	40
Self Described							
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 Managers	402	386	314	70	369	18	18
Executives	12	12	12	0	12	0	0

Note:

Graduates are excluded from workforce data, as per FRD29B guidance.

Employees on leave without pay or maternity leave without pay are excluded, as per FRD29B guidance.

One employee was acting in long term senior positions at the last full pay period in June of 2019.

Employee profile by type 2019-20 – June 2020

	Jun-20						
	All Employees		Ongoing			Fixed term and casual	
	Number Headcount	FTE	Full Time Headcount	Part Time Headcount	FTE	Number Headcount	FTE
Gender							
Male	733	717	620	44	659	69	57
Female	464	414	277	141	379	46	35
Self Described	1	1				1	1
Age							
Under 25	36	31	19		19	17	12
25-34	280	272	228	16	240	36	33
35-44	432	400	294	102	370	36	30
45-54	272	261	213	48	251	11	9
55-64	151	144	125	16	138	10	7
Over 65	27	23	18	3	20	6	2
Classification							
Casual	27	11				27	11
Total 1-Senior Officer	749	715	563	108	643	78	72
1	3	2	0	0	0	3	2
2	70	69	54	3	56	13	13
3	85	84	79		79	6	5
4	58	53	39	9	44	10	9
5	113	109	92	13	102	8	7
6	125	120	93	12	102	20	19
7	268	252	189	65	239	14	13
Senior Officer	27	25	17	6	22	4	4
Senior Employees	422	405	334	77	395	11	10
Senior Managers	409	392	321	77	382	11	10
Executives	13	13	13	0	13	0	0

Graduates are excluded from workforce data, as per FRD29B guidance.

Employees on leave without pay or maternity leave without pay are excluded, as per FRD29B guidance.

Appendix G – Workforce Statistics (continued)

Total number and rates of new employee hires by gender and age group

Gender	Headcount
M	97
F	105
Self Described	1

Age	Headcount
Under 25	20
25-34	77
35-44	60
45-54	35
55-64	9
Over 65	2

Total number and rates of employee turnover by gender and age group

Gender	Headcount
M	81
F	60
Self Described	0

Age	Headcount
Under 25	9
25-34	24
35-44	55
45-54	23
55-64	26
Over 65	4

Hours of training for the financial year 2019-20 - All Melbourne Water

Age	All Melbourne Water		
	F	M	All
Total Completed Hours of Training	12,253	24,995	37,249
Total Number of Employees Completed Training	419	658	1078
Average Completed Training Hours Per Employee	29	38	35

Ratio of basic salary and remuneration of women to men by employee category by significant locations of operation

Corporate	Ratio (F/M)		Service Delivery	Ratio (F/M)	
	Base	Remuneration		Base	Remuneration
MW EA 1	N/A	N/A	MW EA 1	1.09	1.09
MW EA 2	N/A	N/A	MW EA 2	1.01	1.01
MW EA 3	1.01	1.01	MW EA 3	0.99	0.98
MW EA 4	1.00	1.00	MW EA 4	0.99	0.96
MW EA 5	1.01	1.01	MW EA 5	0.99	0.95
MW EA 6	0.99	0.99	MW EA 6	0.98	0.95
MW EA 7	1.00	0.99	MW EA 7	0.99	0.96
SO	0.89	0.89	SO	0.93	0.93
Senior Management	0.97	0.97	Senior Management	0.93	0.93
Executive	0.86	0.86	Executives	1.29	1.29

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
- 63% 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.

Local Jobs First

The *Local Jobs First Act 2003* comprises the Victorian Industry Participation Policy (VIPP) and the Major Projects Skills Guarantee (MPSG). All public departments and agencies are required to implement the policy. The Local Jobs First Policy (LJFP) supports Victorian businesses and workers by ensuring that small and medium size enterprises are given a full and fair opportunity to compete for both large and small government contracts, helping to create job opportunities, including for apprentices, trainees and cadets. The annual report on the implementation of LJFP is tabled in Parliament by the Minister for Jobs, Innovation and Trade.

The following projects were commenced or completed during 2019-20 in accordance with the relevant obligations.

Projects Commenced – Local Jobs First Standard

Melbourne Water commenced four projects in metropolitan Melbourne totalling \$53,483,342.

The MPSG applied to one of these projects.

The outcomes expected from the implementation of the LJFP to these projects where information was provided are as follows:

- the average commitment was 87.67 percent local content
- a total of 5.33 jobs to be created
- retention of 16.45 jobs
- 1.66 new apprenticeships to be created and 1.28 to be retained
- creation of two new trainees and retention of 1.5 existing trainees
- The MPSG applicable project provided a total of 266 labour hours to engineering trainees as at April 2020.

Projects Completed – VIPP/LJF Standard

Melbourne Water completed six VIPP projects in metropolitan Melbourne totalling \$78,517,370.

The outcomes from the implementation of the LJFP to these projects where information was provided, were as follows:

- the average commitment was 86.5 percent and an average of 94.83 percent was achieved
- 32 new local jobs were committed and 62 new positions were actually created
- 150 existing jobs were committed and 268.4 were retained
- 13 existing apprenticeships and trainees were to be retained and 11.75 apprentices were in fact retained
- MPSG was applied to two of these projects and provided 397,545 labour hours to apprentices, trainees and cadets as at April 2020.

Projects Commenced – LJF Strategic

Melbourne Water commenced 12 projects in metropolitan Melbourne and regional Victoria totalling \$216,463,265.

The outcomes expected from the implementation of the LJFP to these projects are as follows:

- the average commitment was 96 percent local content
- a total of 12.12 jobs to be created
- retention of 175.14 jobs
- 0.89 new apprenticeships to be created and 4.11 to be retained
- creation of 8.64 new trainees and retention of 5.57 existing trainees
- creation of 0.34 new cadets and retention of 0.67 existing cadets

The MPSG provided a total of 12,169 labour hours to cadets, trainees and apprentices as at April 2020.

Projects Completed – LJF Strategic

There was one completed strategic project with the following outcomes:

- the project had a commitment of 99 per cent local content
- 15.8 existing local jobs were committed and 15.8 positions were retained.

Appendix H – Global Reporting Initiative

Melbourne Water is signatory to the United Nations Global Compact and supports the United Nations Sustainable Development Goals (SDGs). We provide our Communication on Progress to the United Nations' 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) 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 United Nations SDGs. Melbourne Water stakeholders, customers, and staff contributed to an understanding of which 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 United Nations 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 United Nations Global Compact Communication on Progress (see Appendix I, The United Nations Global Compact).

Reporting

The *Melbourne Water Annual Report 2019-20* 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 2018-19. No restatements of information have been made.

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, 13-41
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	65-66
GRI 102-6	Report the markets served	Inside Cover, 9, 43-45
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	56-58, 165-169
GRI 102-8	Information on employees and other workers	165-169
GRI 102-9	Describe the organisation's supply chain	59
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	70
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, 65
GRI 102-13	Membership of associations	157
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	49-52, 65
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	65-69
GRI 102-40	Provide a list of stakeholder groups engaged by the organisation	9-11, 14-15, 20-21, 23, 25, 27, 29, 31-35, 38-39, 41, 43-46-52, 55, 59, 64, 170
GRI 102-41	Percentage of total employees covered by collective bargaining agreements	168
GRI 102-42	Report the basis for identification and selection of stakeholders with whom to engage	9-11, 14-15, 20-21, 23, 25, 27, 29, 31-35, 38-39, 41, 43-46-52, 55, 59, 64, 170
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	9-11, 14-15, 20-21, 23, 25, 27, 29, 31-35, 38-39, 41, 43-46-52, 55, 59, 64, 170
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.	9-11, 14-15, 20-21, 23, 25, 27, 29, 31-35, 38-39, 41, 43-46-52, 55, 59, 64, 170
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	170-173
GRI 102-47	List all the material Aspects identified in the process for defining report content	170-173
GRI 102-48	Restatements of information	170
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	170
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 Global Reporting Initiative Standards	170
GRI 102-55	Global Reporting Initiative content index	171-173
GRI 102-56	External assurance	170

Appendix H – Global Reporting Initiative (continued)

H2: Economic Indicators

Indicator	Disclosure	Location	
Management Approach			
103-1	Explanation of the material topic and its Boundaries	12-13, 24-25, 30, 32, 37, 170	
103-2	The management approach and its components	56-57	
103-3	Evaluation of the management approach	56-57, 73-143	
Material topics			
201-1	Economic Performance	Direct economic value generated and distributed	56-72
202-2	Market Presence	Proportion of senior management hired from the local community	166-169
203 -1	Indirect Economic Impacts	Infrastructure investments and services supported	12-41
204-1	Procurement Practices	Proportion of spending on local suppliers	169
205-1	Anti-corruption	Confirmed incidents of corruption and actions taken	157
206-1	Anti-competitive Behaviour	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	154

H3: Environmental Indicators

Indicator	Disclosure	Location	
Management Approach			
103-1	Explanation of the material topic and its Boundaries	170	
103-2	The management approach and its components	16-17, 9-11, 43-45, 60-62	
103-3	Evaluation of the management approach	67-68	
Material topics			
301-1	Materials	Materials used by weight or volume	16-23
302-1	Energy	Energy consumption within the organisation	164
303-1	Water	Water withdrawal by source	158-161, 163
304-1	Biodiversity	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	63-64
305-1	Emissions	Direct (scope 1) GHG emissions	164
306-1	Effluents and Waste	Water discharge by quality and destination	26-29
307-1	Environmental Compliance	Non-compliance with environmental laws and regulations	64

H4: Social Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		53-57
103-2	The management approach and its components		53-57
103-3	Evaluation of the management approach		65-66
Material topics			
401-1	Employment	New employee hires and employee turnover	168
402-1	Labor/Management Relations	Minimum notice periods regarding operational changes	168
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	46-47, 165
404-1	Training and Education	Average hours of training per year per employee	168
405-1	Diversity and Equal Opportunity	Diversity of governance bodies and employees	166-168
405-2	Diversity and Equal Opportunity	Ratio of basic salary and remuneration of women to men	168
406-1	Non-discrimination	Incidents of discrimination and corrective actions taken	168
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	168
408-1	Child Labor	Operations and suppliers at significant risk for incidents of child labor	59, 65-66
409-1	Forced or Compulsory Labor	Operations and suppliers at significant risk for incidents of forced or compulsory labor	59, 65-66
411-1	Rights of Indigenous Peoples	Incidents of violations involving rights of Indigenous peoples	168
412-2	Human Rights Assessment	Employee training on human rights policies or procedures	168
413-1	Local Communities	Operations with local community engagement, impact assessments, and development programs	10-11, 14, 33-35, 40-41, 45, 52, 59
414-1	Supplier Social Assessment	New suppliers that were screened using social criteria	59
415-1	Public Policy	Political contributions	157
416-2	Customer Health and Safety	Incidents of non-compliance concerning the health and safety impacts of products and services	145-147
418-1	Customer Privacy	Substantiated complaints concerning breaches of customer privacy and losses of customer data	156
419-1	Socioeconomic Compliance	Non-compliance with laws and regulations in the social and economic area	65

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 United Nations Global Compact within the 2019-20 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: <ul style="list-style-type: none"> Diversity Strategy and associated programs 	51-52
2. Make sure that they are not complicit in human rights abuses.	<ul style="list-style-type: none"> Safety performance, measurement and programs 	46-48, 165
	<ul style="list-style-type: none"> Our management of customers' confidential and personal information 	156
	<ul style="list-style-type: none"> Our actions toward Reconciliation and Aboriginal Engagement 	9-10, 51
Labour		
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	<ul style="list-style-type: none"> Continued analysis of our workforce statistics to support programs 	165-169
	<ul style="list-style-type: none"> Diversity Strategy and associated programs, including inclusion, gender equity, parental leave, domestic violence leave and flexible working arrangements 	51-52
4. The elimination of all forms of forced and compulsory labour.	<ul style="list-style-type: none"> Our actions toward increasing cultural awareness 	51
5. The effective abolition of child labour.	<ul style="list-style-type: none"> 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 	168
6. The elimination of discrimination in respect of employment and occupation.	<ul style="list-style-type: none"> Our management of suppliers 	59

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.	<ul style="list-style-type: none"> Waterway quality programs and the <i>Healthy Waterways Strategy</i> 	36-41
	<ul style="list-style-type: none"> Our flooding and drainage programs and supporting strategies 	31-35
9. Encourage the development and diffusion of environmentally friendly technologies.	<ul style="list-style-type: none"> Our biodiversity program and supporting <i>Environmental Stewardship Strategy</i> Our environmental programs including energy, resource recovery and climate risk management Our community engagement and education programs 	63-64 60-63 9-11, 15, 21, 43-45
Anti-corruption		
10. Businesses should work against corruption in all its forms, including extortion and bribery.	<p>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 <i>Independent Broad-based Anti-corruption Commission 2011</i> and the <i>Protected Disclosure Act 2012</i>. We provide assurance over our control environment through a robust assurance management program.</p> <p>This commitment is implemented through the following strategies and programs, detailed within this report:</p>	
	<ul style="list-style-type: none"> Our corporate governance programs and policies 	65-69
	<ul style="list-style-type: none"> Our risk management program and frameworks 	70
	<ul style="list-style-type: none"> Our compliance in accordance with Acts of Parliament 	70, 154-157
	<ul style="list-style-type: none"> Our Code of Conduct 	melbournewater.com.au
	<ul style="list-style-type: none"> Our public interest policy and procedure 	157

Appendix J – Letter of Expectations

Priority Area	Key Performance Indicator	Page reference
Climate Change	E2 Emissions reduction	164
	E3 Climate adaptation	61
Customer and Community Outcomes	C1 Customer satisfaction	44,146
	C2 Customer and community engagement	11
Water for Aboriginal cultural, spiritual and economic values	AC1 Engagement of Aboriginal Communities	51,59
	AC2 Engagement of Traditional Owners	9
	AC3 Reconciliation Action Plan	10
Resilient and liveable cities and towns	L1 Integrated Water Management	13
	L2 Water efficiency	21
Recognising recreational values	Rec1 Recreational values	21, 30-41
Leadership and Culture	G1 Diversity and inclusion	51
	G3 Health and safety	165
Financial Sustainability	F1 interest cover	See Performance Report (146)
	F2 gearing ratio	
	F3 internal financing ratio	
	F4 current ratio	
	F5 return on Assets	
	F6 return on equity	
	F7 EBITDA Margin	
	F8 Credit rating.	



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