Melbourne Water Annual Report

2016-17

VICTORIA State Government

Melbourne Water

Enhancing Life and Liveability

Aboriginal Acknowledgement

Melbourne Water respectfully acknowledges the Traditional Owners of the land on which we operate and pays our respect to their Elders past and present.

We acknowledge Aboriginal and Torres Strait Islander peoples as Australia's first peoples and as the Traditional Owners and custodians of the land on and water in which we operate. We recognise and value the ongoing contribution Melbourne's Aboriginal and Torres Strait Islander communities and their rich cultures make to the services Melbourne Water provides. We embrace the spirit of reconciliation, working towards the equality of outcomes to ensure an equal voice.

About this report

The *Melbourne Water Annual Report 2016-17* describes our activities undertaken between 1 July 2016 and 30 June 2017 to meet our customer needs, regulatory obligations and contribute towards achieving our vision of Enhancing Life and Liveability.

Melbourne Water is a Victorian Government-owned corporation.

As part of our commitment to sustainability, we will print a limited number of copies of this report. 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 contact Melbourne Water on 131 722 (within Victoria) or (03) 9679 7100 (outside Victoria), or email enquiry@melbournewater.com.au

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Enhancing Life and Liveability

Water is essential to Melbourne's vibrant, liveable and sustainable lifestyle – now and into the future. It underpins the health of people and the environment, enhances community wellbeing, and supports productivity and jobs.

As a committed community partner in the world's most liveable city, Melbourne Water's vision is 'enhancing life and liveability'. We help deliver this vision through our services to help create healthy people, healthy places and a healthy environment.

In order to deliver our services, Melbourne Water works in close partnership with many stakeholders and customers including the community, Traditional Owners, retail water corporations, local and state governments and developers. Our diverse and talented staff engage extensively with the community to understand and respond to their needs. Together, we make Melbourne a great place to live.

The Year in Review

Report from the Chair and Managing Director

It has been a rewarding year at Melbourne Water where we recognise the vital role we play in contributing to liveability in Melbourne's greater region. This responsibility is a privilege and a deep commitment.

Guided by our vision of creating Healthy People, Healthy Places and a Healthy Environment, our achievements have helped support economic growth, enhance community wellbeing and underpin basic human health.

The Victorian Government's State Water Plan, *Water for Victoria*, has called on the water industry to work together to better manage water as a fundamental resource for Victorians. By continuing to partner with our customers, stakeholders and the community we are contributing to this important initiative.

Delivering on our vision: Healthy People, Healthy Places, Healthy Environment

In 2016-17 Melbourne continues to be one of the world's most liveable cities, but we are facing big challenges: a growing city with increasing urbanisation and climate change.

With more than 125 years of experience servicing greater Melbourne, we are concentrating our efforts on securing a sustainable and healthy community for future generations. As we continue to deliver essential services in a changing economy, we are focusing even more on our customers. Their input is helping us plan for the needs of our city and its surrounds, now and into the future.

We are proud to deliver some of the highest quality drinking water in the world. Our new *Melbourne Water System Strategy* provides a 50-year vision to secure Melbourne's water supply for future generations, and is the product of substantial community and stakeholder collaboration. In 2018, it will be supported by a 50-year *Sewerage Strategy* which will ensure we can adapt and respond to the increasing demands that urban growth and climate change are placing on the wastewater system.

Minimising our environmental impact, especially our contribution to climate change, is a high priority for Melbourne Water. In 2016-17 we commissioned five new mini hydro-electric plants throughout Melbourne, increasing our overall network to 14, with more to be added in 2018. We can now produce more than enough renewable energy to power our entire water supply operation. Together with other energy-generating initiatives, we are working hard to further reduce our carbon footprint.

We continue to work with local councils to create more opportunities for the shared use of our land, building shared pathways to provide cycle routes and walking paths along Melbourne's waterways. The Greening the Pipeline project exemplifies our approach to working in partnership to enhance the liveability of communities along a 27-kilometre corridor. This project is finding a positive community use for a decommissioned heritage-listed sewer system and creating new parks through a collaborative project between Melbourne Water, Wyndham City, City West Water and VicRoads.

Melbourne Water's important stewardship role of maintaining and improving more than 8680 kilometres of rivers and creeks to meet the needs of growing communities was highlighted when we were appointed as a lead agency to produce the *Yarra Strategic Plan*. As with all we do, the community will be at the centre of this project as we progress towards defining a 50-year Community Vision for the Yarra River and its surrounds that truly unites the community and meets the needs of all interested stakeholders. We are excited to be working in consultation with the Wurundjeri and Birrarung Council to deliver this critical and iconic Plan for the future of Melbourne.

Evolving our organisation to support community outcomes

Our commitment to safety was reflected in progress made in 2016-17 to reduce our injury rate (or Total Recordable Injury Frequency Rate) by 43 per cent. Melbourne Water also released its new *Health, Safety and Wellbeing Policy* which has filtered into a number of best practice initiatives that improve the safety and delivery of our services.

In 2017 Melbourne Water's advancements in digital technology were recognised with the *NRMA Insurance Excellence Award* for the *Flood Risk Management Project of the Year*. The award recognised our development of the Flood Integrated Decision Support System (FIDSS), which helps keep Melbourne safe by providing our emergency services partners with timely, high quality information regarding flood risks. Two individuals also received honours, with the Victorian Branch of the Australian Water Association naming Dr Melita Stevens as Water Professional of the Year and Kim Mosse being awarded VicWater's Emerging Leader for 2016.

We are working towards becoming even more representative of the community in which we work through our gender equity and diversity commitments. More than 150 leaders across Melbourne Water participated in Inclusive Leadership Training to support leading diverse teams, and we continue to reduce barriers to participation for people with a disability through actions from our *2016-18 Accessibility Inclusion Plan*. We are on track to achieve our 50 per cent gender balance target for women in management roles by 2020, as set in our *Diversity and Inclusion Strategy*. That diversity of people and thought drives better and more inclusive decisions for our community.

Our *Reconciliation Action Plan* activities generated more positive engagement with Aboriginal and Torres Strait Islander leaders, and we are partnering with organisations to create more Aboriginal and Torres Strait Islander employment opportunities, with four traineeships made available in 2017. We are also appreciative of all the local Traditional Owner groups we have worked with throughout 2016-17 which bring us closer to understanding the cultural values associated with water. Opportunities to engage more effectively in managing waterway health is another important outcome of this partnership.

In collaboration with our customers, we have made significant progress in improving the products and services we provide and our customers tell us this approach is working. Our reputation survey results place us in the top tier, with a result higher than 80 achieved for the last two quarters of 2016-17. Our enhanced digital applications, such as Frog Census, the updated Melbourne Water storages app and our consultation-driven website *Your Say*, are engaging our customers more than ever before.

Melbourne Water continues its strong focus on financial sustainability, delivering price reductions for our services achieved through the 2015-16 Price Submission.

Our efforts contributed to an improved credit rating for 2016-17. This was achieved by delivering on our commitments, improved business planning practices, quality reporting, and greater alignment between our forecasting, operational and capital expenditure. This will result in considerable savings over the next three years, and increase our ability to meet our obligations while delivering additional services for our customers and greater Melbourne.

A globally sustainable citizen

This was Melbourne Water's second year as a signatory to the UN Sustainable Development Goals. We have developed strong actions against each of these goals in our *2016-17 Corporate Plan* and will be reporting against them next year. Our Report on Progress for the UN Global Compact can also be found on pages 170-171 of this report.

All the work highlighted in this year's Annual Report has been delivered in partnership with the many organisations with which we work closely, including Melbourne's retail water companies, the Victorian Government, local government, developers and industry associations. Together, we are all working to make Melbourne an even greater place to live.

We are pleased to present the *Melbourne Water Annual Report 2016-17*, in accordance with the *Financial Management Act 1994*.

John Thwaites
Chairman

25 August 2017

Michael Wandmaker
Managing Director

25 August 2017

Sustainable Development Goals

Melbourne Water has committed to the United Nations Global Compact (UNGC), the world's largest corporate sustainability initiative. Linked to this, we also signed a public CEO Statement of Support for the UN Sustainable Development Goals (SDGs) along with over 30 other leaders in the Australian business community.

Contributing to the Sustainable Development Goals

The SDGs are a common set of goals to put the world on a sustainable path. The universal goals 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 vital role of water and related resources in creating and delivering sustainable communities puts Melbourne Water in a key position to contribute to this global effort.

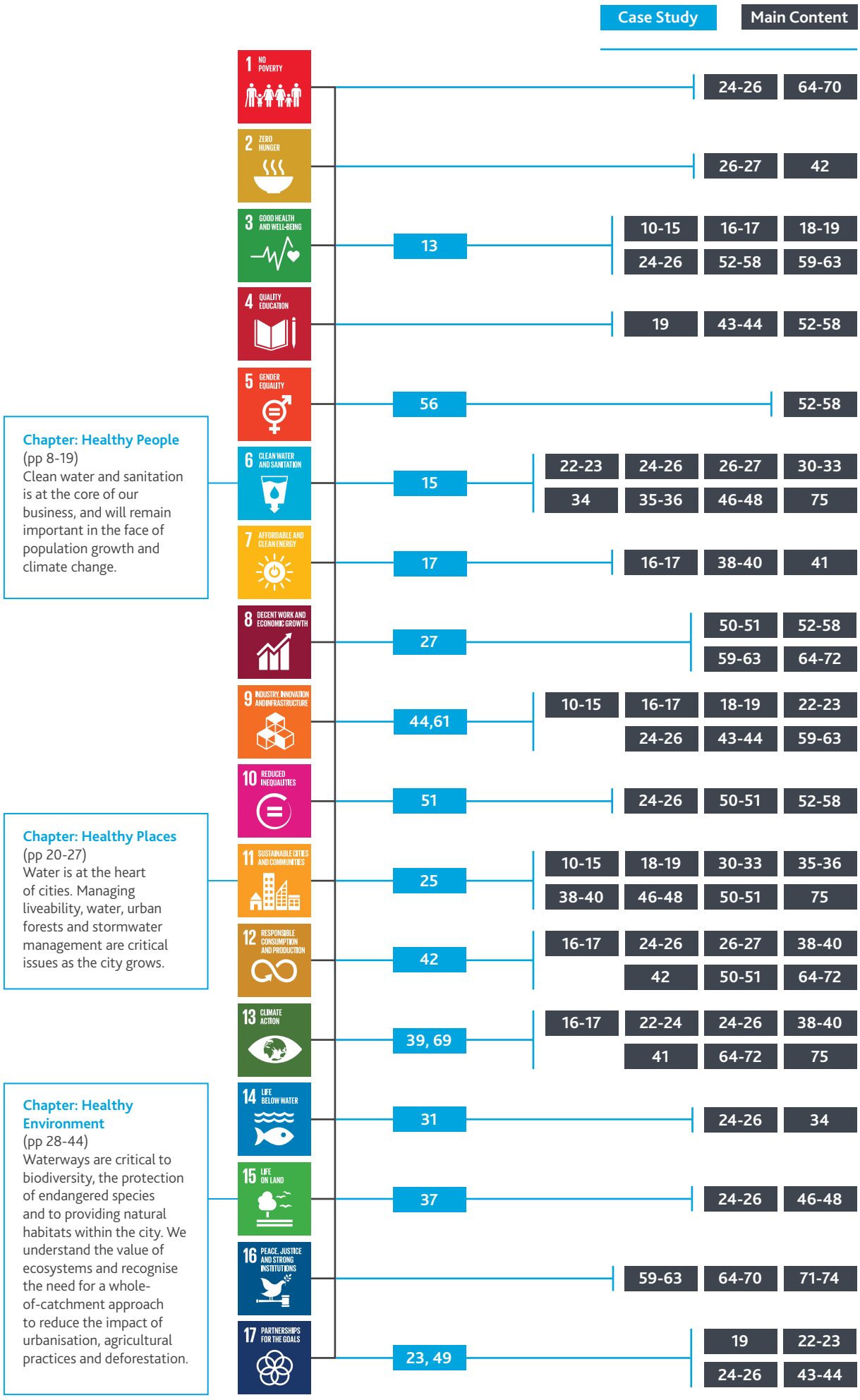
Melbourne Water aims to enhance our contribution across all goals, while demonstrating leadership for SDGs 6 – Clean Water and Sanitation, 11 – Sustainable Cities and Communities and 15 – Life on Land. Given Melbourne Water's approach, the *Melbourne Water Annual Report 2016-17* provides information on how Melbourne Water is contributing across all the goals.

Our strategic direction clearly outlines our commitment to the economy, environment and community across three pillars and organisational themes. Our three pillars are: Healthy People – strengthening the wellbeing of the community; Healthy Places – co-creating the world's most desirable places to live; and Healthy Environment – enhancing the natural environment. Our organisational themes comprise Customer Focus, Inspired People, Continuous Improvement and Financial Sustainability. The SDGs align closely with Melbourne Water's strategic direction, particularly goals 6, 11 and 15.

Creating the world's most liveable city is a collaborative effort. As such, the SDGs will provide us, as well as our stakeholders and customers, with a common framework to deliver ongoing community wellbeing and a sustainable, well-managed environment for future generations.

How to navigate this report from a sustainable reporting context

The interdependent nature of the 17 UN Sustainable Development Goals (SDGs) means that by delivering our strategic direction, Melbourne Water will contribute across all 17 goals. Relevant SDGs which link to our work are aligned in the footer of each section of this report. Melbourne Water demonstrates leadership in SDG 6, SDG 11 and SDG 15. These three goals are aligned to our strategic direction of Healthy People, Healthy Places, Healthy Environment (see pages 8 to 44). Further, goals which align strongly within our organisation are linked with case studies. To learn more about how we determined our material goal focus, see the Global Reporting Initiative index (Appendix H).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Healthy People

Strengthening the Community

Melbourne Water protects public health and strengthens community wellbeing by providing affordable, world-class drinking water and safe sewage treatment.

Our new *Melbourne Water System Strategy* provides a 50-year vision to secure Melbourne's water supply for future generations. In 2018, a 50-year *Sewerage Strategy* will be developed. These strategies will ensure we are well placed to continue to adapt and respond to the challenges of population growth and climate change.

Despite these challenges, Melbourne Water continues to deliver some of the highest quality water in the world. In 2016-17 we delivered 428 billion litres to our customers and the community of greater Melbourne. As our water network diversifies, we are also part of a national effort to embed further scientific quality standards.

As well as planning for the future, we are also implementing infrastructure improvements today. In January 2017, we began building a $150 million nitrogen removal facility at our Western Treatment Plant. This will help us reduce the amount of polluting nitrogen entering Port Phillip Bay and increase the capacity of the plant to accommodate Melbourne's predicted future growth.

At the Eastern Treatment Plant we have adopted an innovative approach to our chemical sewage processes which concentrates sludge and allows for greater quantities to be treated within the existing treatment system. This has deferred the need to build a new $20 million digestion plant for another 10 years.

We are implementing new radar imaging technologies to provide detailed information about the condition of our sewerage system. This will allow us to make better value investments in infrastructure upgrades without compromising risk or public safety. This technology is new to the Australian water industry and can be used to model the condition of the sewer to better predict corrosion rates.

We continue to support a community that values water and the environment through our engagement and education programs. Our education and Waterwatch programs support learning for the water curriculum, and contribute to scientific research through monitoring our waterways with a broad volunteer base of citizen scientists. We build capacity at an industry level, and with funding from the Department of Environment, Land, Water and Planning this year, our Clearwater program expanded its reach to regional Victoria and helped increase integrated water management knowledge and understanding throughout Victoria.

428GL

HIGH QUALITY
DELIVERED TO CUSTOMERS
AND THE COMMUNITY

Providing long term water security for our community by developing 50 year strategies in supply and sewage.

332GL

OF SEWAGE
REMOVED AND TREATED

INTEGRATED THE FIRST DESALINATED WATER ORDER INTO MELBOURNE'S SUPPLY SYSTEM
with
100% COMPLIANCE

$150M STAGE 2
CONSTRUCTION AT WTP

NITROGEN REMOVAL PLANT
WITH CAPACITY TO TREAT
140 MILLION LITRES
of wastewater per day

Replacement of the 25W cover has ensured the WTP can now meet 100% of its energy demand

$8M ODOUR TREATMENT FACILITY
AT EASTERN TREATMENT PLANT
REDUCING SITE EMISSIONS BY 20%

Clearwater delivered IWM capacity building programs to 600 water professionals across Melbourne and regional Victoria

$104.85M

IN WATER SUPPLY
CAPITAL EXPENDITURE

$115.1M IN SEWERAGE
TREATMENT
CAPITAL EXPENDITURE

$51.5M IN SEWER
TRANSFER ASSET
CAPITAL EXPENDITURE

14,705

PARTICIPANTS
in education and citizen science programs

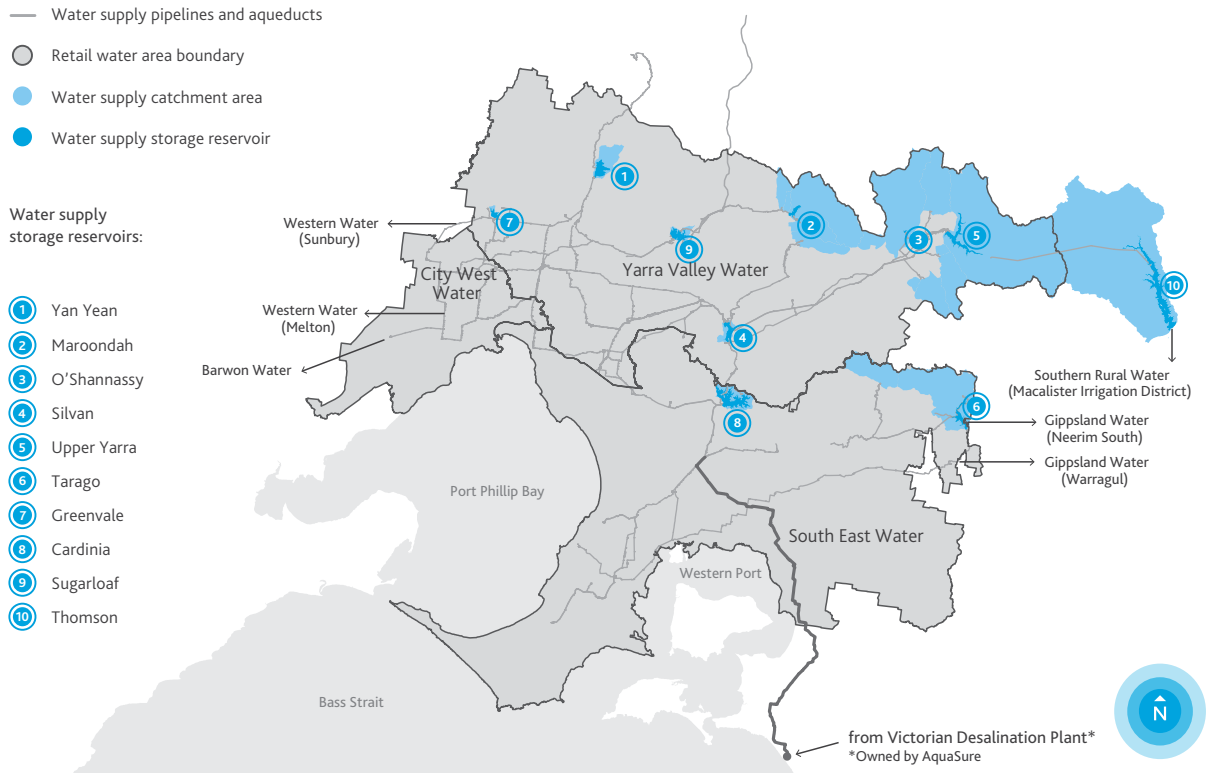
Procured new radar imaging and CCTV technology in our sewer maintenance program, increasing our asset condition management approach, a first for Australia

Water Supply

To ensure Melbourne's water supply remains secure, we manage our water storages to meet the needs of a growing city and are prepared for drought, flood, bushfires and other events.

Melbourne's water supply comprises 10 storages with a total capacity of 1812 billion litres. The storages started the year (in July) at 59.4 per cent full, climbed to a maximum of 72.6 per cent in November and finished (June) at 62.2 per cent, a net increase of 2.8 per cent over the year. With the exception of a brief drop in 2016, storage levels at 30 June 2017 were the lowest for this time of year since 2011. Storages remain well above the low of 26 per cent experienced in 2009.

Melbourne water supply system



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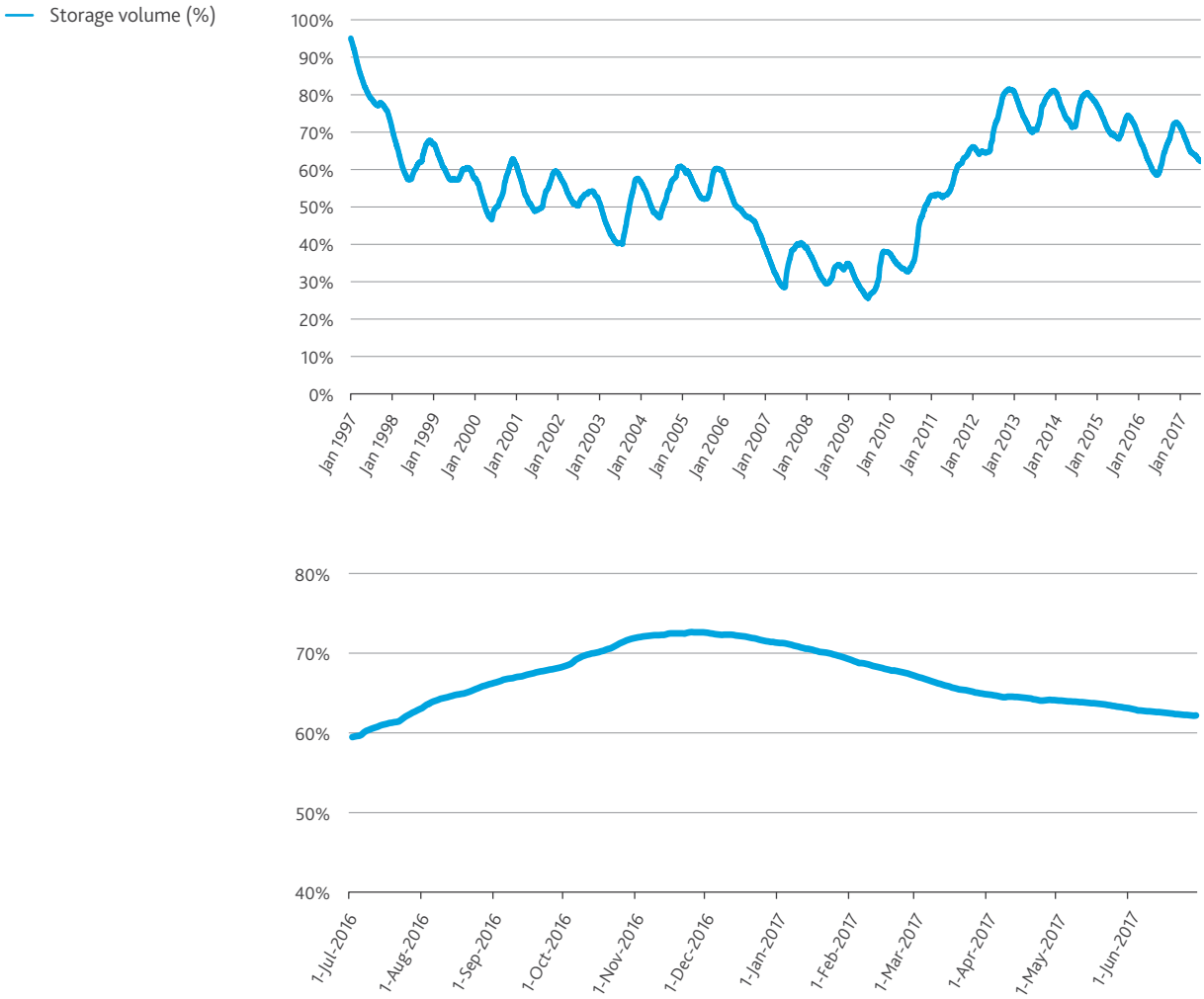
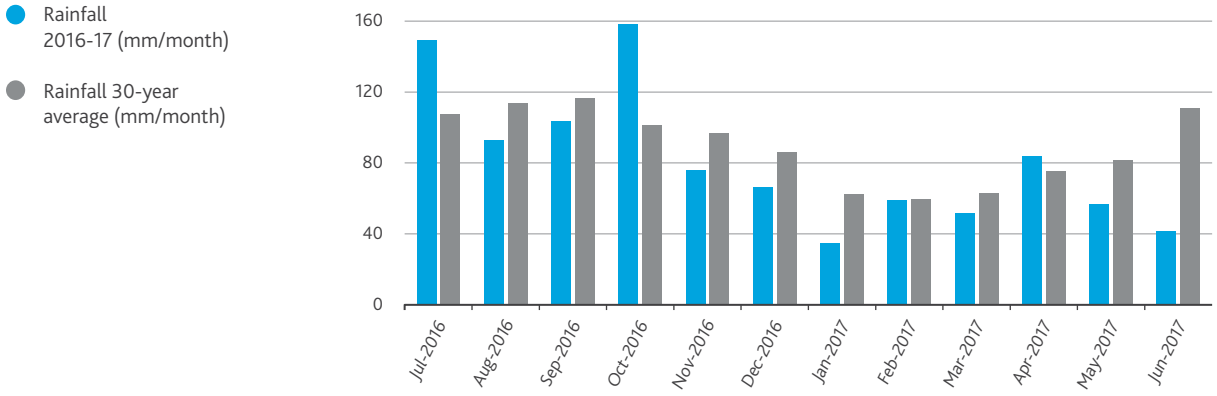
Melbourne water storage




Maroondah Reservoir

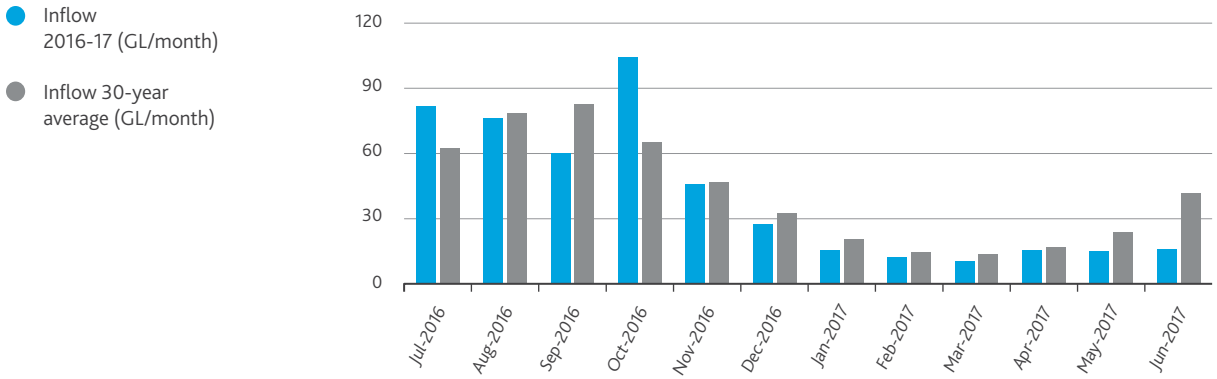
The water contained in Melbourne's storages typically increases during the winter-spring 'filling season' before being drawn down during the warmer and drier summer-autumn period. The 2016 filling season saw catchment rainfalls and inflows slightly above the 30-year average. However, the 2017 filling season got off to a very dry start with June inflows at 60 per cent below average. Monthly rainfall across Melbourne's storage catchments varied between a low of 35 millimetres (in January) and a high of 159 millimetres (in October). The total rainfall of 974 millimetres was 9 per cent below the 30-year average.

Monthly average rainfall at Melbourne's major harvesting reservoirs

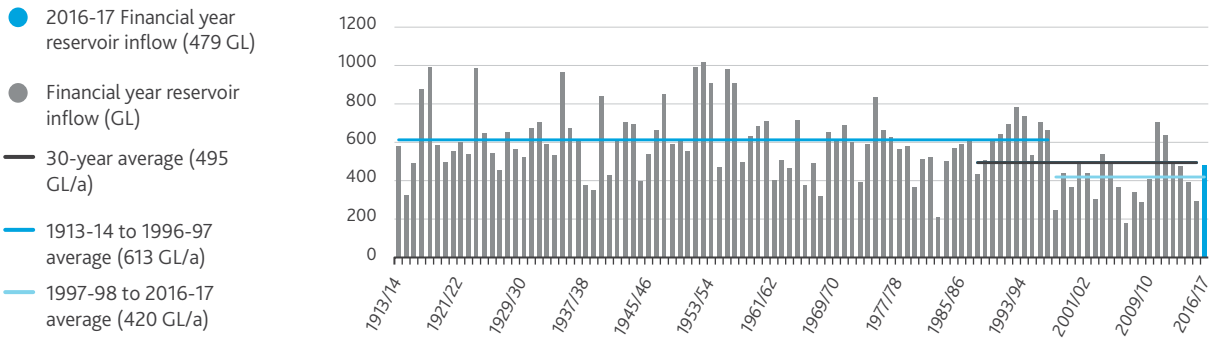


The monthly inflow into the reservoirs varied between a low of 10 billion litres (in March) and a high of 104 billion litres (in October). The total inflow of 479 billion litres was 3 per cent below the 30-year average.

Monthly average inflow at Melbourne's major harvesting reservoirs



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



The 2016-17 inflows to Melbourne's four major harvesting storages of 479 billion litres were 22 per cent below the long-term annual average of 613 billion litres for the pre-Millennium Drought period (1913-14 to 1996-97). This result is 3 per cent below the average for the last 30 years (495 billion litres), which provides recent historical context to water resources data, and 14 per cent above the average for the period since 1997, which is one of the Department of Environment, Land, Water and Planning scenarios used for future water resources planning to represent recent streamflow conditions.

Water from the Victorian Desalination Project

For the 2016-17 financial year, the Minister for Water announced an order of 50 billion litres of water from the Victorian Desalination Project (VDP) at no additional charge to customers. In March 2017, the Minister announced that a minimum annual water order of 15 billion litres from the VDP would be introduced for the next three years (from 2017-18). Operational and technical advice provided by Melbourne Water and Melbourne's retail water companies helped inform this decision. Minimum annual water orders contribute to continued water security, better plant management and steady prices for customers.

Melbourne Water considers a number of factors when providing the Department of Environment, Land, Water and Planning (DELWP) with advice about desalinated water orders. Considerations include how much water will be needed throughout the year, the current levels in our storages, expected water demand, climate outlooks and the cost to consumers.

As with all the water supplied by Melbourne Water, desalinated water meets the strict standards of the Australian Drinking Water Guidelines and the *Victorian Safe Drinking Water Act*.

2016-17 Retail water consumption

- 35.6% South East Water 152,475 ML
- 35.0% Yarra Valley Water 150,124 ML
- 26.4% City West Water 113,195 ML
- 2.4% Western Water 10,443 ML
- 0.3% Barwon Water 1,071 ML
- 0.2% Gippsland Water 1,030 ML

Supplying our Customers

Melbourne Water supplied between 32 billion litres (in September) and 42 billion litres (in March) of water per month to our retail water company customers. In total, we supplied 428 billion litres of water in 2016-17, 1 per cent less than last year, meeting all customer expectations.

Case study

Melbourne Water System Strategy

In 2016-17 we developed the *Melbourne Water System Strategy*. It outlines our contribution to implementing relevant policy directions set by the Victorian Government's water plan, *Water for Victoria*. The Strategy takes a long-term view, considering the water resource management challenges and opportunities across the Greater Melbourne region over the next 50 years.

To respond to the challenges of a changing and variable climate and growing region, it outlines an adaptive portfolio approach: we will make the most of the water supply system, support the community to use water even more efficiently, diversify the sources of water we use, and optimise the water grid and market. Concurrently with our development of the *Melbourne Water System Strategy*, all of the other urban water corporations connected to our water supply system, including Melbourne's retail water companies, also developed urban water strategies which consider the water and sewerage management challenges and opportunities in each of their service areas over the next 50 years.

The *Melbourne Water System Strategy* was the culmination of extensive collaboration over 15 months with a wide range of stakeholders including, among others, Melbourne's retail water companies (City West Water, South East Water and Yarra Valley Water), Western Water, Barwon Water, Southern Rural Water, Traditional Owners, the Victorian Environmental Water Holder and DELWP.

To ensure the *Melbourne Water System Strategy* reflected the needs and perspectives of the community, we worked particularly closely with Melbourne's retail water companies to consult their customers during the development of the strategy, which included a series of workshops and an online survey of more than 740 people. The result is a series of consistent and complementary strategies across the water sector, stronger relationships with our customers and stakeholders and a clear vision for the security of Melbourne's water supply for the future. A 50-year *Melbourne Sewerage Strategy* is now in development and will be delivered in 2018. The full Strategy can be viewed at: https://www.melbournewater.com.au/aboutus/reportsandpublications/key-strategies/Pages/Melbourne-Water-System-Strategy.aspx

Health-Based Targets

Melbourne Water protects the public health of the Melbourne community by providing high quality, safe and reliable drinking water. We treat drinking water across multiple barriers, from catchment to tap, within a robust risk management framework. This service is underpinned by an independently certified drinking water quality management system linked to quality standards set in the *Australian Guidelines for Drinking Water* by the National Health and Medical Research Council.

Melbourne Water played a significant role in the revision of the national Guidelines which introduced microbial health-based targets in 2016-17. These targets introduce new measures for assessing the microbial safety of drinking water. Dr Melita Stevens, Principal Scientist at Melbourne Water, has been involved in promoting health-based targets since 2008 and is a member of the Water Services Association of Australia group formed in 2012 to ensure industry involvement in this significant change to the way drinking water safety is measured. Melbourne Water was one of 19 water companies involved in the trials to assess the inclusion of health-based targets.

A clear benefit of the health-based targets is their emphasis on the effectiveness of water treatment processes and the ability to implement corrective actions in real time should a problem be detected, providing increased confidence in the supply of safe drinking water.

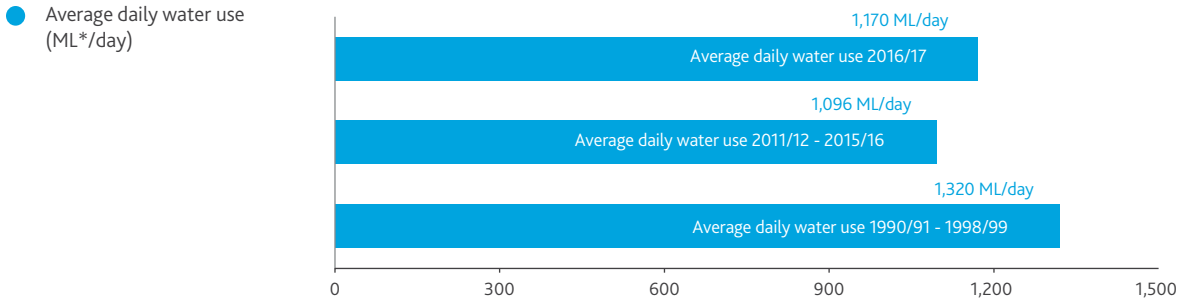
Ensuring our Water Quality

Melbourne Water regularly undertakes field surveys to identify water quality risks. In 2016-17 we expanded data collection throughout Melbourne Water's supply system through sanitary surveys (measuring pathogen risk) in the catchments of Greenvale, Cardinia, O'Shannassy, Upper Yarra and Silvan reservoirs. In 2017-18 we will continue these surveys, using a new mobile application developed to standardise the data collections. We will also start to apply this data to identify potential sources of contamination, reduce catchment risk factors and determine the level of water treatment required.

Our commitment to delivering high quality drinking water was recognised in our strong performance during an independent audit of our drinking water quality management system. In 2016-17 we achieved all water quality targets, including those for E. coli, turbidity, colour, taste and odour and provided drinking water without any incidents that could affect public health. There were no notifications of non-conformance and only a small number of suggested improvements were made.

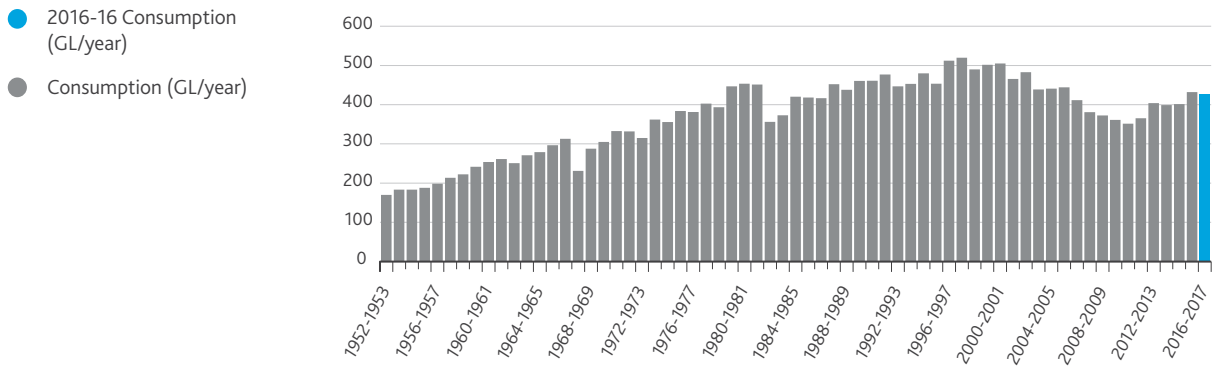
In 2016-17 we developed a new Melbourne Water *Drinking Water Quality Strategy* to guide the ongoing delivery of safe and secure drinking water. The strategy takes into consideration multiple challenges such as climate change, population growth, increased urbanisation and the need to use a broader range of water sources to meet the needs of our customers.

Average daily water use for Melbourne



*ML – megalitre – is a unit of volume equivalent to 1 million litres

Financial year consumption



Water Consumption

The Melbourne community has continued to use water efficiently, and Permanent Water Saving (Use) Rules are in place across Victoria to ensure we continue to use water wisely. Melbourne's residential water use in 2016-17 was 161 litres per person per day, slightly above the Victorian Government target of 155 litres. This result was slightly less than last year's 166 litres per person per day and 1 per cent more than the last five-year average.

Including non-residential users, Melburnians used an average of 1170 million litres of water per day during the year, which was 7 per cent more than the last five-year average. While water consumption has been slowly increasing in recent years, it remains below the levels experienced in the 1990s.

For example, when metropolitan consumption reached its peak in 1997, Melbourne used an average of 1475 million litres per day for the year, or 26 per cent above current levels.

Melbourne Water continues to work with partners, industry and the community to ensure we make the best use of our precious water supplies. We provide all available water use and storage level data online. This year we updated our water storage mobile application, which allows everyone in the community to more easily compare their daily water use with the per-capita daily average.

Supporting Growth and Risk Reduction

In 2016-17, Melbourne Water delivered $104.85 million in capital works to sustain the water supply system for the community of Melbourne for future generations. Significant investments of more than $48.5 million were made to renew water transfer assets, including the Preston Reservoir to Merri Creek water main renewal ($19.8 million) and the replacement of the ageing Maroondah Aqueduct ($18.5 million).

Risk reduction was also a major part of our capital program and 2016-17 saw the completion of several significant projects including:

- investing $3.7 million to upgrade disinfection plants at Greenvale, Monbulk and Kallista. This resulted in a substantially reduced safety risk for employees and improved community safety
- the renewal of the fluoridation plant at Cardinia including a new plant currently being built in a new building. This has reduced OH&S risks to operators, improved the reliability of fluoride dosing and reduced potential for environmental spills.

Case study

Renewing Ageing Infrastructure in the Maroondah Aqueduct

Assessing and renewing ageing infrastructure is one way in which Melbourne Water ensures that Melbourne continues to have some of the highest quality drinking water in the world.

The Maroondah Aqueduct runs for 27 kilometres from Maroondah Dam near Healesville to Sugarloaf Reservoir in Christmas Hills. Constructed during the early 1890s, the aqueduct was once considered to be a masterpiece of engineering. However, in recent years the original pipes and channels had reached their use-by date. Cracks in the pipes were causing leaks, and open concrete-lined channels were exposed to debris and animals. Following a risk assessment, Melbourne Water identified the declining state of the Maroondah Aqueduct as potentially compromising water quality.

In September 2016, Melbourne Water commenced a $32.1 million project to upgrade a 5.7 kilometre section of the aqueduct in the Yarra Valley. As part of this upgrade, old concrete channels are being replaced with underground pipes and backfilled with soil. When complete, these upgrades will protect Melbourne's water quality and prevent water currently being lost due to evaporation and seepage. It will also improve public safety and provide improved community access to land either side of the aqueduct.

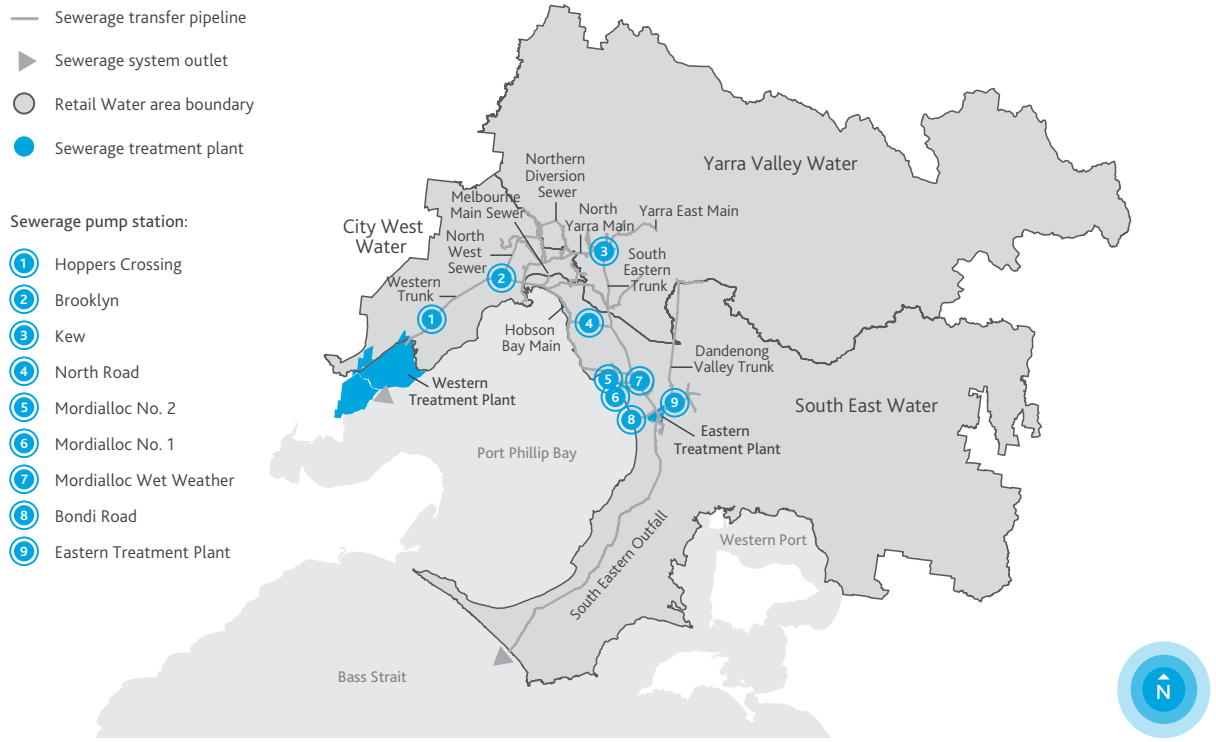
As a critical water supply asset, the Maroondah Aqueduct delivers up to 200 million litres of water per day to Melbourne's growing population via Sugarloaf Reservoir. Replacing the aqueduct with a pipeline forms part of Melbourne Water's strategy for renewing ageing infrastructure and securing Melbourne's water supply into the next century.

Sewage

Melbourne's sewage treatment system consists of two main treatment plants: the Western Treatment Plant (WTP) at Werribee and the Eastern Treatment Plant (ETP) at Bangholme. More than 400 kilometres of pipes and pumps transfer waste from the networks of Melbourne's retail water companies to our treatment facilities.

Melbourne Water's treatment plants process sewage, which can then be supplied as recycled water or safely released into Port Phillip Bay and Bass Strait. In 2016-17, these systems operated to customer and regulatory standards. Our ongoing investment in capital works, totalling more than $115.1 million in 2016-17, places us in a strong position to continue this service standard into the future.

Melbourne Water's sewerage system



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Western Treatment Plant

At Werribee, the 10,500-hectare Western Treatment Plant (WTP) is a world leader in technical and environmental innovation, serving 1.6 million people in the central, northern and western suburbs of Melbourne. Operating for more than 120 years, the WTP continues to grow to meet the needs of a rapidly-expanding city.

The WTP's system of lagoons gradually treats sewage using bacteria to break down organic matter in the water. This approach is very low in energy consumption. When combined with our on-site methane power generation and use of recycled water for irrigation, the WTP is one of the lowest cost treatment plants in the world.

In 2016-17, the WTP continued to meet customer and regulatory standards. Nearly 200 billion litres of sewage were successfully treated and 18 billion litres of recycled water were delivered to our customers.

Treatment Upgrades

A three-stage $290 million program of works to increase the plant's capacity began in 2012.

The WTP currently removes a significant amount of nitrogen (present in sewage) from wastewater before discharging it to Port Phillip Bay, and Melbourne Water is working to safeguard the future by ensuring that nitrogen levels entering the Bay do not increase. Construction of a highly automated $150 million nitrogen removal plant began in January 2017 which will treat 140 million litres of wastewater per day. The plant will maximise energy efficiency opportunities and is expected to be commissioned in late 2018.

A comprehensive two-year trial program involving anammox bacteria to remove nitrogen from sewage has been established, which may be the next frontier in low-energy, low-cost sewage treatment.

As a direct result of the works undertaken, close operational management and favourable weather conditions, the WTP has met all licence conditions, including for ammonia, for the 2016-17 year.

Transforming Waste

Sewage at the WTP flows through two covered anaerobic lagoons (25W and 55E respectively) where solids are captured and methane (biogas) is produced for renewable energy. Works to improve the 25W cover, which began in 2014, were completed in mid 2017. The new financially sustainable design keeps the majority of the cover online during maintenance, minimising biogas loss, and ensuring the WTP can now meet 100 per cent of its energy demand.

An 18-month co-digestion trial was launched in 2017. The process of adding high-strength organic wastes into the anaerobic section of the existing sewage treatment to produce methane-rich biogas, co-digestion offers multiple benefits, including an increase in renewable energy generated from biogas and reduced waste to landfill. The trial is a first step towards providing a sustainable outlet for these organic wastes from the food industry, as we continue to work with our customers on environmentally beneficial opportunities.

Case study

Innovating for Future Lower-Cost Treatment

As part of long-term planning for the WTP, Melbourne Water investigates new and developing technologies and processes that could improve the plant. Anammox, a talented bright red bacteria, may be the next frontier in low-energy, low-cost sewage treatment and Melbourne Water is commencing leading-edge trials to potentially realise this opportunity. Mainstream anammox (also referred to as deammonification) has the potential to transform the way we treat raw sewage and provide substantial power demand and operating cost savings.

A key step in the sewage treatment process at WTP is nitrogen removal which uses bacteria that demand large quantities of oxygen and carbon – and consequently have a high energy demand.

The anammox bacteria 'shortcut' the nitrogen removal process and greatly reduce both the oxygen and carbon needed. Mainstream deammonification could save 30 per cent or more in operational expenditure, and could enable increased carbon capture and energy recovery upstream. Anammox, however, are a difficult bacteria to cultivate and sustain. Melbourne Water has established a comprehensive trial program and an initial 18-month laboratory program conducted with Victoria University showed promising results.

Melbourne Water is currently commissioning a world-first demonstration-scale plant to prove the process on a larger scale and optimise future plant design and this has already attracted national and international interest. The trial is expected to run for a minimum of two years.

Securing Recycled Water Supply

A long-term bulk water agreement was finalised with Southern Rural Water, providing certainty of water supply. This agreement guarantees 11 billion litres of recycled water from the WTP to Southern Rural Water which will then pass on the water to irrigators in Werribee South via its supply network. Irrigators can be confident of a reliable supply into the future, regardless of uncertain climate conditions.

Eastern Treatment Plant

The Eastern Treatment Plant (ETP) is situated on an 1100 hectare site at Bangholme and serves Melbourne's population from the south-eastern and eastern suburbs.

Built in 1975, the ETP is known for adopting leading technology which includes an intensive mechanical and biological approach to treat sewage and industrial wastewater. In 2012, the plant was upgraded to treat effluent to an advanced tertiary standard. This upgrade significantly improved the quality of water discharged into the environment and improved recycled water quality from Class C water to high quality Class A water.

The ETP continued to successfully operate and deliver both customer and environmental regulatory outcomes in 2016-17. Our discharge met all Environment Protection Authority (EPA) Victoria licence requirements but there were three odour complaints that were attributable to the plant. It treated 133 billion litres of sewage, and delivered more than 5 billion litres of recycled water to our customers.

Melbourne Water continues to meet the challenges associated with providing cost-effective sewage treatment for our growing population and associated industries. These challenges drive the need for robust integrated planning and construction processes. In 2016-17 we:

- worked with Melbourne's retail water companies to improve how the metropolitan water industry supports a growing Melbourne. In 2016-17 we continued to partner with South East Water to explore options to service future residential development in Melbourne's south-east
- completed the construction of an $8 million odour treatment facility which reduces site odour emissions by around 20 per cent. Foul air extracted from sewers is treated to protect them from corrosion
- applied holistic and innovative approaches to the management of sludge generated by sewage treatment to cater for growth in sewage loads at the ETP. Our project plan applies a concentration process to the sludge within the system, allowing the treatment system to process a greater quantity within existing capacity. As a result, this plan defers the need to construct an additional sludge digester plant by 10 years, saving approximately $20 million and minimising the cost of sewage services to our customers
- progressed the renewal of mechanical and electrical components including major pumps and high voltage switchboards, whilst preventing interruptions to our services. This five-year program of works totals around $50 million and replaces equipment which dates back to original plant construction in the 1970s.

Sewage Transfers

In addition to our two treatment plants, Melbourne Water also manages and operates 400 kilometres of large diameter sewers.

Managing corrosion and odour continues to be a key focus of our asset management program. In 2016-17 we delivered several projects to enhance the life of our sewer assets.

We are procuring radar imaging capability to provide a more accurate assessment of sewer conditions, which together with CCTV cameras has the potential to provide us with detailed information on sewer condition. Using an artificial intelligence platform, this innovative technology is new to the Australian water industry and can be used to model the condition in the sewer to better predict corrosion rates. The integration of this data into our asset management program will enable us to prioritise renewal investments, delivering better value for our customers.

We are collaborating with Melbourne retail water companies to improve the quality of sewage transferred through the sewers. We have also implemented four odour/ventilation technology trials to reduce concrete corrosion.

Melbourne Water plays an integral role in the Integrated Sewage Quality Management System (ISQMS), a mutually-agreed, industry-led integrated risk management framework, which drives continual improvement of sewage quality management.

Key achievements include developing the first industry-agreed sewage Demand Forecast and Capacity Planning and Improvement tool, identification and reassessment of the OH&S parameter limits to protect sewer workers, and revision and amendment of the Total Dissolved Solids risk management framework. These initiatives drive continuous improvement in understanding the sewerage system for Melbourne Water and its customers.

In 2016-17 we delivered $51.5 million of capital works to rehabilitate our sewer transfer assets and continue successful customer service. Major capital works include Williamstown and Merri Creek sewers and the Merri Creek Interceptor. In addition, a further $67.5 million of new sewer rehabilitation projects have been developed and prioritised for future works.

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Increasing Awareness, Building Water Industry Capacity

Community and Education Programs

Melbourne Water offers a range of programs to build a community that values water and the environment by improving water literacy levels and engagement. Increased water literacy facilitates better engagement with water users on a range of issues, two of which include the importance of water efficiency in managing future water supply and the impacts that negative behaviours, such as littering and dumping waste, have on our waterways and bays.

Our education resources are tailored to primary, secondary and tertiary students, and the broader community and support objectives including:

- improving understanding of the impact of climate change on the community
- increasing the uptake of science, technology, engineering and mathematics subjects in schools
- providing materials that support the Victorian Curriculum F-10 which covers water as part of Year 7 science and geography.

In 2016-17, there were 14,705 participants in our programs, ranging from tours of sewage treatment plants, to citizen science activities such as monitoring frogs and platypuses.

Together with five Catchment Management Authorities, Melbourne Water piloted a sustainability program, River Detectives, with 13 schools and education partners. The program inspires an understanding, appreciation and care for their local waterways. One hundred schools across Victoria participated in this year's pilot.

Digital engagement is expanding with new mobile applications and online resources. The *Melbourne's Water Story* website was launched to help teachers deliver more powerful curriculum about water. Our Frog Census program was expanded with the development of a mobile app to contribute to the knowledge and conservation of frogs and the health of the environment within Melbourne's waterways.

Clearwater

Clearwater is a leading capacity-building program providing the water industry with skills, knowledge and networks to steer Integrated Water Management (IWM) practices across the water sector. Activities are based on the needs of the water industry and local government and include networking and knowledge-sharing events, technical tours, organisational training and the provision of regular industry updates and online resources. This year saw the participation of 600 water professionals, twice the number of the previous year. A two-year, $1 million DELWP grant expanded the program's IWM capacity-building engagement across the whole of Victoria to a new regional target audience.

The International Water Centre's Water Leadership Program provided three sponsorships for IWM emerging leaders. It also engaged with more than 120 water professionals in a series of regional workshops, a significant step forward in promoting collaboration between organisations to deliver greater benefits to the community.

Clearwater also partnered with Melbourne Water's Living Rivers Program in 2017 in a six-month pilot program to deliver improved knowledge-sharing outcomes across Melbourne. Around 200 council water practitioners attended workshops and site visits, including the Kingston City Council's multi-functional, integrated stormwater improvement project at the Edithvale Recreation Reserve.

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Healthy Places

Melbourne Water is the custodian of more than 33,000 hectares of land in the Port Phillip and Western Port regions. We support our Healthy Places organisational pillar by managing the impacts of climate change, protecting the region from floods and facilitating enhanced public access to nature and green spaces.

We deliver on our vision of enhancing life and liveability by engaging in projects and partnerships that provide significant community benefit from our land. In April 2017, our contribution to the 'Greening the Pipeline' project helped launch a pilot community parkland in Williams Landing.

As the floodplain manager for the Port Philip and Western Port region, home to over four million people, we are responsible for identifying and reducing flood risk to protect the community through the implementation of the *Flood Management Strategy*.

This Strategy adds a new emphasis on collaboration and transparency. It helps our whole-of-catchment approach, and sets targets for the entire region.

Melbourne Water supports all stages of urban development and provides planning advice for the construction of stormwater infrastructure. This helps to protect new properties from flooding and minimises the negative impacts on local waterways. We also work with the development industry and private landowners to provide service for the planning and building of sustainable and liveable communities.

Integrated Water Management is an important part of our commitment to Healthy Places. We continue to promote the co-ordinated development and management of water, land and related resources, to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

BEGAN IMPLEMENTING
65 ACTIONS
OF THE FLOOD STRATEGY

Collaborating with local council and partners to better understand flood risks

SUPPORTING LIVEABLE COMMUNITIES

Shared pathway agreements, Our Space, Your Place and master planning along Moonee Ponds Creek.

23GL
OF RECYCLED WATER SUPPLIED TO CUSTOMERS

Managing sustainable urban growth challenges through Integrated Water Management efforts including Arden Macauley precinct.

$20M ON EMBANKMENT UPDATES
for
28 FLOOD-RETARDING BASINS

FLOOD RISK MANAGEMENT

PROJECT OF THE YEAR

BY FLOODPLAN MANAGEMENT AUSTRALIA

DELIVERS REAL-TIME FLOOD PREDICTIONS THAT WILL ENABLE MELBOURNE WATER TO ISSUE FASTER, MORE PRECISE FLOOD WARNINGS VIA THE BOM, ALLOWING EARLIER ACTION TO MITIGATE IMPACTS OF FLOODING

Melbourne Water supported the development industry to deliver capital works in growth areas

including

5 FLOOD-RETARDING BASINS

8 KM OF WATERWAY REJUVENATION

20 KM OF UNDERGROUND PIPE

and

8 NEW WETLANDS
providing stormwater treatment and habitats for diverse flora and fauna

Supporting Flood Resilience

Flooding is natural and in many cases inevitable. Like fire and other natural hazards, flood is part of the Australian landscape, and can have devastating impacts on communities.

Approximately 232,000 properties in Melbourne have a greater than 1 per cent chance of flooding in any given year. The cost of annual average damage caused by floods in our region is nearly $400 million.

Climate change is expected to increase flood risks due to more frequent, intense rainstorms and rising sea levels. Although we cannot stop floods from happening, we can plan for and manage flood risk and reduce the consequences for the community. We do this through the collaborative *Flood Management Strategy*.

In 2016-17, in partnership with stakeholders, we began to implement the 65 actions detailed in the Strategy. These steps help us to manage current and future flood risks. A focus of the Strategy and the associated actions is closer collaboration with our partners and communities to reduce flood risks. We have engaged with councils to better understand and reduce flood risks in their municipalities throughout 2016-17. We are now working with councils on collaborative, whole-of-catchment flood mapping which replaces our previous practice of separate mapping of council and Melbourne Water systems.

Over the past year, we have undertaken joint flood mapping studies with Casey, Hume and Wyndham councils. Whole-of-catchment mapping delivers more accurate information, provides greater transparency for communities about their flood risk and improves long-term outcomes for our community. Melbourne Water will continue to work with councils in this way. Further updates to our flooding and drainage mapping are in Appendix E.

In early 2017 Melbourne Water hosted the first Elster Creek CEO Forum, with participation from Bayside, Glen Eira, Kingston and Port Phillip councils. Its purpose was to create a platform for constructive discussions about the catchment's flooding issues, which currently cost $24 million per year and account for 6 per cent of Melbourne's entire annual flood bill. By collaborating at a catchment level and ensuring that the intent of this forum is captured in a joint Memorandum of Understanding (MoU), we have been able to commence productive conversations around a range of factors which contribute to flooding, including land uses, resilience and community awareness. The MoU puts community members at the heart of decision-making in all efforts to explore opportunities to reduce flood risks. Discussions are continuing in relation to a program of activities including community engagement and planning opportunities, scheduled to commence in 2017-18.

Improved warning services help communities to take quick action and reduce the effects of overland and river flooding. We have made significant improvements to our flood warning technologies throughout 2016-17, helping us to issue faster, more accurate flood warnings and tighten our communication processes with the Bureau of Meteorology (BoM) and other emergency networks such as the State Emergency Service (SES).

In 2016-17 we worked with the SES and councils to test a flash flood mobile application which automates push, SMS, voice and email notifications to residents, agencies and employees, links SES data to enable fast sharing of safety information and passes on any severe weather warnings from the BoM. In the future, it will also connect to Melbourne Water's flood mapping technology via our award-winning Flood Integrated Decision Support System (FIDSS). The app is now awaiting production.

Melbourne Water is leading a collaborative approach to embed climate change scenarios into planning controls for our region. This year we finalised our updated *Planning for Sea Level Rise Guidelines*. This was achieved in consultation with the Department of Environment, Land, Water and Planning (DELWP), coastal councils in the Port Phillip and Western Port region, and Victorian coastal floodplain management authorities. The Guidelines provide direction on the assessment of development applications in areas identified as being subject to future sea level rises. They will also be factored into 2017-18 amendments for Cardina, Casey and Mornington councils.

Planning controls and amendments are essential for controlling development and preventing flood impact to properties. In 2017, in conjunction with councils, we processed amendments to municipal planning schemes in the cities of Manningham, Bayside and Yarra. These amendments updated the flood data and planning controls for approximately 14,000 properties.

We also invested in maintaining our infrastructure. In 2016-17, Melbourne Water spent $20 million on embankment upgrades to 28 of its 230 retarding basins. These basins are used to hold water during a storm so that it can be released at a controlled rate and reduce flooding to downstream communities. These works will be completed in 2018.

Supporting the Community When Floods Occur

IIn partnership with the SES, we continued our annual $350,000 investment in a Disaster Risk Reduction program. This is a community capacity-building program which

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Case study

Vital Flood Information in Real Time

As the statutory drainage authority for metropolitan Melbourne, Melbourne Water owns and manages a vast hydrographic monitoring network. A considerable amount of high quality data is collated, stored and used for flood forecasting and analyses. Yet, until recently, this information was not integrated into a single system: during a flood response, three or more separate systems needed to be accessed before information could be reliably shared with emergency response teams and at-risk communities.

In 2011, following one of the widest spread flood events in Melbourne's history, Melbourne Water initiated a project which aimed to integrate its disparate flood information into one comprehensive system The result is Melbourne Water's new Flood Integrated Decision Support System (FIDSS).

Ensuring that the right information is available at the right time to people who need it is a key objective of the *Flood Management Strategy*. FIDSS supports this aim by providing timely, high quality information about flooding during flood events. It is an essential tool for sharing flood-related information to our emergency partners and for keeping flood-prone communities up-to-date. FIDSS has been specifically designed to integrate Melbourne Water's telemetry systems, URBS hydrologic software, HYDSTRA data management and GIS flood maps. It also directly connects with the latest Radar, Nowcast and Access Products from the Bureau of Meteorology (BoM). The benefits are real-time flood predictions that enable Melbourne Water to issue faster, more precise flood warnings via the BoM and allow the State Emergency Service and local authorities to work with the public and flood-prone residents to take early action to lessen flooding impacts.

Floodplain Management Australia awarded FIDSS the Flood Risk Management Project of the Year at its national conference in May 2017. National recognition for FIDDS is a testament to Melbourne Water's *Digital Strategy*, which is about making Melbourne Water safer, smarter, faster and easier to work with. We are investigating further opportunities to support communities during flood events through mobile phone applications for flash flood warnings, improving flood investigations and online services such as flood maps.

> *"The collaboration of Melbourne Water and other agencies, departments and organisations with Emergency Management Victoria are integral to ensuring the system of emergency management in Victoria is sustainable, effective and community focused. Their combined support is helping drive an 'all communities, all emergencies' effort to broaden the approach to emergencies, and put the community at the centre of our decision making."*
>
> ***Craig Lapsley***
> *Emergency Management Commissioner, Emergency Management Victoria*

delivers education and awareness to support community resilience and proactive management of exposure to floods.

The need for flood awareness programs like the Disaster Risk Reduction was demonstrated on 29 December 2016, when a severe rain storm hit Melbourne. The storm brought with it some of the heaviest rainfalls on record in Victoria, with up to 78 millimetres of rain falling within two hours. The heavy downpour resulted in wide-spread flash flooding as the drainage system struggled to cope with the volume and intensity of flows. Many residents, homes and businesses were affected by widespread and long-lasting disruption.

Melbourne Water responded with councils and the SES by visiting affected residents. Our operations team managed over 100 work orders, including the removal of debris, repairing damaged pits and erosion, and operating CCTV in our drainage network to ensure they were clear of blockages. This event highlighted the trauma that floods cause in our communities. It also reinforces the critical role that community awareness and resilience building plays in supporting people in crisis.

Supporting Sustainable Urban Growth

Liveability

At Melbourne Water, the long-term interests of the community and future generations are central to our decision-making processes.

We deliver on our commitment to enhancing life and liveability within Melbourne by engaging in projects and partnerships that provide significant community benefit from our land. A recent audit of Melbourne Water land determined that 63 per cent (20,728 hectares) is open and available for community use. To help community groups access this land, we reduced our community leasing fees and created the *Our Space Your Place* web portal.

Our Space Your Place allows customers to identify available land and express an interest in using it, which is then reviewed by our Strategic Land Forum. To date, we have assessed 24 expressions of interest for this initiative, including community gardens, community solar farms, apiary training facilities and worm farms.

Our open space master planning for land and waterways prioritises areas based on community need and the potential for improved community health. In addition to the *Greening the Pipeline* project (see case study 'Working in Partnership to Enhance Liveability') we also commenced master planning for the Moonee Ponds Creek, facilitating a collaboration with community groups, local councils, a number of State Government organisations, business owners and research institutions. The project is responding to community expectations of improved urban waterway environments and management, including options for integrated community uses.

We are continuously generating liveability assets with councils and community groups on our land. Over 20 per cent of the cycling and walking paths throughout the region are on Melbourne Water land, including 633 kilometres along waterways, and 163 kilometres on other land.

We are working in partnership with local councils to facilitate Shared Pathway Agreements, which provide an overarching framework for responsibilities for pathway design, operation and maintenance, and make it easier for councils to initiate the process of building them. This year we facilitated five additional shared pathway agreements including a 1.1 kilometre pathway in Burwood East with the City of Whitehorse. As Melbourne becomes increasingly urbanised, shared pathways will become more important as places where community members can recreate and exercise.

In 2016-17 we partnered with Development Victoria to support the Riverwalk Estate in Werribee. Riverwalk is a 197-hectare development that will house around 6600 people when completed in 2027 and repurposes land previously used as part of our Western Treatment Plant. The estate will include 14 hectares of parks, gardens, wetlands and other social and environmental assets, linked by 10 kilometres of bicycle tracks and walking trails. A total of 132 allotments have been made available for residential housing within a water-sensitive development. Through extensive use of rainwater and recycled water, and in combination with the water efficient appliances and fixtures that will be installed in each new home, each person living at Riverwalk should only need 65 litres of water per day from the water supply system. This is significantly less than the average 161 litres per person per day currently used across Melbourne.

We are also making $1.5 million worth of improvements over the next three years within the Western Treatment Plant by expanding its ecotourism visitor appeal. This year we improved the Lake Borrie birdwatching visitor route with upgrades to roads, road signage and installation of interpretive signage. A visitor toilet facility has also been designed and will be built in the 2017-18 financial year.

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> *City West Water is a passionate advocate for the proven benefits that quality green spaces and plants provide our communities, and the crucial role water plays in enhancing liveability. We are proud to partner with Melbourne Water, Wyndham City and VicRoads on projects like Greening the Pipeline to deliver more liveable communities in Melbourne's growing west.*
>
> ***David Ryan***
> *Managing Director*
> *City West Water*

Integrated Water Management

Integrated Water Management (IWM) is fundamentally linked to achieving the UN Sustainable Development Goals. Melbourne Water's approach brings together all facets of water, land and related resources to deliver economic, social and environmental benefits for the wider community.

In 2016-17 our IWM achievements included:

Planning for the Future of Melbourne's Water Cycle

Melbourne Water has developed an intelligent water network to underpin the medium and long-term planning of Melbourne's water, sewerage and stormwater networks. Developed for six different climate and population scenarios, the platform helps us to assess of the impact of population and climate change on our water systems. From here, we have developed a spatial map identifying potential locations in Melbourne's water and sewerage networks where the capacity may be insufficient in 2031, 2051 and 2070. We will also work with our retail water company partners, local government and industry professionals to identify decentralised water management options. These will be presented at IWM forums to be delivered by DELWP in 2017-18.

Healthy Places through Integrated Water Management

In response to Melbourne's rapid population growth, the Melbourne Metro Rail Project will activate the Arden Macaulay urban renewal precinct on the banks of the Moonee Ponds Creek, between North Melbourne and Kensington. As this area was planned prior to flood regulations, it is prone to significant flooding. Over the past year Melbourne Water has worked with the Victorian

Case study

Working in Partnership to Enhance Liveability

As the custodian of over 33,000 hectares of land throughout the Port Phillip and Western Port region, Melbourne Water opens up land for community use wherever it is safe to do so. This year we helped support the community in Williams Landing, where the Greening the Pipeline initiative is creating new parks through a collaborative project between Melbourne Water, Wyndham City, City West Water and VicRoads.

Greening the Pipeline will transform 27 kilometres of the heritage-listed Main Outfall Sewer pipeline into a regional-scale parkland. Initially constructed in 1882, this once vital infrastructure protected the health of Melbourne's growing population for 100 years until it was decommissioned. Running through industrial and residential land in Melbourne's west, the disused pipeline has been reimagined to spark a sense of community and identity, and improve active transport and green links in the area. To showcase the potential of the project, a 100-metre section of parkland was created at Williams Landing. Melbourne Water funding and a Victorian Government grant enabled park construction to commence in November 2016 and open in April 2017.

The Williams Landing parkland has a rain garden system which cleans stormwater runoff from local streets. The stormwater is pumped into garden beds in the middle of the park which filter its pollutants. Cleaned water is stored in underground tanks which are re-used to irrigate the park's trees, shrubs and lawn. As a result, the parkland uses less drinking water to irrigate its spaces, and helps improve the health of downstream waterways by taking stormwater out of the system.

Positive feedback was received from the local community which is enjoying the park and making use of the green space. Local, national and international visitors have been drawn to the park to see an example of Melbourne's enhanced life and liveability. Master planning has now commenced for another 3.5-kilometre section of Greening the Pipeline.

Planning Authority, the City of Melbourne and the Victorian Government to develop a proposed water-sensitive strategy for this site. The strategy will:

- enable urban development by reducing the flooded area while managing for the impacts of climate change and upstream urban development
- incorporate opportunities to revitalise the public realm surrounding Moonee Ponds Creek without taking land that could otherwise be safely developed
- embed IWM and water-sensitive city concepts into the landscape
- integrate a water-sensitive strategy with other key waterway projects, including the *Healthy Waterways Strategy*, Integrated Water Management Forum, Moonee Ponds Creek Catchment Planning, Metro Tunnel Arden Station construction and City West Water stormwater harvesting projects.

Healthy Environments through Integrated Water Management

The Northern Growth Corridor stretches from Craigieburn to Wallan and includes the suburbs of Mickleham, Kalkallo, Donnybrook, Beveridge, Woodstock and Wallan. The corridor is currently experiencing rapid growth. Plan Melbourne suggests that approximately 100,000 new dwellings will be added by 2050.

To maintain the region's natural ecology, around 30 billion litres of stormwater runoff generated by urbanisation will need to be prevented from entering the local waterway. This is more than twice the total demand for water of all residents and businesses in this area.

Melbourne Water has worked with Yarra Valley Water and DELWP to develop an *Integrated Water Management Plan* for the corridor in 2016-17. It has also undertaken related research on 'community willingness to pay'. The Plan:

- protects waterway ecology as well as native nationally-threatened flora and fauna that rely on these waterways
- enables urban development within the carrying capacity of nature
- incorporates opportunities to create urban cool zones and billabongs within the urban setting
- provides a potential 30 billion litres of water in an average year for supplementary water supplies for uses such as watering open space and gardens.

Land Development

Melbourne Water's Development Services team provides waterway management, stormwater and flood services to a broad range of development-related customer groups.

The team supports all stages of urban growth area development and provides planning advice for the construction of stormwater infrastructure to protect new properties from flooding and maintain the health of local waterways. In 2016-17, four Precinct Structure Plans were finalised with Melbourne Water input, 22 Development Services Schemes underwent concept design, and over 1450 hectares of development land met compliance requirements. This last step means Melbourne Water supported the development industry to deliver around 21,600 homes in growth areas, along with schools, retail and shopping precincts, parklands and open recreational space for new communities.

Melbourne Water supported the development industry to deliver capital works in growth areas. These works included five flood-retarding basins, eight kilometres of waterway rejuvenation, 20 kilometres of underground pipe to manage drainage and flood flows, and eight new wetlands to provide stormwater treatment and, importantly, habitats for diverse flora and fauna.

We also provided key stormwater and drainage infrastructure input for the planning and delivery of major State Government projects. These included level crossing upgrades, the Outer Suburban Ring Road, West Connect, Ballarat Line Upgrade and the Melbourne Metro Rail Project.

In 2016-17, we reviewed 11,181 applications for advice and approvals for development activity. This is a key service that maintains and enhances public safety and protects 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.

In March 2017 we launched our new online application process, facilitating 32 different development application types. This is one way we are making interactions easier, as we continue to make positive changes to the way we do business for the benefit of customers.

Alternative Water Sources

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.

A large percentage of the recycled water is used on-site at our main wastewater treatment plants.

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Recycled water supplied off-site to our customers is commonly used for:

- irrigating pastures and public open spaces
- intensive agriculture and horticulture
- residential estates for flushing toilets and watering gardens
- industrial processes and wash-down facilities.

The quantities of recycled water supplied to customers vary from year to year subject to recycled water availability and customer demand. Customer demand is typically lower during wet periods and increases during warm, dry periods.

In 2016-17, Melbourne Water started construction of the second stage of a three-stage upgrade project at the WTP. Once complete, the works will support our ability to provide recycled water at the right quality and with greater security of supply.

Recycled water volumes used on site and supplied to our customers in 2016-17 are shown in Table 1.

Table 1: Recycled water produced for 2016-17

	Volume 2016-17 (ML)
Treated wastewater available for recycling	327,327
WTP	
Conservation flows used on site	5602
Non-agricultural on-site use	54
Agricultural on-site use	12,387
Southern Rural Water	
– Werribee Irrigation District	5049
– Werribee Tourist District	121
City West Water	
– Werribee Employment Precinct	194
– MacKillop College	23
– Water tankers/standpipes	8
– West Werribee Dual Supply (non-residential)	81
– West Werribee Dual Supply (residential/ commissioning)	70
WTP Sub Total	**17,987**
ETP	
Re-used on site	10,080
Water Infrastructure Group – Eastern Irrigation Scheme	3921
Supply to South East Water – South Eastern Outfall	1256
ETP Sub Total	**15,257**
Total	**38,846**

Case study

Improving Health and Wellbeing for Disadvantaged People

A recent success story is our collaborative project with Training Employment Accommodation Mentoring Inc (TEAM), a not-for-profit registered training organisation (RTO) that assists people with a disability. In 2016, TEAM expressed interest via the Our Space, Your Place portal in using an area of the Syndenham pipe track to build a garden and nursery area where it could offer programs such as job-ready horticultural training, 'garden to table' food gardens and indigenous gardening programs.

TEAM was granted a licence to use the site and development of the garden space began in July 2017. Mr Mat Mason, Training Manager at TEAM said: *"Thanks to this licensing agreement with Melbourne Water, TEAM will run a series of programs utilising a strip of otherwise idle land that will touch the lives of hundreds of disadvantaged people from Melbourne's western suburbs. It is a place where people from a diverse range of community groups will come together to participate in and learn about urban horticulture and sustainability."*

Opening up land along the Syndenham pipe track is one way that Melbourne Water is enhancing the life and liveability of Melbourne. The Syndenham pipe track contains infrastructure essential to Melbourne Water and the community of Melbourne, so careful planning for the design of the site has been essential for a successful outcome.

Healthy Environment

We contribute to Melbourne's healthy environment by 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.

Our waterway and stormwater management programs help to manage and improve waterways and bays. We do this by managing vegetation, creating new habitats and delivering environmental flows. We also support activities in waterway catchments to reduce stormwater pollution and runoff. These activities are all guided by our *Healthy Waterways Strategy* and *Stormwater Strategy*, which we have successfully implemented since 2013.

We also empower people to help protect our natural assets through engagement and sponsored programs. We now engage earlier and more deeply with our communities to enable a stronger understanding of our work and the role we play in supporting local environments. In 2016-17 we invested $8.4 million in grants to local government and community groups through our River Health Incentives and Living Rivers Programs to deliver projects that protect and improve the environmental management of our waterways.

Minimising our environmental impact, especially our contribution to climate change, is a high priority for Melbourne Water. In 2016-17 we commissioned five new mini hydro-electric plants, increasing our overall network to 14 with more to be added in 2018. Our pledge to be carbon neutral by 2030 is driving us to deliver further innovation and we are working on a range of programs to help us better combat climate change.

Our commitment to biodiversity can be seen in our management of two internationally significant wetlands which are recognised under the Ramsar Convention. As part of our work on these wetlands, we maintain diverse and important communities of native plants and animals.
For the first time in its 125-year history, biosolids from the WTP are now being beneficially re-used for agriculture. Through innovative resource recovery, Melbourne Water has also reduced its biosolid stockpile at the ETP by 227,000 tonnes.

Small business engagement guidelines launched with Victoria Small Business Commissioner

$8.4M IN GRANTS

to local government and waterways stakeholders to improve our waterway health

REVISED ENVIRONMENTAL STEWARDSHIP STRATEGY.

25GL

OF ENVIRONMENTAL WATER DELIVERED

Collaborating with community and stakeholders to support design of the next **Healthy Waterways Strategy**

5 NEW

HYDRO-ELECTRICITY PLANTS IN 2016-17

Our current program can generate 69,540 megawatt hours of renewable energy, avoiding 75,800 tonnes of carbon dioxide emissions, equivalent to taking more than 29,200 cars off the road.

FROG CENSUS

APP WITH **85%** INCREASE VOLUNTEER ENGAGEMENT, DELIVERING RECORDINGS OF RARE AND ENDANGERED FROG SPECIES

50-YEAR COMMUNITY VISION FOR THE YARRA

AS PART OF THE YARRA STRATEGIC PLAN

370,000 dry tonnes of biosolids beneficially reused

Finalised the new 10 year Port Phillip Bay Environmental Management Plan (EMP) following extensive community consultation and development.

Protecting and Enhancing our Natural Environment

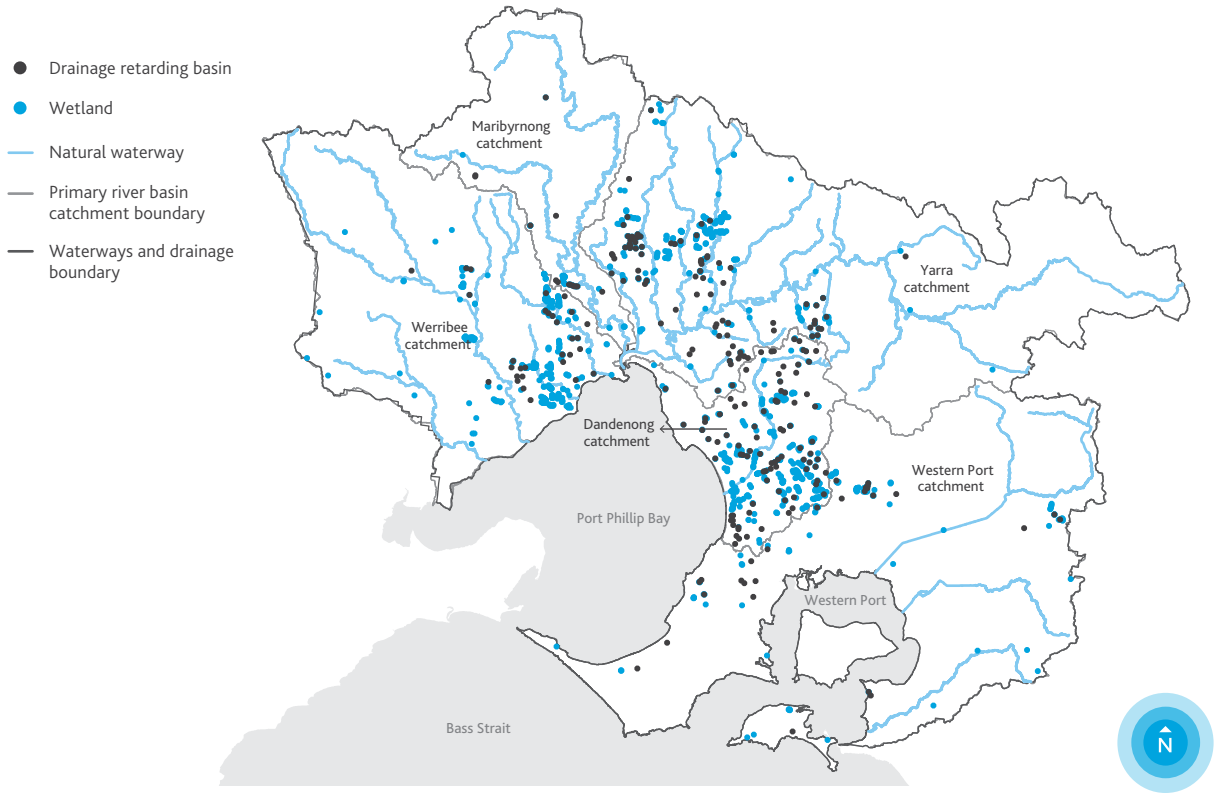
Water sustains the communities we live in, the natural environment we value and the economy we depend on. Each year, Melbourne Water invests approximately $48 million to protect and repair our waterways from a variety of threats, including those posed by climate change and population growth.

Maintaining and Restoring River Health

Every year, Melbourne Water maintains more than 8680 kilometres of rivers and creeks, and more than 500 stormwater treatment systems and wetlands. A major part of our work involves on-ground activities that directly affect rivers, wetlands and estuaries. We manage vegetation that supports a variety of habitats and wildlife, and maintain waterway infrastructure to protect public safety and the environment. In 2016-17 we commenced 80 multi-year river health improvement projects and delivered waterways improvements efforts through:

- planting 225 kilometres of new vegetation
- constructing 73 kilometres of stock exclusion fencing
- rehabilitating 95 hectares of aquatic habitat including wetlands, billabongs and floodplains
- removing three fish barriers to improve waterway connectivity for fish and other animals
- removing 2987 cubic metres of silt and debris
- stabilising river banks across six sites to protect the waterways as long-term assets.

Melbourne Water's waterways and drainage systems



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Melbourne Water also implemented a Sediment Basin Program which intercepts and manages the flow of coarse sediments before they pollute waterways. In 2016-17 we streamlined the management of 519 sediment basins in our region, and removed in excess of 10,000 cubic metres of coarse sediment from 32 basins. Using drone imagery analysis, we inventoried all basin assets and set work priorities which were then executed by our Minor Field Services Panel. This resulted in a number of site safety improvements as well as significant time and cost savings. On the strength of this success, we have further committed to removing 50,000 cubic metres of sediment in 2019-20, which will significantly improve the health of our region's waterways.

Sediment basins and wetlands capture and treat sediments and nutrients from urban run-off and prevent it entering waterways and bays. Management of wetlands and sediment basins is an example of many activities Melbourne Water undertakes to improve water quality under the State Environment Protection Policy (Waters of Victoria) and the Port Phillip Bay Environmental Management Plan (see page 34).

Melbourne Water's River Health Incentives Program celebrated its 21st anniversary in 2016, and has achieved several major milestones along the way. The River Health Incentives Program protects our waterways by providing grants for farmers, community groups and land management agencies. It has been a hugely successful example of partnering with the community to deliver outcomes and has provided more than 12,000 grants (worth over $45 million) to over 4600 participants.

In 2016-17 our River Health Incentives Program funded $5.1 million in projects with councils, other stakeholders and partners, which provided over 340,000 plants for planting along 44.8 kilometres of waterways, installed 68.5 kilometres of stock exclusion fencing and managed 220 kilometres of vegetation.

The Centre for Aquatic Pollution Identification and Management (CAPIM) in collaboration with Melbourne Water, have found widespread pollution of waterways with a synthetic pyrethoid pesticide called bifenthrin. CAPIM and Melbourne Water are working with other state government departments to identify the cause of this pollution in new housing estates where this pesticide is very common in the drainage system.

Case study

River Health Incentives Program Turns 21

Since its inception in 1995, the Melbourne Water River Health Incentives Program has provided technical and financial assistance to more than 12,000 environmental projects across Melbourne's rivers and creeks. By working in partnership with schools, communities, councils and landowners, the Program has supported projects that protect and improve the environmental management of our waterways. This has resulted in the removal of tonnes of litter and weeds and the planting of over three million plants and trees to restore native habitats.

Through the Program, more than 230 community groups, 38 councils and 4300 individuals have been able to improve the environmental health of Melbourne's waterways. It has also seen over 1500 kilometres of fencing constructed to prevent livestock damaging sensitive river and creek systems. That is similar to fencing the distance from Melbourne to Byron Bay, and greatly contributes to protecting and improving the health of our waterways and the environment.

An example of this work is the City of Casey's successful 'Plant Your Roots' program which, in partnership with Melbourne Water and Parks Victoria, saw the biggest community tree-planting event ever held in Casey. Involving over 200 participants from Casey's diverse and multicultural community, Plant Your Roots revegetated 10 hectares of land with 20,000 indigenous trees and plants.

The River Health Incentives Program has played a significant role in transforming the health of Melbourne's rivers and creeks, which are estimated to attract about 90 million visitors each year. Today, Melbourne's healthy waterways are one of the reasons why Melbourne is listed among the world's most liveable cities. Melbourne Water will continue working in partnership with stakeholders and communities to create healthy waterways for future generations.

Collaborating for the Future

Melbourne Water contributes to the *Victorian Waterway Management Strategy* and *Regional Catchment Strategy* through implementation of its Regional Waterway Strategy (known as the *Healthy Waterways Strategy*). As part of our commitment to community consultation, we are exploring new co-design opportunities to help us better engage with stakeholders including community groups, industry partners, local and State Government and Melbourne's retail water companies. An initial series of workshops were launched in the Maribyrnong catchment and drew 100 attendees from 39 organisations over three workshops. We are also using our consultation platform *Your Say* to enable local residents to share their local experiences and insights at https://yoursay.melbournewater.com.au/healthy-waterways

The Yarra Strategic Plan

The Yarra River and its environs underpin the liveability and economic prosperity of Melbourne. The river and its catchment provides 70 per cent of Melbourne's drinking water, and is home to one-third of Victoria's animal species. Over 190 bird species also live within the Yarra River corridor. Traversing 242 kilometres of urban and rural landscapes, the river provides farming irrigation and parklands for recreation. The river is also of great spiritual and cultural significance for Aboriginal communities.

In February 2017, the Victorian Government released its *Yarra River Action Plan* which contains 30 actions to ensure the long-term protection of the river and its parklands. The plan has nominated Melbourne Water as the lead agency for seven of these actions, including the development of a 50-year Community Vision for the Yarra.

The Community Vision will become the foundation for an overarching Yarra Strategic Plan, which will ensure better coordination of activities and decision-making processes for the entire river. Particular attention will be given to issues such as waterway management, public land, infrastructure, management of cultural and heritage values, statutory planning and planning for whole of river amenity. The Community Vision and the *Yarra Strategic Plan* will embrace the Caring for Country wisdom of Traditional Owners by working in partnership with the Wurundjeri Council to *Wilip-gin Birrarung murron* (keep the Yarra alive).

Planning is already underway to ensure that Traditional Owners, relevant key stakeholder agencies and departments are actively involved in developing the *Yarra Strategic Plan*.

One significant achievement in 2016-17 has been the implementation of stronger planning controls and an associated Advisory Note to protect the Yarra River corridor. This process was led by the Department of Environment, Land, Water and Planning (DELWP) in partnership with Melbourne Water and affected councils.

Melbourne Water is now a referral authority for applications within the new Design and Development Overlay to ensure that development does not unduly impact on the environmental and waterway values of the river.

> *"As a key advocate for Melbourne's iconic Yarra River, we enjoy a strong relationship with Melbourne Water in our shared passion for ensuring the health of this waterway. We are excited at the opportunity the Yarra Strategic Plan provides to deliver modern river governance that will be both world class and provide the protection the Yarra deserves."*
>
> ***Andrew Kelly***
> *Yarra Riverkeeper*
> *Yarra Riverkeeper's Association*

Delivering Environmental Water Releases

Rivers and creeks have natural patterns of high and low flows which plants and animals rely on at different times to reproduce and survive. These patterns can be disrupted by human activity and climate change, with damaging effects for wildlife.

Environmental water releases are designed to emulate natural river flows, and improve the health of waterways for native animals and plants. Melbourne Water, on behalf of the Victorian Environmental Water Holder, manages the environmental water reserve for the river systems of Port Phillip and Western Port catchments. Recent monitoring has revealed good fish migration and has detected Australian Grayling in the Werribee River system for the first time.

Melbourne Water delivered over 25 billion litres of water in 2016-17, as shown in Table 2.

Table 2: Environmental water delivered for 2016-17

River	Volume	Outcomes
Yarra	21,361ML	Five releases of environmental water were made into the Yarra system to allow the migration of Australian Grayling (*Prototroctes maraena*), improve water quality and improve access to breeding and feeding habitat by macroinvertebrates, platypus and fish. Movement opportunities for small native fish were also provided in the upper reaches or the river, and small rapids and pool habitats were refreshed in the middle reaches for improved macroinvertebrate, platypus and fish habitats.
Tarago	1952ML	Three releases were made into the Tarago system to maintain water quality, provide habitat for River Blackfish, platypus and macroinvertebrates and support spawning of Australian Grayling.
Werribee	1850ML	Six releases were made to provide and improve frog and macroinvertebrate habitat in Coimadai Creek near Bacchus Marsh. This also promoted fish migration and improved water quality in the lower reaches through Werribee.
Maribyrnong	304ML	Three environmental flow releases improved water quality and improved small rapids habitats in the upper reaches. Additional improvements included providing movement opportunities for small native fish in the upper reaches, while also refreshing small rapids and pool habitats in the middle reaches for macroinvertebrates, platypus and fish.

Managing our Catchments

Taking a whole-of-catchment approach is a vital part of managing the health of our waterways.

Local government manages about 25,000 kilometres of street and local drainage infrastructure. Stormwater collected by these smaller local government systems drains into the regional assets managed by Melbourne Water or directly into the bays and waterways.

Melbourne Water's Living Rivers Program supports sustainable stormwater management by providing grants to local government to deliver projects that improve catchment management throughout the region.

In 2016-17, the Program funded 55 new sustainable stormwater management projects, totalling $3.3 million throughout the 2016-17 and 2017-18 financial years. This has leveraged $3.85 million in council investment for sustainable stormwater management.

Significant projects include:

- supporting the Bolin Bolin Stormwater Harvesting project. On the eastern banks of the Yarra in Bulleen, approximately 35 megalitres of stormwater per year will be harvested and treated for to re-use in irrigating several local sports grounds. It is the first public private partnership of its kind and benefits to the community include reducing Yarra River water extraction, greener open spaces and flood mitigation. Manningham City Council, Melbourne Water, City of Boroondara and Carey Baptist Grammar School are project partners
- co-hosting a sell-out industry forum with Clearwater for government and research institutions on the important issue of point-source stormwater pollution (pollution from a single, identifiable source)
- supporting the Kingston City Council to develop an in lieu developer contribution mechanism and deliver a two-year pilot. This opt-in mechanism will enable Council to receive revenue for construction and maintenance of water-sensitive urban design systems (such as wetlands, stormwater harvesting and re-use) to meet its *Integrated Water Cycle Strategy* targets and deliver best practice outcomes in the municipality. Melbourne Water is also partnering with Council to evaluate the effectiveness of the mechanism.

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Port Phillip Environmental Management Plan

In partnership with DELWP and the EPA, Melbourne Water finalised the new 10-year *Port Phillip Bay Environmental Management Plan* (EMP) in June 2017. The new EMP will guide investment and actions by government, industry and the community to conserve and enhance the health of Port Phillip Bay into 2027. As well as completing detailed scientific, modelling and economic studies, we undertook extensive community and stakeholder consultation during the Plan's development. The community consultation process involved over 500 attendees at beachside stands and workshops, more than 1000 online surveys and 83 formal submissions. More than 2500 people visited the website and forum page to provide comment.

With an increased focus on shared responsibility across the community, industry and government, and a drive to mitigate threats and pressures from urbanisation and climate change on the Bay's ecology, the EMP will help to ensure the Bay continues to thrive as a healthy ecosystem that delivers significant benefits to the Victorian community and economy.

Stream Flow Management Plans

Stream Flow Management Plans are a key tool to ensure that the water resources in catchments are managed in an equitable manner to ensure long term sustainability of the water resource and environmental health. Stream Flow Management Plans are developed in catchments where water resources are considered over-allocated. In 2016-17 Melbourne Water commenced a five-year review of the *Olinda Creek Stream Flow Management Plan* to consider water use in the catchment, develop sustainable allocations for agriculture and other uses and maintain an environmental water regime to sustain waterway health. We are working in partnership with DELWP and other key council, agricultural and community stakeholders to deliver this Plan in 2017-18.

Pollution Compliance Notices

As the manager of Melbourne's waterways, Melbourne Water is responsible for cleaning up pollution caused by others where the polluter can't 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.

In 2015-16, the EPA issued eight notices to Melbourne Water to manage pollution in silt removed from Stony Creek. The penultimate clean up notice related to this was finalised to EPA satisfaction by the end of 2016-17 and the remaining notice relates to ongoing management obligations and will be active for a further two years. The notices are related to pollution caused by others and are not considered sanctions by the EPA.

Enhancing Biodiversity

Melbourne Water manages significant landholdings that support diverse communities of native plants and animals.

Melbourne Water manages significant landholdings that support diverse communities of native plants and animals. We develop and implement strategies that protect native biodiversity, in compliance with Victorian and Commonwealth biodiversity obligations and our activities for 2016-17 align with the Victorian Biodiversity Plan 2037.

During 2016-17 the updated three-year *Environmental Stewardship Strategy* was approved. The strategy aims to enhance the value of our natural and cultural assets by ensuring resource availability and service provision for future generations.

Managing Sites of Biodiversity Significance

The Ramsar Convention on Wetlands of International Importance is an international treaty for the conservation and sustainable use of wetlands. Melbourne Water manages major portions of two Ramsar-listed wetlands: the Port Philip and Bellarine Peninsula site (which includes the WTP) and the Edithvale-Seaford Wetlands site. Melbourne Water invests in biodiversity conservation at both of these sites.

Our WTP site is one of the most important refuges for waterfowl in Victoria. It also supports migratory shorebird populations and a significant population of the endangered Growling Grass Frog. It is home to the nationally endangered Spiny Rice-flower and Orange-bellied Parrots. As part of our commitment to biodiversity, we regularly carry out pest and weed control, environmental watering, ecological burns and population monitoring.

Melbourne Water biodiversity

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Melbourne Water co-manages the Edithvale-Seaford Wetlands with the Kingston and Frankston city councils. These wetlands are home to many bird species including the endangered Australasian Bittern. They also provide a critical overwinter habitat for migratory birds such as the Sharp-tailed Sandpiper which breeds in the high Arctic, providing essential food resources for at least six months of each year.

Melbourne Water also manages another 42 sites of biodiversity significance (SoBS). We assess the effectiveness of our SoBS management through a five-yearly fauna and flora monitoring process. The next assessment will be completed in mid-2018.

Supporting Biodiversity in Public Spaces

Melbourne Water manages, supports and promotes biodiversity in our shared environments.

In 2016-17, we commenced our first 10-year management plan to eradicate the introduced common cord-grass (*Spartina anglica*) plant from Western Port Bay. This involves working with Parks Victoria and private landholders along Cardinia Creek and Bass River estuaries to prevent this aggressive plant from taking over valuable bird habitats.

2017 marked the fourth year of Melbourne Water's *Enhancing our Dandenong Creek* (EODC) project. This is a significant environmental project in which we have collaborated with the EPA to improve a natural amenity.

To date, 18 new habitat ponds have been constructed for native fish and 600 dwarf galaxias fish have been translocated from their nursery habitat to their newly constructed homes along Dandenong Creek. Another fish release will occur in 2018.

Platypus Monitoring

During 2016-17 Melbourne Water enhanced its platypus monitoring program through the addition of environmental DNA sampling and citizen science programs. This has provided us with more data on platypus than ever before. Platypus environmental DNA was found in approximately 50 per cent of the waterways sampled, but has also confirmed that the platypus may have been lost from several reaches. This potential loss in some reaches reflects an overall national decline in platypus populations, whose conservation status has recently been changed from "Least Concern" to "Near Threatened". However, this year's live-trapping surveys have found a high number of juvenile platypuses, showing signs of population recovery in some areas.

Citizen scientists have been active in monitoring platypuses, aiding in the collection of environmental DNA samples from the Werribee River and Monbulk Creek systems. The platypusSPOT app has received over 100 sightings for the Melbourne area, including the first sighting of a platypus in upstream Darebin Creek in more than 10 years.

Case study

Technology Improves our Community Engagement

Melbourne Water has a strong history of forging successful partnerships with individuals, community groups and partner organisations. We have generated an engaged volunteer base which proactively participates in environmental conservation and waterway management activities.

Frogs play an important role in the waterway ecosystem and are easily affected by changes to their environment. One of the best ways to help frogs is for citizen scientists to get involved in Melbourne Water's Frog Census program.

Established in 2001, Frog Census is a citizen science program that allows members of the public to contribute to the knowledge and conservation of frogs within Melbourne's waterways. As frog populations are particularly sensitive to habitat loss, pollution and drought, monitoring them is an effective way for Melbourne Water to assess the ongoing health of both waterways and ecosystems. Volunteers collect information which is used to map the distribution and abundance of frog species, and influence frog management actions undertaken along our waterways.

During 2016, Melbourne Water invited volunteers to participate in the end-to-end design of a Frog Census mobile application. Since its launch, the app has significantly increased volunteer engagement with the Frog Census program and has also led to a number of unexpected discoveries and re-discoveries of frog species throughout Melbourne.

As frogs are often difficult to see, the app enables smartphone users to record and upload frog calls and geographic information on where and when the frogs have been heard. The inclusion of the mobile app in the Frog Census program has resulted in an 85 per cent increase in volunteers, leading to an increase in recordings of rare and endangered frog species. Since the app's launch in September 2016, Melbourne Water has received 38 recordings of the endangered Growling Grass Frog and the first recordings of the Common Spadefoot Toad in over five years. It has also identified two new locations of the Red Groined Froglet on the Mornington Peninsula and captured the first Frog Census recordings of its call since 2008.

The redesigned Frog Census will lead to better-informed decisions across government about frog conservation. The data will also inform planning and decision making on our waterway health, including directly informing a snapshot of frog condition across Melbourne catchments undertaken as part of a review of our *Healthy Waterways Strategy*. The data is also added to the CSIRO's Atlas of Living Australia and Victorian Biodiversity Atlas so that knowledge about biodiversity and endangered species can be widely shared.

Photo: Peter Robertson (Growling Grass Frog - *Litoria raniformis)*

Energy and Emissions

Melbourne Water is committed to increasing the production of renewable energy from its operations and reducing our emissions.

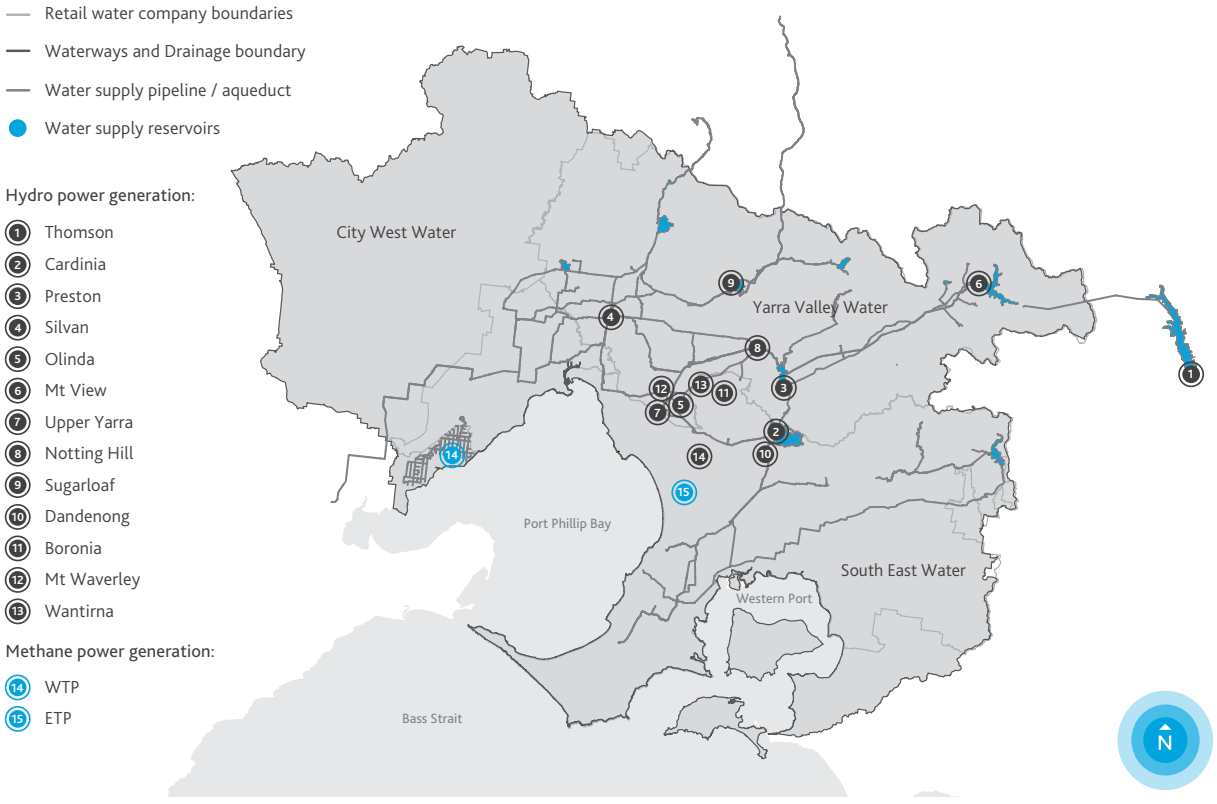
Energy

Hydro-electricity production from the transfer and delivery of water to Melbourne metropolitan customers has been increased with the addition of five new hydro generation plants in 2016-17. Our water supply network is often a net exporter of electricity, with some variability dependent on how we transfer bulk water requirements around the reticulated network. In 2016-2017 the distribution and treatment of water was almost energy neutral: 57,950,048 kilowatt hours (kWh) consumed versus 53,280,543 kWh produced using hydro-electric plants.

Although Melbourne Water uses significant amounts of energy to deliver water and sewerage services to its customers and the community, we produce 47 per cent of the electrical energy we consume from renewable sources. In 2016-17 we consumed 1,995,612 gigajoules of energy.

Wastewater treatment consumed 164,326,193 kWh of electricity from the grid, however during the wastewater treatment process 91,419,754 kWh was generated through the capture and combustion of biogas. This renewable electrical energy was used onsite and any excess exported to the Victorian electricity grid.

Melbourne Water methane and hydro-electric power generation



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Emissions

We have two main types of greenhouse gas emissions. Scope 1 emissions of 191,890 tonnes of carbon dioxide equivalent (tCO2-e) are direct emissions of methane and nitrous oxide from the wastewater treatment process. Scope 2 emissions of 246,441 tCO2-e are indirectly created through the consumption of electricity purchased from the grid and used for pumping and treatment of both sewerage and water. While we have effectively reduced our submissions since we began recording results in 2000, in 2016-17 Melbourne Water emitted a total of 438,332 tCO2-e of greenhouse gases.

Melbourne Water now has a clear pathway to achieve a net zero carbon emissions position by 2030. Scope 2 emissions will be greatly reduced by replacing grid electricity with our own renewable energy sources like hydro-electricity, biogas, solar and biomass. Reducing Scope 1 emissions generated by biological treatment processes will require additional monitoring, research and testing to develop long term viable options. Ongoing research and international collaboration is underway to better understand these emission sources and enable Melbourne Water to make material reductions in these direct emissions.

Carbon Pledge

Melbourne Water has a long history of undertaking carbon reduction initiatives, through energy efficiency programs, improved sewage treatment processes as well as generating and using our own electricity from renewable sources. Existing carbon reduction projects include numerous hydro-electric power stations on the water supply system and two biogas-fuelled power stations at the ETP and WTP. Together, these power stations already generate around 149,000 megawatt hours of electricity each year.

The Melbourne Water net zero carbon emissions pledge will be achieved across two pledge periods, the first being a 50 per cent reduction in current emissions by June 2025 and the remaining 50 per cent to zero by June 2030. The pledge reduction initiatives will deliver reductions whilst balancing customer affordability. This commitment continues our longstanding energy efficiency programs and supports the Victorian Government commitment to achieving net zero carbon emissions by 2050.

Case study

Mini hydro plants powering Melbourne

Hydro-electric power stations operate throughout Melbourne Water's supply network. These power stations generate renewable energy from the flow and pressure of moving water and feed it back into the electricity grid.

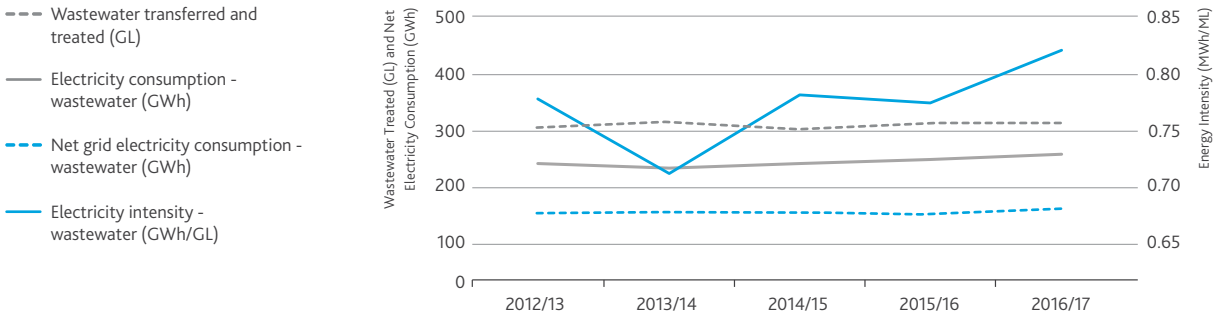
In addition to nine existing power stations, five additional mini-hydro plants were commissioned in 2016-17, and we are investigating options for further plants. The newly commissioned plants are located at service reservoirs in Wantirna, Boronia, Dandenong, Mount Waverley and at Cardinia Creek.

The plants were delivered in pre-assembled, self-contained units, offering simple, weather resistant power delivery solutions which were brought online quickly. All mini-hydro plants are fully remote-controlled, operational from off site and seamlessly integrated into Melbourne Water's supply system to ensure uninterrupted operation.

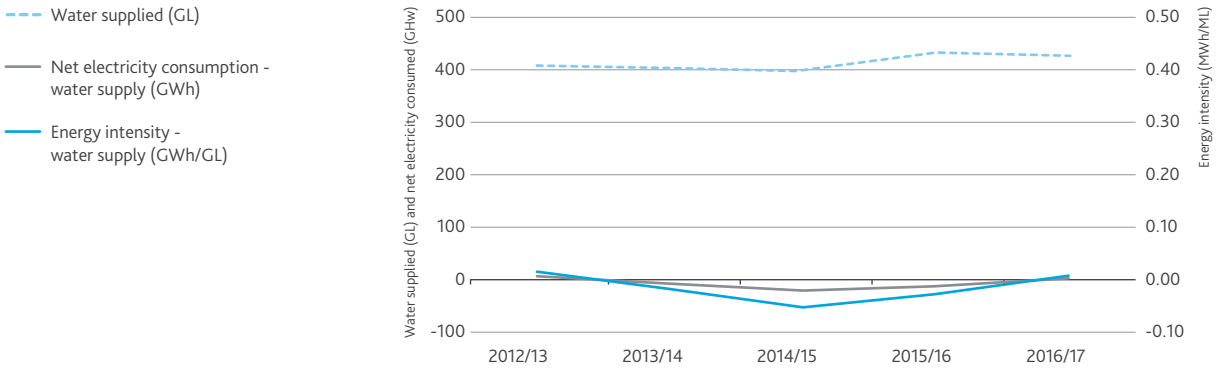
This design is more cost efficient compared with seven mini hydro plants installed in 2008-2010, as the new self-contained approach allows all construction to occur off site prior to delivery.

In total, the 14 hydro-electric power stations can generate up to 69,500 megawatt hours of electricity per year. By operating these power stations, we prevent over 75,800 tonnes of carbon dioxide emissions each year – equivalent to the emissions of more than 14,000 households, or taking more than 29,200 cars off the road.

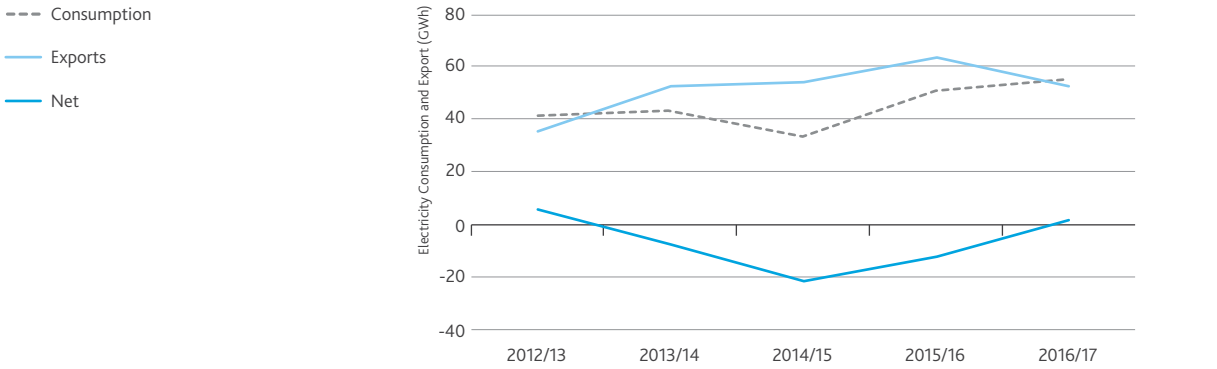
Wastewater transfer and treatment



Water supply



Electricity consumption and generation in our water supply network



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Climate Change

Climate change is a critical challenge for Melbourne Water, the community and natural environments.

Melbourne Water is one of Australia's major greenhouse gas emitters and climate change poses significant risks to our services over the long term. Melbourne Water's land management, water supply, wastewater and urban development activities provide unique opportunities to support the natural environment and community wellbeing.

Melbourne Water is developing a new *Climate Change and Resilience Plan* (CCRP) for our business to ensure we are prepared and capable to address future challenges. The CCRP will build on past progress, and respond in four key areas:

- greenhouse gas emissions
- environmental resilience
- community resilience
- adapting to climate change.

Melbourne Water is working with the Victorian Government to help achieve zero net emissions from the metropolitan water sector by 2030 through the Take 2 Pledge program. We have extensive experience in improving energy efficiency and generating renewable energy, and we are researching and testing methods to reduce direct emissions from our activities.

In 2016-17, we invested $690,000 into climate change research across a broad range of projects. Results from this research will inform our decision making in areas which deliver the most value for our environment and the community.

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Case study

Beneficial use for biosolids

Biosolids are the stabilised solid organic materials that remain after a municipal sewage treatment process. Once dry, this material has similar properties to soil; however, beneficial re-use has been challenging due to its association with sewage.

Melbourne Water is making significant progress in the use of clay-rich biosolids from the Eastern Treatment Plant (ETP). Over the last two and half years, we have reused 798,863 dry tonnes of biosolids. In 2016-17 almost 370,000 dry tonnes of biosolids were re-used, equivalent to ten years' worth of biosolids production from ETP within one year, an amount which would occupy approximately 24 per cent of the MCG. This is a result of evolving knowledge and innovative use of this resource and is a significant environmental achievement for Melbourne Water.

Of the total biosolids, 226,500 dry tonnes were trucked off-site from the ETP to take advantage of its geotechnical properties in the capping of a nearby landfill. Involving nearly 15,000 truck movements the process was completed without a single safety incident. An additional 139,500 dry tonnes were re-used as clay liners to refurbish sludge drying pans, eliminating the need to purchase these materials.

Biosolids re-use has also occurred at the Western Treatment Plant (WTP), with 3500 dry tonnes of agricultural grade biosolids sent to farmers in the Balliang area. This was made possible following the EPA's recent approval of a R*egional Environmental Improvement Plan*, which sets out best practice requirements for applying Melbourne Water's biosolids to land.

The biosolids delivered to the Balliang farmers will improve soil structure and provide enough nitrogen and phosphorus to cover crop needs for a couple of years. Such arrangements in the long term will significantly reduce the amount of biosolids we need to store on site, and form part of the long-term sustainable management and re-use of this resource. We will continue seeking agricultural partners who wish to use biosolids to improve their soil in order to deliver a long-term environmental solution.

Goal 2 | Goal 12

Partnering with our Community to Connect to our Environment

Engaging with our Community

Melbourne Water has a long history of community engagement and recognises the importance of genuine and effective community engagement to deliver our services.

As part of our commitment to the community we continue to innovate and evolve the way we engage with our customers, stakeholders and the community to meet contemporary and future challenges.

In 2016, Melbourne Water launched its Next Generation Community Engagement Program, a three-year program designed to transform and deliver a continue step change in the approach, tools, methods and behaviour Melbourne Water uses to engage with the community.

Our leading and best practice approach to engagement is achieving results. Over 2016–17, we worked on 113 capital works projects which had the potential to cause community impact and concern. Of these, 43 projects were completed, including 24 Retarding Basins, major sewer projects including the Merri Creek Interceptor and Moonee Ponds Reliever, as well as significant water main upgrades s including the M9/M102. For these projects, evaluation of local impacted stakeholders indicated they had 79 per cent trust in Melbourne Water and 77 per cent overall satisfaction in project communications. More broadly, customer surveys have shown that 67 per cent of people who were aware of Melbourne Water works this year rated our engagement as 'good or very good' (up from 46 per cent in 2016), and the percentage of people rating our engagement in the highest category of 'very good' went from 10 to 30 per cent over this time.

Other key achievements in our community engagement efforts in 2016-17 include the development of a new digital engagement and collaboration platform *Your Say* to increase our engagement profile and practice and deliver modern, best-practice community engagement, *Your Say* has also helped us to build greater social licence to deliver on priority projects, improved outcomes on major infrastructure projects such as the renewal of a major water main running from Preston Reservoir to Merri Creek, and the introduction of new and innovative community engagement approaches in the development of our strategies such as our co-design options of the new *Healthy Waterways Strategy*. We also partnered with the Victorian Small Business Commissioner to launch Melbourne Water's *Small Business Engagement Guidelines* in June 2017, setting industry best practice standards for community engagement.

Goal 4 | Goal 9 | Goal 17

Case study

Better Engagement Delivers Better Value for our Communities

Every year, Melbourne Water undertakes a large number of major infrastructure projects to improve Melbourne's water supply and sewage systems. Many of these projects take place in inner-city or suburban areas and can impact local traders. A major sewer upgrade and construction of a new connecting sewer hit a roadblock in 2014, when construction began in an inner-city suburb.

Following the start of construction, complaints quickly escalated both politically and to the Victorian Small Business Commissioner. Businesses were losing trade due to road closures and detours, and community sentiment was that Melbourne Water provided insufficient consultation and communication around impacts and did not take time to understand community and business needs.

To rework our small business engagement approach, Melbourne Water has worked with the Victorian Small Business Commissioner in 2016-17 to develop guidelines that will help ensure we talk to local traders and give them the opportunity to have input into the way a project is planned.

With the emphasis on engaging with small business during the planning phase of projects, the guidelines allow open and honest communication, create avenues for continued, engaging dialogue and allow the small business owner to feel part of the process through early engagement. The Victorian Small Business Commissioner said: *"The guidelines provide a best practice guide for managing and minimising the impact of infrastructure works on small business."*

We put this engagement into action with the upgrade to the Williamstown Sewer, a 4.4 kilometre sewer re-lining project between Williamstown and the Spotswood oil refineries. The location of the works includes yacht clubs, cafés, motels and the busy shopping district along Williamstown's central shopping street. Melbourne Water engaged with businesses nine months prior to construction, which allowed timing concerns to be managed and works scheduled to avoid busy trade periods. Strong relationships with Hobsons Bay City Council and the Chamber of Commerce supported the community co-design to attract patrons to the shopping street while works are occurring.

Fostering Liveability through Corporate Partnerships

A liveable city is built on strong partnerships and activated by its dynamic events. We partner with agencies, local government and community groups to build stronger connections to Melbourne's environment and amenities, through a greater understanding of the water cycle and the place we live, work and play.

In 2016-17, our partnerships and events program solely sponsored the Inflatable Regatta along Melbourne's Yarra River. This brought nearly 2000 people to the river to embrace its recreational and environmental value.

We also celebrated a decade of partnership as naming rights sponsor for the Kids Teaching Kids Conference, an interactive water curriculum event delivered by primary and secondary schools throughout Melbourne. TREATMENT'17 *flightlines* at the Western Treatment Plant attracted 700 visitors. It also offered a new understanding of the WTP through artistic interpretation and exploring new ways to experience the historic site which has operated for 125 years.

We also contributed to the Melbourne Food and Wine Festival as the sponsor for River Graze. This enabled us to highlight the majesty of the Yarra River and remind the community that Melbourne's water is the secret ingredient behind all that we eat, drink and enjoy.

> *"Melbourne Water's contribution over the last 10 years has helped raise awareness and drive action on local and global environmental issues and supported the next generation of leaders to create a more sustainable future for us all."*
>
> ***Ally Borgelt***
> *Education Manager*
> *Kids Teaching Kids*

Strengthening Our Business

To successfully deliver our services in an era of rapid change, we need to build on a solid organisational foundation and adapt, evolve and develop. In 2016-17, Melbourne Water has continued to develop our business under the four themes of Customer Focus, Inspired People, Continuous Improvement and Financial Sustainability.

Customer Focus

Melbourne Water's vision of Enhancing Life and Liveability depends on our ability to develop strong, valued and trusting relationships with our customers and stakeholders.

We provide services to more than four million people across the greater Melbourne region, and our customers and stakeholders are identified in the following key segments:

- Victorian Government departments (non-regulatory)
- key Victorian Government agencies and regulators
- retail water companies
- local government
- developers
- community groups
- influencers
- suppliers
- community.

CUSTOMER EXPERIENCE TRANSFORMATION

SETTING CLEAR ROAD MAP OF INVESTMENT IN

2017-18

THE EXPANSION OF THE

RELATIONSHIP MANAGEMENT FRAMEWORK

Working in collaboration and partnership to make our relationships two-way.

CUSTOMER REPUTATION

INCREASED TO

80.2

RECONCILIATION ACTION PLAN

- Cultural awareness training •
- Indigenous trainees commencing work in 2017 •
- 60 staff attendance at a traditional Smoking Ceremony •

Customer Focus

In 2016-17, our Customer Focus program established a consistent way of engaging with customers, and took the next steps to delivering the products and services our customers expect, in the way they expect them.

We have embarked on a customer experience transformation program that will enhance the way we provide information and services to our customers through online channels. A new robust approach to relationship management was rolled out in 2016-17 to build strategic customer relationships. This is supported by an internal customer capability initiative that will drive better, more consistent experiences for our customers. All of this is underpinned by customer insights, customer experience metrics and a continuous improvement approach.

Connecting with our Customers

Today, digital capability is integral to providing a good customer experience. Customers want to be able to access information and services from all types of devices and self-serve for simple requests and transactions. In 2016-17 Melbourne Water developed a 'customer experience road map' to transform the way our customers interact with us across various digital platforms.

In the first phase we have:

- redesigned the Melbourne Water home page to better suit customer needs
- redesigned the Water Storages app to deliver information on our water levels in a concise and relevant format
- created the *Melbourne Water Story* to support delivery of the water curriculum in schools within the broader Melbourne area. The *Melbourne Water Story* is a digital learning experience of Melbourne's past, present and future water-related challenges
- implemented *Your Say*, a community consultation tool, which provides an easily accessible digital platform that enables community participation in our projects concerning decisions that affect them.

Looking forward, our customer experience road map provides a clear direction of investment to deliver the services our customers need, want and expect anytime, anywhere and on any device.

Relationship Management

This year we launched the relationship management model which defines our approach to managing our key customer segments. It is designed to ensure we build strong relationships with our customers, particularly around more complex work, service opportunities and systemic issues. Key relationship management roles, capabilities, competencies and processes for quality, consistent customer service and proactive engagement have been defined. Our approach to relationship management has been based on customer feedback, and survey and research data.

A better understanding of our customers and resulting closer partnerships has seen:

- the establishment of dedicated relationship managers for the local government and developer segments to streamline customer enquiries, reduce escalations and proactively work through complex issues and opportunities
- stronger advocacy and trust with key partners – including government and retailers – to enable proactive engagement on water issues and leadership to drive policy outcomes which improve outcomes for customers and our community
- partnership and innovation with developers, councils, and other key customers in the way we work to address growth area and infill urban development
- improvement in our incident response capability, with our emergency partners engaging with us more proactively resulting in more consistent community messaging and less pollution entering our environment.

Building the Capability of our People

The capability and attitude of our people is critical to the organisation's transition to a 'customer-first' approach. By aligning with our overarching corporate competency framework, we have provided targeted training and development for our people that is specific to the roles they do, the customers they interact with and the environment they operate in.

Our achievements this year building internal capability and fostering change across the organisation is delivering results both internally and externally. Our 2016-17 Employee Engagement survey has shown a 15 per cent increase in the commitment to achieving long-term customer satisfaction. These results now place us in the top decile, and reflect our focus on continually improving the experience of our customers.

Goal 6 | Goal 11 | Goal 15

Measuring our Customer Performance

In order to understand how our customers experience us, we developed a broader suite of research tools in 2016-17. Metrics, research, data analyses and customer insights help us drive continuous improvement of the customer experience and enable targeted solutions for better outcomes.

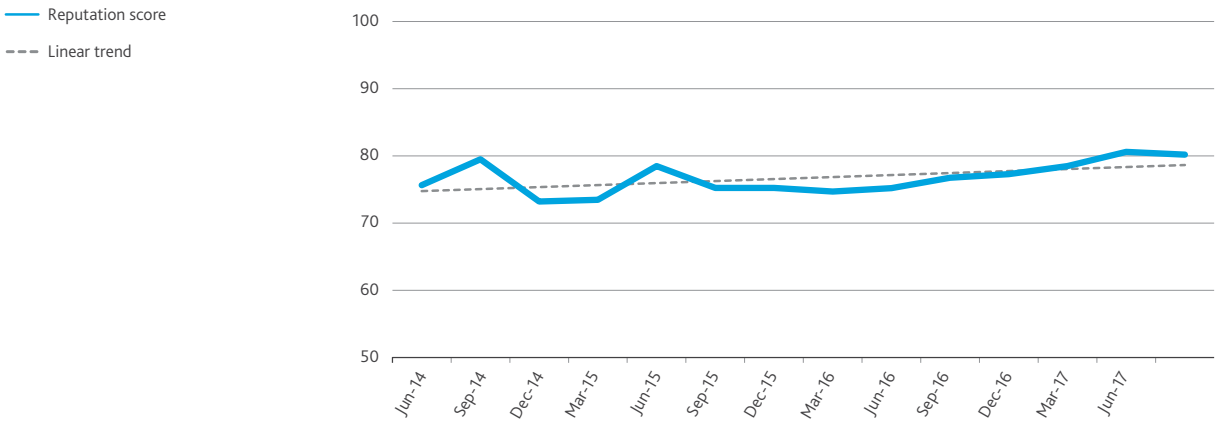
These tools and analyses also give us feedback on how our customers view our performance. Initial results from new post call surveys in our Customer Service Centre (CSC) have been strong, with 283 customers indicating that:

- 86 per cent were satisfied overall with their Melbourne Water experience
- 92 per cent found it to be an easy experience
- 81 per cent found their enquiry was resolved at first contact.

With a 33 per cent increase in the number of calls handled from October 2015 to June 2017 over its two years of operation, and nearly 40,000 calls during 2016-17, these results indicate that the establishment of the CSC has contributed to increased customer satisfaction levels and an overall improved customer experience.

In addition, we continue to monitor our reputation on a quarterly basis to understand how we are perceived by our customers and the community and how satisfied they are with the products and services we provide. Since 2016, our overall reputation score has steadily increased each quarter reaching an 'Excellent/ Top Tier' rating of 80.2 in June 2017.

Melbourne Water Reputation Score – Community & Customers



Case study

Incident Management

Incident management in Victoria has taken significant leaps forward in a coordinated, collaborative response in the last few years, driven by Emergency Management Victoria's 'all communities, all emergencies approach to minimise the consequence on our community.

A significant flash flooding event swept through Melbourne in December 2016, with devastating effect on many people's homes and businesses. In the first two months of 2017, Melbourne's western region experienced an unprecedented number of incidents averaging one per week for Melbourne Water's incident response teams. These included factory fires, a plane crash in a shopping centre, a chemical spill and response to a Federal Police investigation.

This sustained pressure on our people and resources led to a number of actions in 2016-17 to improve our incident capability, such as:

- inclusion of Waterways and Land team relationship managers in regional emergency management discussions with multiple agency partners. This has created stronger networks and clearer understanding around Melbourne Water's capabilities to support communities during emergency incidents. Our emergency management partners are now more proactively connecting with Melbourne Water as incidents occur, enabling earlier intervention to mitigate pollution and damage upstream before it reaches our waterways
- expanding our incident response and after-hours duty management roster to cover incidents affecting our waterways and sewage supply system. This enables our people to mobilise and escalate issues more rapidly during incidents, reducing the environmental, social and economic impact
- emergency management training for a broader range of staff to deliver an incident ready workforce at less risk of fatigue
- improvement in our 'flood alert' phase when severe weather is forecast which sets clear escalation and external coordination points.

> *"The EPA recognises the significant efforts of Melbourne Water in supporting pollution cleanup caused by incidents. Its ongoing contribution plays a key role in protecting the public from environmental hazards."*
>
> ***Cheryl Batagol***
> *Chair*
> *Environment Protection Authority Victoria*

Aboriginal Engagement

Aboriginal communities have a spiritual and customary living relationship with water in all its forms through creation stories, use of water as a resource and knowledge about sharing and conserving water.

Establishing and fostering partnerships with Aboriginal communities throughout the Port Phillip and Western Port region continues to be an important part of Melbourne Water's water resource planning and management processes. Over the coming year, Melbourne Water will enhance this approach to include recognition and support for Aboriginal cultural, spiritual and economic values to land, water and resources as part of delivering *Water for Victoria*.

Two key programs during the 2016-17 year at Melbourne Water were the Heritage Improvement Program and the *Reconciliation Action Plan*.

Heritage Improvement Program

Melbourne Water's journey toward reconciliation began in 2008 with our inaugural *Cultural Heritage Strategy* implemented through our Heritage Improvement Program. This program remains a key tool to support ongoing engagement with local Traditional Owners.

In 2016-17 we bolstered this formal commitment to reconciliation by working in partnership with local Traditional Owner groups to support cultural inclusion in the development of a number of strategies, including the *Melbourne Water System Strategy*. This important initiative has helped foster relationships across our business, paving the way for our ongoing engagement activities with future strategies such as *Yarra Strategic Plan* and the next *Healthy Waterways Strategy*.

To broaden our internal business awareness of the cultural impact our work can have on Traditional Owners, we set a new protocol for the process of repatriating artefacts salvaged during our construction projects. Where appropriate, our project managers now participate in repatriation ceremonies led by Traditional Owners.

Reconciliation Action Plan

Launched in March 2016, Melbourne Water's 2016-17 *Reconciliation Action Plan* (RAP) is a natural extension of our commitment to creating a culturally diverse and inclusive workplace and business.

It builds on the strong relationships we have formed with many Traditional Owner groups through our Cultural Heritage Program and provides a framework to move beyond legislative requirements concerning Aboriginal cultural heritage management and contributes to reconciliation with local Aboriginal and Torres Strait Islander communities.

Highlights of our reconciliation initiatives include:

- opening discussions regarding cultural values on waterways with the Wurundjeri to consider possible opportunities for environmental flow management
- partnering with organisations to improve employment opportunities for Aboriginal and Torres Strait Islander people at Melbourne Water, with four traineeships made available
- attendance by 60 management staff at a traditional smoking ceremony led by indigenous leaders at Brimbank Park
- cultural awareness training for more than 200 leaders across Melbourne Water
- the development of procurement guidelines to promote the engagement of Aboriginal and Torres Strait Islander-owned businesses.

The 2017-2019 RAP is currently being developed, and actions to support stronger relationships and mutual respect are a key focus. These include actions to build greater understanding of Aboriginal culture within the community through our school education programs and identifying avenues to create respectful relationships that enable opportunities to share knowledge and build understanding between Melbourne Water and Aboriginal and Torres Strait Islander people.

The Future

Melbourne Water is committed to working in partnership with Aboriginal communities and over the coming year we will continue to build on our 2016-17 approach, introducing a number of exciting initiatives such as further employment partnership opportunities, the launch of the 2017-19 *Reconciliation Action Plan* and continued training programs for our employees.

Goal 8 | Goal 10 | Goal 11 | Goal 12

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Case study

Social Value in Procurement – a value-based approach of working with the supply chain

When we buy goods and services from diverse suppliers such as Aboriginal and Torres Strait Islander businesses or social enterprises we are creating social outcomes beyond the goods or services that we require.

To support our commitment to reconciliation, Melbourne Water committed to a supply contract with an Aboriginal-owned business, Muru Office Supplies, broadening our positive impact on the community. Meaning 'pathway', Muru Office Supplies aims to create a pathway towards a successful Aboriginal and Torres Strait Islander business sector that can help disadvantaged communities: 15 per cent of its profits go to Aboriginal and Torres Strait Islander community projects.

The company is Supply Nation certified, meaning it is majority owned, controlled and managed by Aboriginal people or Torres Strait Islanders, and endorsed by the Australian Government under the Commonwealth's 2015 Indigenous Procurement Policy.

This is a great example of procurement helping the business to establish socially responsible contracts, and demonstrates our support of Aboriginal and Torres Strait Islander-owned businesses, aligning with our Reconciliation Action Plan.

Diverse suppliers bring innovation and value, and redistribute profits to social programs or charitable activities. For every dollar of revenue, Aboriginal and Torres Strait Islander businesses create $4.41[1] of economic and social value. The new two-year contract includes two optional one-year extensions, and is estimated to be worth $200,000 per annum. While the contract also delivers a small saving of 1.5 per cent or roughly $2800 a year, the real value is in seeing the social impact that our purchasing decisions can have.

[1]Source: 'Social return on Investment' report, Supply Nation Certified Suppliers 2015, http://www.supplynation.org.au/resources/social_return_on_investment_report/

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Inspired People

Our organisation is a leader, with diverse, smart and capable people who are reflective of the community. The health, safety and wellbeing of people is a top priority for Melbourne Water. We apply this value to everything we do and everyone we work with, including staff, customers and community members.

Melbourne Water faces challenges from population growth, urbanisation and climate change. Successfully meeting these challenges requires us to become ever more innovative, forward looking, flexible and customer focused. In 2016-17 we continued to invest in the capability, diversity and engagement of our workforce to enable our people to realise their full potential, now and into the future.

We are committed to developing as a learning organisation to strengthen the link between learning and continuous improvement to drive better customer and community outcomes now and for the future. By defining ourselves as a Learning Organisation, Melbourne Water will be skilled at creating, acquiring and transferring knowledge to generate new ideas to complex problems, improve organisational performance and employee engagement.

MELBOURNE WATER'S ENGAGEMENT

INCREASED BY

6.25%

over the 2016/17 year, making a **20%** increase over the last two years.

CAREER DEVELOPMENT CENTRE

LAUNCHED TO ENABLE ALL MELBOURNE WATER EMPLOYEES TO CONNECT TO LIFELONG LEARNING ON OUR JOURNEY TO BECOMING A LEARNING ORGANISATION.

GENDER EQUITY TARGETS FOR 2020 ON TRACK.

WOMEN IN MANAGEMENT ROLES UP FROM **28%** IN 2014-15 TO **39%** AS AT THE END OF JUNE 2017.

CURRENT TOTAL RECORDABLE INJURY FREQUENCY RATE

(TRIFR) = 3.15

Down more than **43%** from last year's result of **5.51**

78%

INCREASE IN EMPLOYEE PERCEPTION OF OUR WELLBEING PROGRAM

OVER 2400 ENGAGEMENTS

Safety

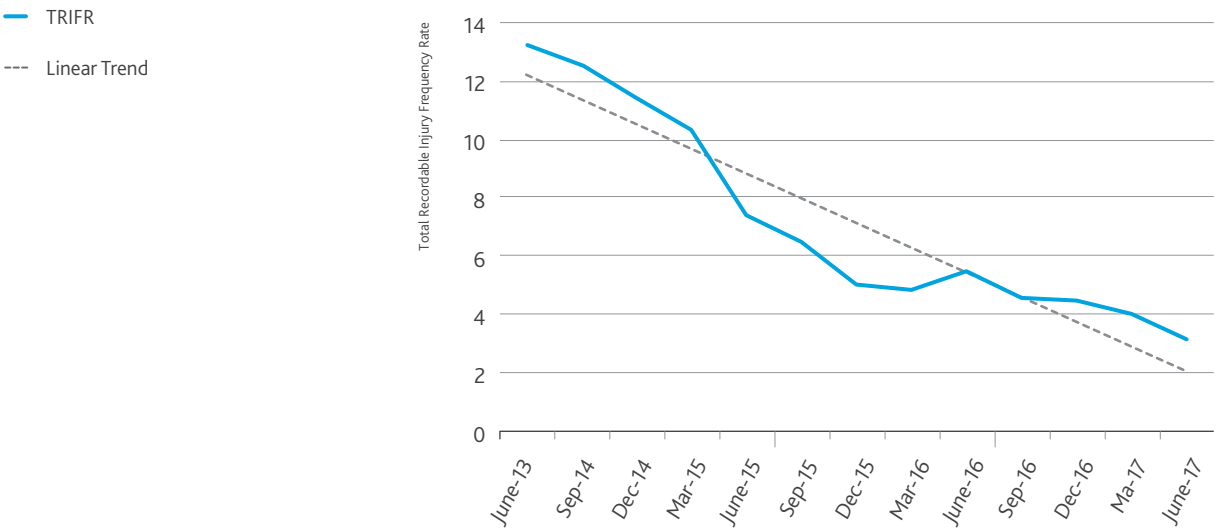
Melbourne Water's relentless focus on improving safety throughout our organisation continued in 2016-17.

In 2016-17 we continued our outstanding progress in reducing our injury rate (Total Recordable Injury Frequency Rate (TRIFR) by 43 per cent. Melbourne Water does not differentiate between the safety of employees, contractors and the community, as we see great benefit in a holistic approach to preventing harm and ensuring the integrity of our operation. Our TRIFR rates are therefore inclusive of incidents from both our contractors and Melbourne Water staff.

This year we have shown significant improvement, achieving a total result of 3.15 events per million hours worked against a target of 3. This is down from 5.51 in 2015-16 and 7.37 in the year preceding. As a component of our overall TRIFR, the employee TRIFR reduced from 2.45 in 2015-16 to 1.41 in 2016-17. TRIFR results now reflect industry standard consolidation of hours, implemented in October 2016, retrospectively applied to ensure a consistent baseline against which to measure our safety performance. For further information and data on our safety results, see Appendix G, Workforce Statistics.

Melbourne Water this year has made a serious investment in moving towards having a generative safety culture. A generative safety culture is one that is employee led where safety is so embedded in values, beliefs and actions that it becomes the organisation's culture. Melbourne Water's investment has included dedicated resource and focus within the safety group. Development of a program of activity is underway that will see teams evaluate their culture and design team member lead interventions for improvement, as well as collaborative work groups drawn from all levels of the business to experiment and improve on some key markers of a generative organisation such as being a learning organisation. In addition Melbourne Water is experimenting with some leading metrics to better assess our progress on the path to a more generative culture.

Total Recordable Injury Frequency Rate and Lost Time Injury Frequency Rate



Goal 3 | Goal 4 | Goal 5 | Goal 8 | Goal 10

In 2016-17, Melbourne Water released its new *Health, Safety and Wellbeing Policy*. The Policy sets out joint accountabilities for our organisation, leaders and staff. It also ensures that our work, facilities and assets are consistently safe and fit for purpose. Central to the Policy is a commitment to safety first. This means that if we cannot assure the health, safety and wellbeing of our people in the way we work, we will not do that work until a suitable and safe alternative has been found. We view this policy as contract between ourselves and our people, as it sets out expectations for us all.

The *Health, Safety and Wellbeing Policy* is driving a number of best practice initiatives that improve the safety and delivery of our services. An example of this is our introduction of a 'Lock Out Tag Out' (LOTO) system across all Melbourne Water sites. The LOTO system involves physically locking equipment with personal locks to keep our contractors and staff safe. We have further complemented the LOTO system by implementing a new Isolation Standard which puts Melbourne Water's safety initiatives on par with the oil and gas sector. We are also improving safety by implementing a 'double block and bleed' system wherever practical. This involves installing two sets of locking doors at key access points to major equipment and assets.

Throughout 2016-17, we further refined our focus on asset safety and integrity. Our Winneke and Eastern Treatment plants both underwent rigorous re-licensing programs in order to renew their respective major hazard licences. Both plants were granted their licence with no conditions, which is evidence of our staff and leadership team's commitment to personal and procedural safety.

We also adopted injury prevention technology to progress our commitment to health, wellbeing and safety. As our primary cause of injury is manual handling, we trialled medical-grade sensor technologies to help us assess and manage risk. Data generated from this process revealed that staff employed in our weed-spraying process were regularly undertaking 'at risk movements' while putting on and taking off the 20-litre chemical backpacks. With this knowledge, we improved our employee safety by fitting our vehicle trays with lifting platforms and aids. This has embedded a long-term process through which we can prevent future harm.

In May 2017, Professor Patrick Hudson, a world expert in workplace safety culture, spent time with Melbourne Water's Board, leadership and key staff to discuss generative safety culture. The focus was on how Melbourne Water can embed this approach for its employee and contractor base of more than 1000 people in order to provide consistently safer working environments. Mr Hudson's visit reinforced our commitment to safety as a 'whole of life approach', which was enriched this year through a series of first aid workshops for our staff and families. We held 10 workshops with a total of 200 participants, helping to support safer communities.

As part of our commitment to a 'whole of life' safety philosophy, we started a Contractor Leadership Forum and a Quarterly Contractor and Subcontractor Safety Forum. Involving our Safety and Major Program Delivery teams, these forums bring together contractors and subcontractors from a range of external companies. By working together to share safety-focused ideas and information, we have built trusting relationships with our partners and extended our approach to safety beyond Melbourne Water.

Developing an inclusive workplace

Melbourne Water is committed to building a diverse workforce and an inclusive workplace culture. Creating a culture where people feel safe to express their views helps us deliver more innovative and effective solutions for our customers.

Diversity at Melbourne Water is led by the Leadership Team. Our *Diversity and Inclusion Strategy 2020* includes specific initiatives to support the employment of a diverse workforce that is reflective of the community. Throughout 2016-17, Melbourne Water has implemented a range of initiatives to deliver gender equity, a flexible workforce, reconciliation, accessibility and inclusion, including:

- Inclusive Leadership Training for more than 150 leaders across Melbourne Water. This training provides leaders with important information on leading diverse teams and how to promote inclusion in the workplace. It also provides managers with the skills to create an inclusive team environment
- the launch of Melbourne Water's first *LGBTI Inclusion Plan* and Refract, an employee-led working group ensuring Melbourne Water is an inclusive workplace for its lesbian, gay, bisexual, transgender and intersex (LGBTI) employees, customers and stakeholders, both current and future. Refract initiated Melbourne Water's participation for the first time in the Midsumma Pride March in February
- Melbourne Water's *Gender Equity Shortlist Policy* which requires all hiring managers to ensure they have a gender equitable shortlist of suitable candidates prior to commencing the interview process. We are on track to achieve the 50 per cent target set in our *Diversity and Inclusion Strategy* for the representation of women in management roles, which has risen from 28 per cent in 2014-15 to 35 per cent as at the end of June 2017
- increased access to flexible work arrangements including the development of employee and manager guides. While more than 25 per cent of employees utilise formal flexible work arrangements, 76 per cent of employees access informal flexible work arrangements
- in line with actions set out in Melbourne Water's *Accessibility Inclusion Plan 2016–2018*, a number of important actions have been taken to reduce barriers to participation for people with a disability including the delivery of Disability Confident Recruiter training, a review of pre-employment testing practices undertaken to identify and remove barriers and an accessibility checklist which has been developed to guide the delivery of accessible events for community
- a family and domestic violence procedure was implemented including the provision for up to 20 days paid family and domestic violence leave
- continued implementation of the Melbourne Water *Reconciliation Action Plan* (see Indigenous Engagement)
- workplace adjustments including access to adaptive technology, tactile signage, provision of materials in alternative formats and adjustments to hours of work have been provided to employees.

Case study

Building a More Diverse Water Sector

In recent years, Melbourne Water has taken deliberate steps to increase the number of women in non-traditional roles – a change that has delivered positive results.

Melbourne Water recognises traditional service and maintenance roles are evolving. Improved operational systems and lifting devices have removed previous barriers for women from performing more physical operator roles traditionally held by men. With an increasing recognition of the business benefits of diverse teams, opportunities have arisen to change the perception of who a 'typical' water supply operator is.

Less than five years ago our Water Supply team had no female water supply operators, one female process engineer and no women in leadership positions. When our water supply team at Winneke's water treatment reservoir had a number of operators retire after long and distinguished periods of service, the team saw an opportunity to build a more diverse team, and sought to attract applicants with different skills and approaches.

Recent changes in our recruitment process to improve diversity targets reached a broader field of candidates and highlighted Melbourne Water's achievements and commitment to improving diversity and gender equity. We successfully recruited a female operator in our water supply team: Thilini Malalasakera, a qualified engineer. Two more women, Shekiah Ingliss and Tabatha James, followed shortly after as trainee operators in teams at our Winneke and Tarago sites.

The same team now has 57 per cent representation of women in its process engineering roles, working with our operational staff to ensure Melbourne Water meets its water quality obligations and efficiency and improvement targets. These roles are key in delivering water supply to our customers. The different technical skills, diversity of thought and leadership of our new employees has strengthened the Water Supply team's service delivery, culture and knowledge-sharing, driving innovations and workforce improvements for our customers.

"My chemistry background helps when it comes to understanding the behaviour of chemicals we have around the plant. This knowledge has led to upgrades on some of our lab equipment, which I think my team appreciate, and lab tests have become more efficient. I have been asked by both men and women whether a woman can be an operator, or is it hard being a female operator? My answer is: it depends on the person, not the gender. If you love what you do, any job becomes enjoyable to anyone. "

Thilini Malalasekera | Water Supply Operator – Winneke Team

Building our Organisational Capability

In 2016-17 Melbourne Water invested strongly in the growth and development of our people.

Specific programs aimed at building our organisational capability include our Performance, Opportunity, Development (pod) initiative and the launch of our Career Development Centre.

Performance, Opportunity, Development (pod)

In 2016-17 we introduced our new performance system, pod, for all employees. The system enables our people to align their performance goals to those of their manager and business unit – engaging them through their work to contribute to achieving our Strategic Direction – by improving reporting and visibility of goals across the organisation.

Nearly 50 per cent of the goals in pod this year were aligned to our organisational themes of either continuous improvement or customer focus.

Career Development Centre

In 2016-17 Melbourne Water launched the Career Development Centre, which positions us as a learning organisation by connecting our employees to lifelong learning. A variety of flexible learning experiences, frameworks and tools enable our people to grow their careers and achieve their full potential. It will also help us continue to build organisational capability to meet the challenges we face as a water utility.

The Career Development Centre assists our people by delivering:

- training and development programs across six targeted streams of learning
- learning pathways to formal qualifications such as Certificate III in Water Operations
- coaching and mentoring programs
- career planning workshops to help people build a rewarding career
- engineering and science scholarships
- a graduate program and school work experience programs to attract future talent
- program graduations to celebrate success.

We implemented the Melbourne Water Leadership Capability Framework in April 2017, which defines how we go about our business. This Framework is guided by the principle that regardless of our role or tier at Melbourne Water, we lead collaboratively, towards a common goal. Our next step will be to implement the Technical Competency Framework, which clearly defines what skills and knowledge we need to continue to deliver quality services to our customers.

We also expanded our vocational education and training strategy with 14 trainees completing Certificate 3 in Conservation and Land Management in June 2017, eight trainees expected to complete Certificate 3 in Water Industry Operations/Treatment in December 2017 and 18 apprentices on track for completing Certificate 3 in Civil Construction in September 2017. A new engineering graduate program has seen us employ four new female and four male graduates.

Building our Organisational Engagement

Organisational engagement can influence the performance, productivity and motivation of our employees. We measure our employee engagement annually through our Alignment and Engagement Survey.

In 2016-17, our engagement score increased by 6.25 per cent, building on last year's performance. We have experienced a 20 per cent increase in engagement over the last two years, with one in five of our survey respondents citing lifelong learning, diversity and inclusion, and flexible work as our strongest achievements in 2016-17. We have also seen a 6 per cent increase in our alignment, which is an 18 per cent increase over the last two years.

Increases in our engagement score validate the efforts within Melbourne Water to build a resilient, innovative and professional workforce, equipped to deliver great outcomes for our community. Enhanced business alignment supports the delivery our Strategic Direction objectives and operational requirements. Important advances in 2016-17 include:

- the introduction of the Career Development Centre to provide professional growth and further advance organisational capability
- the implementation of our new approach to performance, opportunity and development, which facilitates business goal alignment, empowers employees and encourages ongoing development conversations
- a 78 per cent increase in employee perception of our wellbeing program. Improved perception is evidenced by the take up of our wellbeing initiatives, with over 2400 participating in our wellbeing program
- significant improvements to our internal communications, with the introduction of a governing framework, streamlined channels and a greater focus on two-way engagement, with over 630 attendees at our engagement events
- further refinement of our approach to change management, with the introduction of a formal methodology and practitioner training delivered to our Change Managers
- embedding more flexible work options to recognise that our people have different needs regarding how, when and where they work. In 2016-17, 72.8 per cent of respondents to our Alignment and Engagement survey indicated that they access informal flexible work arrangements on a regular basis.

Our employees have told us that their experience at Melbourne Water means *"staff are passionate about the work they do, and supportive and caring of the people they work with"* and *"working for an organisation which makes positive changes in the environment and the community. I'm proud to tell people I work here."*

Our Workforce by Numbers

At 30 June 2017:

- our total workforce was 1114 compared with 943 at 30 June 2016
- the proportion of women in our workforce was 35 per cent, compared with 31 per cent at 30 June 2015.

During 2016-17:

- 365 roles were filled with 60 per cent being internal candidates
- 11,787 training sessions for staff were conducted using both face-to-face and online modes covering issues relating to induction, safety, leadership and technical and professional development.

Further workforce data can be found in Appendix G, Workforce Statistics.

Continuous Improvement

Our innovative and agile approach embraces technology to continually exceed community expectations.

PROCUREMENT OF LEADING EDGE ASSET CONDITION

MONITORING TECHNOLOGY

(DRONES, LONG RANGE CCTV AND SUBMERSIBLE)

better understanding of asset condition, resulting in improved safety outcomes at a reduced cost

Automation program delivering more comprehensive data via moving physical asset monitoring infrastructure onto an internet cloud environment, bringing significant cost and time efficiencies.

90% OF PRODUCT QUALITY TESTING DATA

STREAMLINED ACROSS THE ORGANISATION INTO A CENTRAL DATABASE

(more than 50,000 results)

Improving productivity and monitoring trends to improve outcomes and service for our customers.

LAUNCHED NEW ONLINE PORTAL

FACILITATING **32** DIFFERENT DEVELOPMENT APPLICATION TYPES

Working towards making it easier for our customers to deal with us

$7.23M INVESTED ACROSS

60 RESEARCH PROGRAMS improving service delivery assist customers and the water sector

Digital Services

At Melbourne Water, we understand that our people and customers expect innovative and easy-to-use digital services. Throughout 2016-17, we have evolved Melbourne Water's vision of enhancing life and liveability through our *Digital Strategy* which brings together a range of technical skills and digital solutions.

In 2016-17, we built on our *Digital Strategy* with the creation of three Continuous Value Stream (CVS) teams. These teams (Business Intelligence, Field Mobility and Business Process Optimisation) build and release software for our people to use and test in real-life working environments. Our CVS teams work quickly and efficiently and seek user feedback to ensure continual improvement. Our Pre-Work Safety Check app, which is now a critical Melbourne Water safety tool, was developed and built in just 12 weeks. Our CVS teams have also improved existing digital platforms such as the 2017 re-launch of the Melbourne Water app, which recorded nearly 4000 new users in its first month.

As part of our *Digital Strategy*, the Digital Delivery Program was created delivering 11 new projects in the past year, including a new system to manage SMS and web notification to our Water Entitlement and Patterson Lakes customers. In addition, our newly developed DevConnect project created an online application management solution that has helped Melbourne Water become faster, smarter and easier to work with.

Digital technologies have also played an important role in tightening our security processes. Throughout 2016-17 we implemented an e-lock trial at the Western Treatment Plant. Unlike traditional lock and key processes, the new e-lock system integrates with the site's remote building management system and employee fobs. This has resulted in improved security and reduced administration, with access being remotely managed.

In 2017 Melbourne Water's advancements in digital technology were recognised with the *NRMA Insurance Excellence Award* for the *Flood Risk Management Project of the Year*. The award recognised our development of the Flood Integrated Decision Support System (FIDDS) which helps keep Melbourne safe by providing timely, high quality information about flooding to our emergency partners.

As we advance on our digital journey, we will continue to work closely with our internal partners to implement more automated processes which will improve our operations and keep our people safe. We are also exploring how big data can be used to better inform our decisions.

Goal 3 | Goal 8 | Goal 9 | Goal 16

Case study

Virtual Environments Delivering Real Benefits

Melbourne Water has an extensive program of capital infrastructure works, and at the functional design phase (immediately prior to construction), Melbourne Water conducts a HAZOP (Hazard and Operability study) workshop and Safety In Design assessment. Their purpose is to identify critical safety issues and manage them before construction begins. This pre-work involves designers, constructors, project managers, the operators and maintainers of large-scale construction equipment.

Despite this thorough process, safety hazards were still being identified during a hazard identification process and often it was too late, costly or impractical to address issues. As a result, workarounds were required to make the equipment or the building safer.

Designers felt frustrated by requests to modify equipment at a late stage of the build, and did not have access to explain the design concepts to operational staff. In turn, operational staff were unhappy with equipment that didn't meet expectations, and noted hazards designed in the equipment with issues that were obvious to people in their field of expertise. A change was needed.

Using a 3D modelling tool from our construction project teams, our Safety Group and project managers worked together to convert a water treatment plant into a virtual reality environment, which was then tested in specific virtual reality equipment. After completing a traditional HAZOP review on-site, operators, maintainers and asset management tested the virtual world. Twenty safety issues were noted, in addition to the six identified during the HAZOP process. Further trials delivered continued success and we are now using this technology for all complex chemical treatment site projects.

This consultation approach has led to a much stronger engagement in our operation and maintenance staff, and dramatically reduced Melbourne Water's safety risk. The review process time has shortened from several hours to an average of 15 minutes, with more accurate granular detail. Virtual reality has enabled our staff to truly immerse themselves in a life size plant, and identify issues related to access, egress, maintenance, working at heights. Our projects are safer and more efficient to operate, delivering better value for our customers.

Asset Management Services

By continually monitoring the performance of our assets we are better able to deliver efficient and reliable services and exceptional customer experiences.

Melbourne Water's Asset Management and Maintenance Optimisation Program enables our Service Delivery Group to realise service lifecycle value from its natural and built assets and develop best practice when using our assets to provide services. As part of our commitment to continually improve our customer service outcomes, 'lean' and change management techniques continue to be used to streamline, align and better design and manage the implementation of a wide range of business improvement initiatives in service delivery.

In 2016-17 the Asset Management and Maintenance Optimisation Program has:

- procured remote inspection tools which enable us to approach, photograph and document the condition of assets and structures remotely. These tools include drones, long range CCTV, a submersible and an 'OZBOT' which can safely enter a hazardous environment and provide real time imagery and video feedback. These tools reduce risk for our employees, and save time and expense
- worked with our digital team to streamline 90 per cent of product quality testing data from within the organisation into a central database for the first time, significantly improving productivity. Our employees can now monitor data trends more easily, which leads to improved customer service. The remaining 10 per cent of this data is due to be streamlined by mid-2018.

We invested in a package of automation improvements and technology trials, including:

- an innovative 'Internet of Things' technology, that utilises emerging low-cost sensors with data captured via wireless networks and stored in a cloud-based platform. This technology has the potential to deliver cost efficiencies to the business by providing real time feedback of asset and process conditions to a central repository for easy analysis. Tests are underway to use the technology on our stream diversion flow meters and service reservoir corrosion protection systems. Both will provide significant time and cost benefits, reducing the need for physical on-site readings carried out over vast land areas of Melbourne's greater region
- commenced trials utilising an advanced mathematical equation that optimises the number of pumps and their running speed at Winneke water treatment plant. Implementation is due to start in July 2017
- installing a sensor on the solids dredging line at Western Treatment Plant. This has automated solids monitoring and reporting, increased the capacity of the solids drying pan and delivered financial efficiencies
- installed an analyser which electronically measures the chemical oxygen demand required to treat wastewater at Western Treatment Plant. This will further automate the treatment process and provide savings through energy savings.

Business Improvement

Our approach to business improvement continues to evolve as we move from a series of continuous improvement programs across customer, digital, and maintenance and towards an operational model which embeds continuous improvement into our everyday practice.

In 2016-17 Melbourne Water introduced an Integration and Simplification program aimed at cutting red tape and making our policies, processes and systems simpler and easier to navigate. By removing red tape and bureaucracy, this program has helped us develop shared solutions by leveraging existing projects. It has also helped us to minimise costs by streamlining our internal processes. This program is in line with *Water for Victoria's* commitment to reducing regulation in Victoria by 25 per cent.

To support our Integration and Simplification Program we embedded a more efficient, customer-centric approach to our business processes through the introduction of a 'lean' thinking methodology which allows us to create more value for customers with fewer resources. To date, nearly 160 staff have been trained in lean methodology. This represents over 15 per cent of our staff, and our customers are already seeing the benefits across a range of services, including simpler billing collections.

The program has helped to deliver the following key benefits to date:

- establishing a single Integrated Management System to our current framework of certified managed systems (including ISO 9001, 14001 and 4801). This has delivered a 75 per cent reduction in meeting hours from 48 hours to 12, and streamlined three separate documents into one consolidated report
- rationalising the organisation's monthly reporting program. An improved technology platform has delivered information to the business four days earlier, enabling a 20 per cent reduction in employee effort. This has delivered $13,000 savings each month
- simplifying management systems manuals across Melbourne Water. Four manuals have been consolidated into one, eliminating 70 pages and reducing the annual review time by 180 hours.

Current priority focus areas with the business include:

- an integrated audit schedule to reduce duplication and increase enterprise viability of audit actions
- risk management
- document control
- management of change
- business performance reporting to leverage savings achieved in the organisational monthly business review cycles across other enterprise reporting schedules.

Research

Melbourne Water's research program informs business decision making, improves efficiency, reduces cost, helps manage risk and builds capability.

Research outcomes are used to inform policy development, influence regulation, improve service delivery, and assist customers and the water sector at large. During 2016-17, Melbourne Water contributed $7.23 million to 60 research projects having a total value of around $50 million. These projects include:

- a $680,000 'bio-gas capture' research pilot aimed to capture an estimated $360,000 worth of lost biogas each year and use it for electricity generation. This in turn will reduce greenhouse emissions and create revenue from waste. The Smart Water Fund co-funded $541,600 of this project with the remainder paid by Melbourne Water
- a $2 million bushfire research project which examines the impact of climate change and water yield. Bushfires can reduce water yield by up to 50 per cent and lead to reduced water quality. Climate change is also predicted to increase blue green algae blooms which interrupt supply of both potable and recycled water sources. A three year Harmful and Nuisance Blue Green Algae Research Partnership ($2.3 million) has begun and will enable Melbourne Water to use state of the art science and engineering practices to mitigate, manage and avoid blooms
- research into an alternative sludge drying process which is underway at the Western Treatment Plant. The research aims to test the viability of a dry stacking technique used in the mining industry. If successful, this technique may dramatically reduce the number of sludge drying pans that need to be constructed each year and potentially save millions of dollars annually
- Melbourne Water received a Linkage Grant from the Australian Research Council (ARC). The grant, which is held in conjunction with Professor Robin Gasser from the University of Melbourne, will extend our existing Catchment Pathogen Project for another four years. The project seeks to determine the protozoan risk from fauna in forested catchments. Research results will be used to determine whether the installation of a protozoan barrier (valued in the hundreds of millions of dollars) is necessary.

Financial Sustainability

In 2016-17 Melbourne Water has continued to deliver sound financial results through our commitment to commercial excellence and providing value for money to our customers.

$150.4M
NET PROFIT AFTER TAX

$1,791.4M REVENUE

CONTINUING TO DRIVE A STRONG FOCUS ON COMMERCIAL DECISIONS

Financial Sustainability Strategy

Raising commercial acumen across the business, and ensure that all decisions are made considering the implication on cost to our customers.

POSITIVE CREDIT RATING FOR 2016/17

Resulting in **CONSIDERABLE SAVINGS** over the next 3 years, and increase our ability to meet our obligations and deliver additional services to the community.

MELBOURNE WATER
0000 0000 0000
2016 UNTIL 2017

11% PRICE REDUCTIONS & A SAVING OF $9.57M

ACROSS A STRONGER, SAFER WATER SECTOR, VIA INDUSTRY COLLABORATION IN CHEMICAL PROCUREMENT

Financial Performance

During 2016-17 Melbourne Water has committed to a number of strategic initiatives to strengthen our organisational theme of Financial Sustainability.

These initiatives will continue the financial management journey of Melbourne Water and build on our capability, deliver better systems and further improve our processes.

Revenue continued to be robust at $1,791.4 million for the full year ($1,871.6 million in 2015-16). The decrease on the prior year is a result of the lower prices to customers for bulk water, sewerage services and waterways and drainage services following our 2016 Price Determination.

Total expenditure during 2016-17 increased to $1,553.4 million from $1,532.4 million the previous year, mainly due to contracted increases in operational expenses.

The strong financial focus has helped to deliver a positive Net Profit After Tax result for 2016-17 of $150.4 million ($153.4 million in 2015-16).

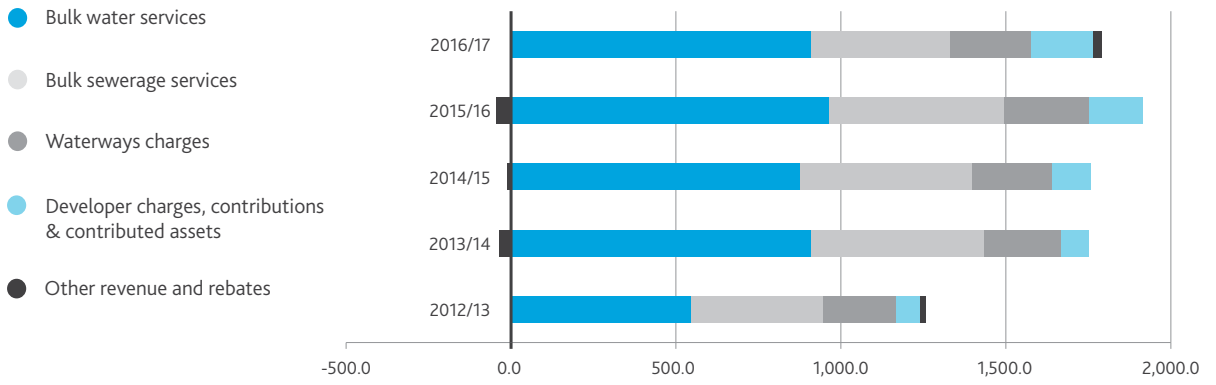
During 2016-17, Melbourne Water made cash payments to the Victorian Government of $265.8 million which was an increase from the $262.9 million paid in 2015-16. Borrowings were higher at the end of June 2017 due to capital expenditure partially offset by strong operating cash flows.

Our investment in capital expenditure increased to $435.9 million ($415.6 million in 2015-16) which has helped drive an increase in our overall balance sheet total assets position to $14,882.1 million up from $14,820.9 million at 30 June 2016.

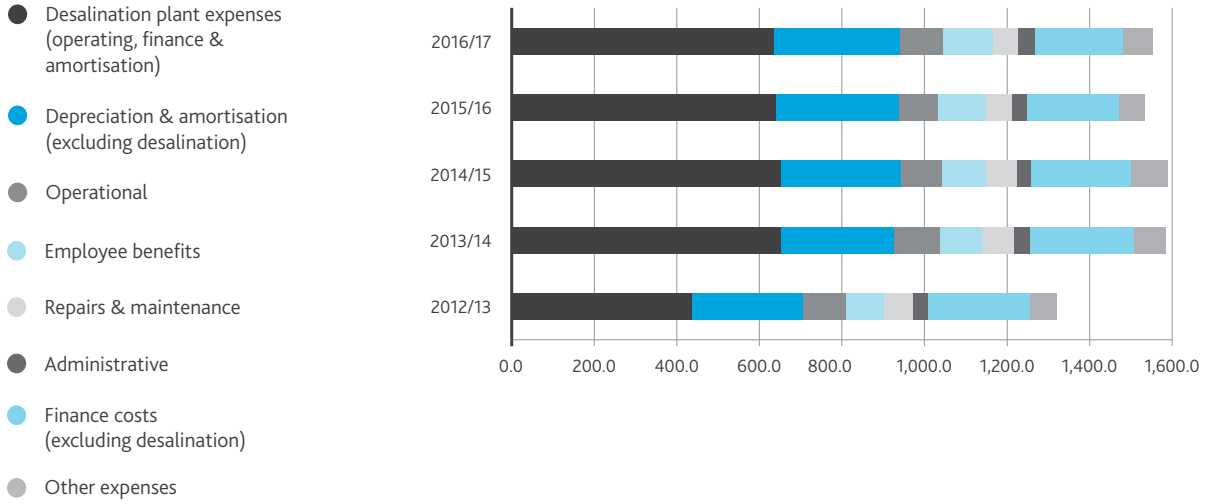
Total liabilities have decreased to $9,612.0 million at 30 June 2017 ($9,675.2 million in 2015-16). This decrease was mainly due to a reduction in current tax liability. As a result of higher assets and lower liabilities, equity increased to $5,270.1 million from $5,145.7 million as at 30 June 2016.

Goal 1 | Goal 8 | Goal 12 | Goal 13 | Goal 16

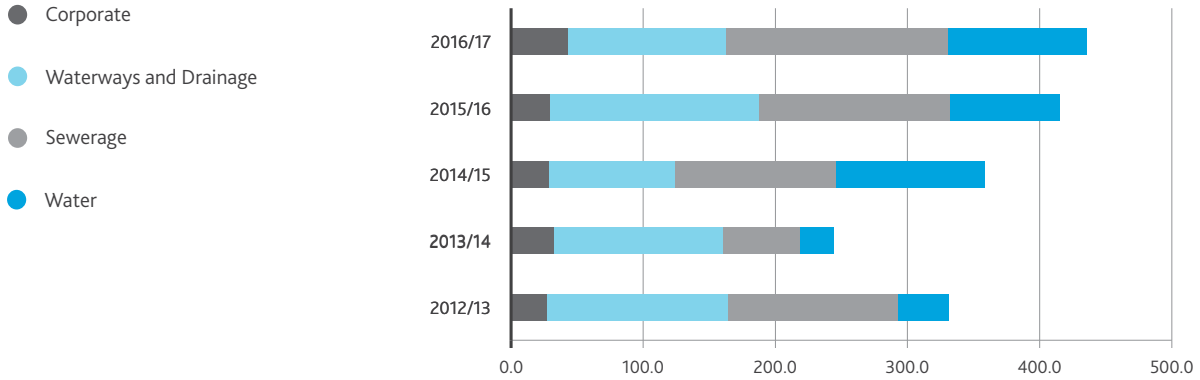
Revenue ($M)



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	2017 $M	2016 $M	2015 $M	2014 $M	2013 $M
Revenue and other income	1,791.4	1,871.6	1,749.7	1,716.7	1,258.2
Operating and other expenses	(512.4)	(481.8)	(514.6)	(505.6)	(454.6)
Depreciation and amortisation expenses	(383.8)	(373.8)	(367.5)	(351.6)	(315.9)
Finance expenses	(657.2)	(676.7)	(707.2)	(727.6)	(549.3)
Net result from operations before tax	**237.9**	**339.3**	**160.4**	**131.9**	**(61.6)**
Tax (expense)/benefit	(87.5)	(185.9)	(44.2)	(42.0)	21.8
Profit/(Loss) for the period after tax	**150.4**	**153.4**	**116.2**	**89.9**	**(39.8)**

Statement of Profit or Loss as at 30 June - Extract	2017 $M	2016 $M	2015 $M	2014 $M	2013 $M
Current assets	95.6	103.8	189.1	233.4	259.8
Non-current assets	14,786.5	14,717.2	14,346.2	14,105.8	14,238.3
Total assets	**14,882.1**	**14,821.0**	**14,535.3**	**14,339.2**	**14,498.1**
Current liabilities	1,032.7	1,018.7	852.5	702.2	770.7
Non-current liabilities	8,579.3	8,656.5	8,890.8	9,154.1	9,346.7
Total liabilities	**9,612.0**	**9,675.2**	**9,743.3**	**9,856.3**	**10,117.4**
Net assets	**5,270.1**	**5,145.8**	**4,792.0**	**4,482.9**	**4,380.5**

Statement of Cash Flows for the year ended 30 June - Extract	2017 $M	2016 $M	2015 $M	2014 $M	2013 $M
Net cash inflow from operating activities	439.7	526.0	373.2	503.5	219.3
Net cash outflow from investing activities	(444.4)	(357.7)	(302.9)	(221.0)	(361.2)
Net cash (outflow)/inflow from financing activities	5.9	(207.1)	(140.3)	(316.6)	286.9

Summary of Financial Performance

Key Financial Performance Indicators

Performance Indicators	2017 $M	2016 $M	2015 $M	2014 $M	2013 $M
Interest Cover (Cash)	**2.0**	2.1 x	1.6 x	1.8 x	1.5 x
Gearing Ratio	**53.6%**	53.6%	55.9%	57.5%	58.4%
Internal Financing Ratio	**89.0%**	135.3%	103.4%	166.7%	56.4%
Current Ratio	**0.09**	0.10 x	0.23 x	0.34 x	0.35 x
Return on Assets	**6.0%**	6.9%	6.0%	5.9%	4.0%
Return on Equity	**2.9%**	3.1%	2.5%	2.0%	(0.9%)
EBITDA Margin	**71.4%**	74.2%	70.5%	70.3%	63.8%

Explanatory Notes:

Refer to the Annual Performance Reporting chapter pages 141 to 143 for definitions of financial performance indicators and reporting of all 2016-17 performance indicators (financial and non-financial) against targets with supporting explanations for any significant variations.

Financial Sustainability Strategy

Melbourne Water's *Financial Sustainability Strategy* outlines the objectives, actions and financial performance indicators that support the achievement of our organisational priorities set out in our Strategic Direction. In 2016-17 we refreshed the Strategy to direct effort on completing the next phase of Melbourne Water's financial management transformation and identified two key focus areas for the next three years. These provide the following value to our business and stakeholders:

- Financial viability
  - maintaining our investment credit grade rating, which allows us to access funding at lower interest rates
  - by setting an objective benchmark to assess the quality of financial management within the organisation, we can demonstrate anenhanced level of commercial acumen in decision making over time.
- Financial leadership
  - improving our financial capability through a dedicated business partner model to support stronger customer outcomes and skills development
  - system investments to streamline and automate processes, improve user experience and improve the quality of our financial data analysis to enable better decision making
  - implementing the Portfolio, Program, Project Improvement (P3I) Project to sustainably and effectively deliver Melbourne Water's capital portfolio.

Case study

Investing in our Environment

In July 2016 Melbourne Water contributed to Australia's first certified Australian Dollar Green Bond, issued by Treasury Corporation Victoria on behalf of the Victorian Government. Green Bonds are bonds that are used to finance new and existing projects that offer climate change and environmental benefits.

The initiative was launched by Victorian Treasurer Tim Pallas at Melbourne Water's Notting Hill mini hydro plant and assures investors that funds will be used for socially responsible investments that deliver important environmental or climate change outcomes. Two of Melbourne Water's 'green' asset types which feed energy back into the grid were included in the total $300 million investment package:

- our mini hydro plants, which generate energy from moving water and operate adjacent to our reservoirs
- the biogas cover on the 25W lagoon pond at Western Treatment Plant, which captures methane emissions from sewage treatment to enable conversion into electricity.

This initiative won an award with the international Climate Bond Initiative in recognition of leading organisations, financial institutions and governments, who have pushed green finance forward, providing a positive example of low carbon investment.

Improved Procurement

Melbourne Water procures a wide range of goods and services worth more than $500 million every year. These include:

- design and consulting services
- construction works and building materials
- information technology hardware and services including telecommunications
- chemicals for water treatment processes
- asset and infrastructure maintenance services
- fleet and fleet repair and maintenance
- corporate goods and services including marketing materials, fleet and office supplies.

Our procurement process is carefully managed to ensure all purchases are made transparently and in accordance with appropriate business, government and ethical standards and to ensure the best value for the community.

We are in the process of implementing a new framework in procurement for 2017-18, which will include incentives for suppliers to include an element of social procurement in their submissions.

In 2016-17, Melbourne Water was part of a collaborative joint procurement program of water treatment chemicals for the water industry in Victoria involving 15 metropolitan and regional Victorian water corporations. The results have identified an initial cost reduction of 11 per cent with extended opportunities for further efficiencies over a four-year period, to deliver a $9.57 million savings across industry spend.

We have also improved the asset value of our vehicle fleet, through a commitment to upgrade 120 vehicles over the next two years with safety-assisted technologies in new vehicles. Road crashes are one of the most common reasons behind work-related injuries, fatalities and absence in Australia. Through improvements to life cycle usage planning for vehicles, we have offset some of the additional investment, while delivering safer working conditions for our employees.

Corporate Governance

Ethics and Values

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

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

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

Powers and Accountability

Melbourne Water operates under the *Water Act 1989*.

Melbourne Water has two current by-laws: *By-Law No. 1: Water Supply Protection (2008)* and *By-Law No. 2: Waterways, Land and Works Protection and Management (2009)*.

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

The Honourable Lisa Neville MP, Minister for Water, was the Minister responsible for Melbourne Water from 1 July 2016 to 30 June 2017. Melbourne Water works with officers of the Department of Environment, Land, Water and Planning (DELWP) and the Department of Treasury and Finance (DTF). Statutory and other reports are provided, covering Melbourne Water's performance against the objectives and performance indicators stated in the Corporate Plan.

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

Primary Responsibilities

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

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

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

- ensuring the Board meets frequently enough to fulfil its duties and obligations, holding 11 Board meetings during 2016-17, and undertaking site visits and strategy workshops with Melbourne Water's Leadership Team. Special Board and committee meetings are convened as required to meet the needs of the business
- monthly updates on Board activities are made available on the Melbourne Water website
- 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.

Goal 16

Committees

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

Audit, Risk and Finance Committee

This committee assists the Board in fulfilling its responsibilities relating to financial management framework and reporting process, risk management, corporate governance, audit and assurance (internal and external), digital strategy and compliance with relevant laws and regulations.

At 30 June 2017, the committee comprised Dana Hlavacek (Chair), John Thwaites, Merran Kelsall and Hugh Gleeson. A report about the activities of the committee in fulfilling its charter is prepared annually.

People, Safety and Remuneration Committee

This committee assists the Board in fulfilling its responsibilities relating to workplace health and safety, strategic human resources (including but not limited to diversity and inclusion, change management, employee engagement), organisational capability and remuneration. For details of directors' and executives' remuneration, refer to the Financial Statements.

At 30 June 2017, the committee comprised David Buckingham (Chair), Kathleen Bailey-Lord and Robyn McLeod. A report about the activities of the committee in fulfilling its charter is prepared annually.

Customer and Service Delivery Committee

This committee assists the Board in fulfilling its responsibilities relating to Melbourne Water's transformation to a customer centric organisation, delivery of customer-driven and resilient services providing multiple benefits, affordable asset delivery and protecting the environment and public health.

At 30 June 2017 the committee comprised Garry Smith (Chair), Kathleen Bailey-Lord, Hugh Gleeson and Robyn McLeod. A report about the activities of the committee 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 were reported to the Treasurer and the Minister.

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

John Thwaites, Chair

John Thwaites is Chair of Melbourne Water.

Mr Thwaites is a Professorial Fellow at Monash University and Chair of *ClimateWorks Australia* and the *Monash Sustainable Development Institute*. He is Chair of the Australian Building Codes Board and the Peter Cullen Trust. He chairs the Brotherhood of St Laurence Equity and Climate Change program.

Mr Thwaites 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 on the Sustainable Development Goals. In 2013, Mr Thwaites was named as one of the 100 Global Sustainability Leaders by ABC Carbon Express.

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

Prior to being elected to Parliament, he was a barrister and Mayor of South Melbourne. He has degrees in Law (Honours) and Science from Monash University.

Mr Thwaites was appointed as Chair of Melbourne Water on 1 October 2015.

Michael Wandmaker, Managing Director

Michael Wandmaker is Managing Director of Melbourne Water.

Mr Wandmaker has extensive senior leadership experience across several industries, both in Australia and internationally and is a Fellow of the Institute of Engineers. He is currently a Director of Committee of 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 is an experienced independent Director who has considerable expertise in finance, audit, risk and compliance. She has served on many boards in the private and public sectors. Her current appointments include directorships at RACV Limited and VicSuper and Chair at Australian Health Service Alliance Ltd (AHSA.) She was previously Chairman, Auditing and Assurance Standards Board and Member, International Auditing and Assurance Standards Board and Financial Reporting Council, a Commissioner at Taxi Services Commission and Deputy Chair at Victorian Regional Channels Authority. She was also formerly a partner at BDO Chartered Accountants.

Ms Kelsall was appointed to the Melbourne Water Board on 1 October 2015.

Kathleen Bailey-Lord, Director

Kathleen 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's experience in leading businesses through complex, transformational change is relevant to the complexity of strategic issues and ambiguity all business face in transitioning to the digital age and networked economy.

Ms Bailey-Lord serves on the board's Safety, People and Remuneration Committee and Customer and Service Delivery Committee. Currently, Ms Bailey-Lord is a Non-Executive Director of QBE Insurance (Australia and New Zealand) where she chairs the Remuneration & Nomination Committee. Her past board experience includes the Australian Government Solicitor; Trinity College, University of Melbourne; Chief Executive Women and the Diversity Council of Australia.

Ms Bailey-Lord was appointed to the Melbourne Water Board on 1 October 2015.

David Buckingham, Director

David Buckingham is Chair of the People, Safety and Remuneration Committee.

He has served as Victoria's Agent General in London, following a long and varied career as a Senior Officer in Federal government and the private sector.

He is a former Executive Director of the Business Council of Australia and Chief Executive Officer of the Minerals Council of Australia. Mr Buckingham has previously served on Boards including the Monash Medical Foundation and Fulbright Foundation. He was Chair of the Linking Melbourne Authority and has held other representative and board positions.

Mr Buckingham was appointed to the Melbourne Water Board on 1 October 2015.

Hugh Gleeson, Director

Hugh Gleeson has over 30 years' experience in the energy and utilities sector.

Mr Gleeson is currently a director of Energy Queensland, the Ausgrid Partnership and GDI-Allgas Energy. He recently retired as the CEO of electricity and gas distribution businesses, United Energy and Multinet Gas, 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.

Mr Gleeson was appointed to the Melbourne Water Board on 1 October 2015.

Dana Hlavacek, Director

Dana Hlavacek was appointed to the Board in September 2011. She is the Chair of the Audit, Risk and Finance Committee.

Ms Hlavacek is an experienced finance executive. She worked at Rio Tinto for 17 years, and previously at KPMG. Ms Hlavacek holds a number of Directorships including the Greater Metropolitan Cemeteries Trust, VicWater and The Brotherhood of St Laurence, where she is Chair of the Audit and Risk Committee. She is a member of the Salvation Army Corporate and Philanthropy Committee.

She is a former Trustee of the Victorian Arts Centre Trust and was Chair of the Risk, Audit and Management Committee.

Ms Hlavacek was reappointed to the Melbourne Water Board on 1 October 2015.

Robyn McLeod, Director

Robyn 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.

In May 2017, Ms McLeod joined the of Governance Working Group of the Board of the Good Shepherd Australia and New Zealand. Previous Board positions include as an inaugural Director of The Australian Centre for Social Innovation and Chair of this organisation's Risk and Audit Committee.

Ms McLeod was appointed to the Melbourne Water Board on 1 October 2015.

Garry Smith, Director

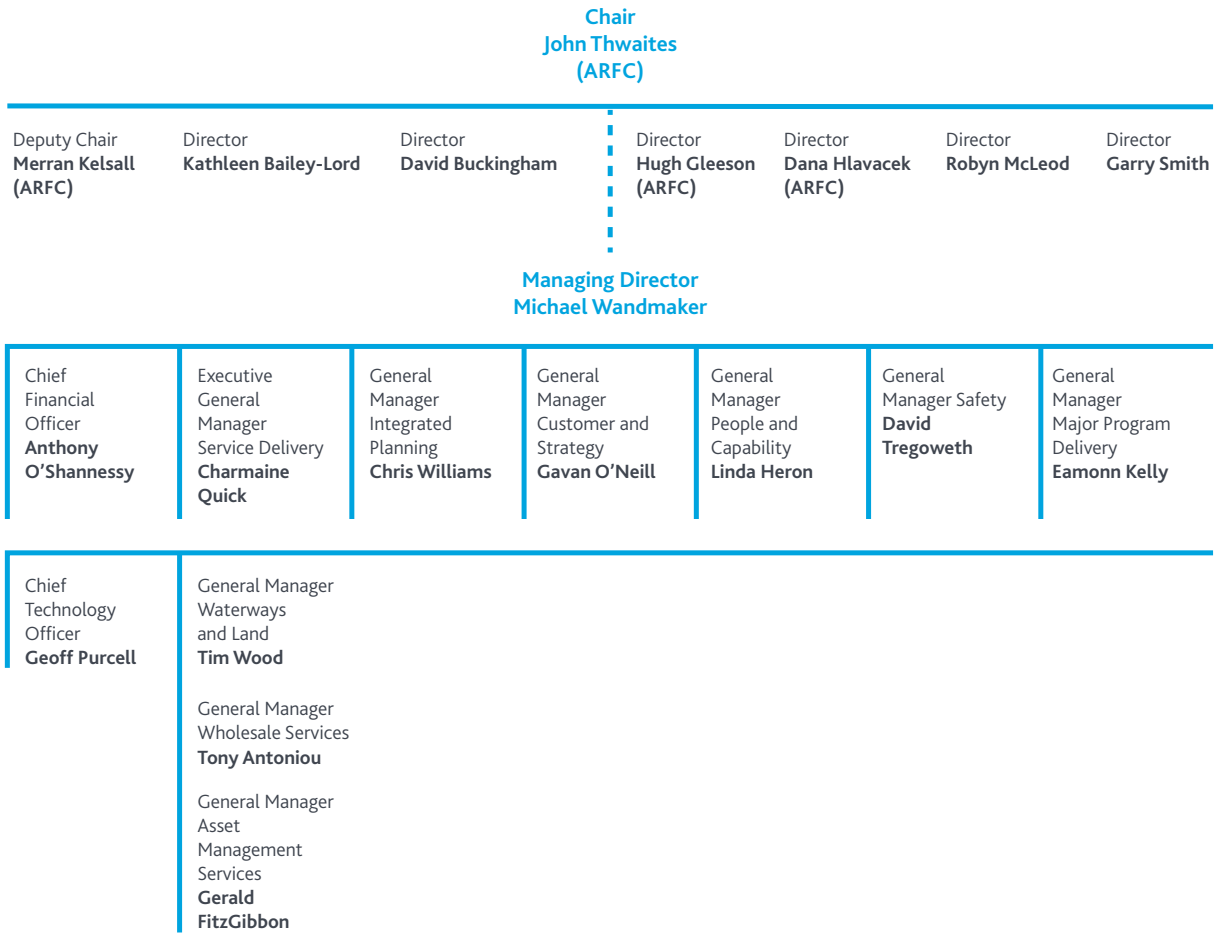
Garry Smith was appointed to the Board in October 2012. He is Chair of the Customer and Service Delivery Committee.

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's 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.

Mr Smith was reappointed to the Board on 1 October 2015.

Organisational Structure



Risk and emergency management

Risk management is central to ensuring Melbourne Water understands and manages the risks and uncertainties in achieving its vision and objectives.

Melbourne Water maintains an Enterprise Risk Management Framework consistent with the Australian/New Zealand Risk Management Standard (AS/NZS ISO 31000:2009) and the requirements of the Victorian Government Risk Management Framework 2015.

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

- an established Risk Management Policy and Risk Appetite Statement
- ongoing management of strategic and operational risks that may impact on the achievement of our strategic and operational objectives – such as financial, legal, asset, product quality, environmental, safety, security, information technology and project execution risks
- identification and collaboration with other agencies to manage state significant and interagency risks
- ongoing education and development of risk capability across the corporation, and maintaining a risk aware 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.

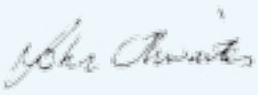
Melbourne Water maintains and tests its Emergency Risk Management framework, which outlines controls with respect to emergency management and business continuity, including critical infrastructure, and the management and response to internal and external emergencies. Melbourne Water also assists in the development of industry response plans and protocols. We work with retail water companies and government departments and agencies that assign roles and responsibilities in the event of large-scale incidents. These plans are also tested and reviewed with retail water companies.

Melbourne Water continually reassesses its risk profile, risk control effectiveness and emergency and incident management framework through external reviews by subject matter specialists and comprehensive risk-based audit programs.

Attestation on Compliance with the Australian and New Zealand Risk Management Standard

I, John Thwaites, certify that:

Melbourne Water has complied with the Ministerial Standing Direction 3.7.1 – Risk Management Framework and Processes. The Audit, Risk and Finance Committee has verified this.



John Thwaites

Chair, Melbourne Water Corporation

Dated: 25 August 2017

Goal 6 | Goal 11 | Goal 13

Directors' Report

Directors

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

John Thwaites (Chairman)
Michael Wandmaker (Managing Director)
Merran Kelsall (Deputy Chairman)
Dana Hlavacek
David Buckingham
Garry Smith
Hugh Gleeson
Kathleen Bailey-Lord
Robyn McLeod

Particulars of the Directors' qualifications, experience and special responsibilities are set out on pages 72-74 of this report.

Directors' meetings

During the financial period, the Corporation held 25 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 (formerly People and Safety Committee)		Customer and Service Delivery Committee	
	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held
John Thwaites (Chairman)	11	11	4	4	-	-	-	-
Michael Wandmaker (Managing Director)	11	11	-	-	-	-	-	-
Merran Kelsall (Deputy Chairman)	10	11	4	4	-	-	-	-
Dana Hlavacek	10	11	4	4	-	-	-	-
Garry Smith	11	11	-	-	-	-	4	4
Kathleen Bailey-Lord	11	11	-	-	2	4	3	4
Hugh Gleeson	11	11	4	4	-	-	4	4
David Buckingham	11	11	-	-	4	4	-	-
Robyn McLeod	9	11	-	-	3	4	3	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 above. Further, where a Director has attended a Committee meeting of which they are not a member, then this attendance has not been included above.

In addition to the regular Board and Committee meetings the Corporation held the following Special meetings during the year.

	Special Board meetings		Special Audit, Risk and Finance Committee meetings		Special People, Safety and Remuneration Commitee meetings		Special Customer and Service Delivery Committee meetings	
	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held	Attended	Maximum held
John Thwaites (Chairman)	-	-	1	1	-	-	-	-
Michael Wandmaker (Managing Director)	-	-	-	-	-	-	-	-
Merran Kelsall (Deputy Chairman)	-	-	1	1	-	-	-	-
Dana Hlavacek	-	-	1	1	-	-	-	-
Garry Smith	-	-	-	-	-	-	-	-
Kathleen Bailey-Lord	-	-	-	-	1	1	-	-
Hugh Gleeson	-	-	1	1			-	-
David Buckingham	-	-	-	-	1	1	-	-
Robyn McLeod	-	-	-	-	1	1	-	-

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 2017 or at any other time) with:

a. the Corporation; or

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

Directors' and Officers' Liability Insurance

During the 2016-17 financial year, the Corporation paid insurance premiums in respect of Directors' and Officers' liability insurance. The policy does not specify a premium for individual Directors and Officers.

The insurance policy provides cover for Directors and Officers of the Corporation against loss arising from claims made against them during the period of insurance by reason of any wrongful act committed, or alleged to have been committed, by them in their capacity as Directors or Officers of the Corporation and reported to the insurers during the policy period, or if exercised, an extended reporting period.

The terms of the insurance policy prohibit the disclosure of the nature of the liabilities insured.

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 2016-17 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 Western Port region. The Corporation delivers innovative integrated planning to establish Melbourne as a water sensitive city. The Corporation also provides water and sewerage services to Melbourne's three metropolitan retail water businesses: City West Water, South East Water and Yarra Valley Water and water services to Western Water and Gippsland Water. The Corporation also has the potential to provide water services to other entities including South Gippsland Water, Westernport Water and Barwon Water. The Corporation works with local government, developers and the community to provide waterways and drainage services.

Operating results and dividend

The Corporation's profit, after providing for income tax was $150.4 million (2015-16: $153.4 million). There has been no dividend payment made or determined in relation to the 2016-17 financial year, any dividend for the 2016-17 financial year will be determined by the Treasurer of Victoria after consultation with the Corporation's Board of Directors and the Minister for Water.

Review of operations

The Directors' review of the Corporation's operations during the financial year ended 30 June 2017 is set out in the Chairman and Managing Director's report on pages 4-5 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 2017.

John Thwaites
Chairman

25 August 2017

Michael Wandmaker
Managing Director

25 August 2017

Financial Report

How this report is structured

Melbourne Water Corporation ('the Corporation') has presented its audited general purpose financial statements for the financial year ended 30 June 2017 in the following structure to provide users with the information about the Corporation's stewardship of resources entrusted to it.

Notes to the financial statements (continued)

Melbourne Water Corporation
Statement by Directors and Chief Financial Officer

We certify the attached Financial Statements for Melbourne Water Corporation ('the Corporation') have been prepared in accordance with Direction 5.2 of the Standing Directions of the Minister for Finance under the *Financial Management Act 1994*, applicable Financial Reporting Directions, 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 2017 and the financial position of the Corporation at 30 June 2017.

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 25 August 2017.

On behalf of the Board:

John Thwaites
Chairman

25 August 2017

Michael Wandmaker
Managing Director

25 August 2017

Anthony O'Shannessy
Chief Financial Officer

25 August 2017

Statement of Profit or Loss and Other Comprehensive Income

For the year ended 30 June 2017

($ thousands)

Revenue	Notes	2017	2016
Revenue	2.1	1,782,579	1,853,322
Other income	2.2	8,784	18,300
Total revenue		**1,791,363**	**1,871,622**
Expenses			
Depreciation and amortisation expenses	4.1.6	(383,834)	(373,829)
Operational expenses	3.1	(216,277)	(206,848)
Employee benefits expenses	3.2	(122,546)	(115,600)
Repairs and maintenance expenses	3.3	(60,763)	(63,297)
Administrative expenses	3.4	(40,674)	(35,460)
Finance expenses	5.1	(657,207)	(676,672)
Government rates and taxes	3.5	(25,320)	(28,801)
Asset transfers to Council	3.6	(24,904)	(20,474)
Other expenses	3.7	(21,885)	(11,414)
Total expenses		**(1,553,410)**	**(1,532,395)**
Net result from operations before tax		**237,953**	**339,227**
Tax expense	3.8.1	(87,520)	(185,867)
Net result for the period after tax		**150,433**	**153,360**
Other comprehensive income after tax			
Items that will not be reclassified to profit or loss			
Actuarial gain/(loss) on defined benefit superannuation plan asset	7.1	10,095	(4,661)
Revaluation increase of land, buildings and infrastructure [(a)]		-	232,457
Decrease in asset revaluation reserve due to disposal of land, buildings and infrastructure [(a)]		(5,140)	(5,261)
Realised gain on disposal of land, buildings and infrastructure [(a)]		5,140	5,261
		10,095	**227,796**
Items that may be reclassified to profit or loss			
Changes in fair value of cash flow hedges		107	644
		107	644
Other comprehensive income for the period after tax		**10,202**	**228,440**
Total comprehensive income for the period after tax		**160,635**	**381,800**

Note:
(a) The prior year balance for the revaluation increase of land and buildings has been restated for presentation purposes to clearly show the realised gain on disposal of land and buildings

The above Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes on pages 87 through to 137.

Statement of Financial Position

As at 30 June 2017

($ thousands)

	Notes	2017	2016
Assets			
Current assets			
Cash and cash equivalents		3,620	2,366
Trade and other receivables	**2.3**	73,871	85,636
Other current assets	**3.10**	11,584	11,617
Non-financial assets held for sale	**4.3**	6,499	4,140
Total current assets		**95,574**	**103,759**
Non-current assets			
Land, buildings, infrastructure, plant and equipment	**4.1.1**	14,706,832	14,664,892
Intangible assets	**4.2**	57,088	41,728
Defined benefit superannuation plan asset	**7.1**	22,589	10,546
Total non-current assets		**14,786,509**	**14,717,166**
Total assets		**14,882,083**	**14,820,925**
Liabilities			
Current liabilities			
Trade and other payables	**3.9**	331,029	335,741
Interest bearing liabilities	**5.1**	650,552	553,142
Other financial liabilities	**6.1**	-	153
Provisions	**3.11**	7,644	7,248
Current tax liability	**3.8.1**	7,066	88,737
Employee benefits provision	**3.2**	36,432	33,672
Total current liabilities		**1,032,723**	**1,018,693**
Non-current liabilities			
Trade and other payables	**3.9**	648	924
Interest bearing liabilities	**5.1**	7,326,447	7,390,499
Provisions	**3.11**	850	3,904
Net deferred tax liabilities	**3.8.2**	1,239,675	1,250,849
Employee benefits provision	**3.2**	11,631	10,330
Total non-current liabilities		**8,579,251**	**8,656,506**
Total liabilities		**9,611,974**	**9,675,199**
Net assets		**5,270,109**	**5,145,726**
Equity			
Contributed equity		530,425	530,429
Reserves [(a)]		2,874,879	2,896,718
Retained profits		1,864,805	1,718,579
Total equity		**5,270,109**	**5,145,726**

Note:

(a) The Corporation has restated the 2015-16 reserves and retained profits balances as outlined in the Statement of Changes in Equity

The above Statement of Financial Position should be read in conjunction with the accompanying notes on pages 87 through to 137.

Statement of Changes in Equity

For the year ended 30 June 2017

($ thousands)

	Contributed equity	Asset revaluation reserve	Other reserves	Retained profits	Total
Balance at 1 July 2016	530,429	2,896,825	(107)	1,718,579	**5,145,726**
Prior period adjustment [a]	-	(16,806)	-	8,965	**(7,841)**
Restated balance at 1 July 2016	530,429	2,880,019	(107)	1,727,544	**5,137,885**
Comprehensive income for the period after tax					
Net result for the period after tax	-	-	-	150,433	**150,433**
Other comprehensive income for the period after tax	-	(5,140)	107	15,128	**10,095**
Total comprehensive income for the period after tax	-	(5,140)	107	165,561	**160,528**
Transactions with equity holders					
Dividends paid [b]	-	-	-	(28,300)	**(28,300)**
Net decrease in contributed equity [c]	(4)	-	-	-	**(4)**
Total transactions with owners	(4)	-	-	(28,300)	**(28,304)**
Balance at 30 June 2017	**530,425**	**2,874,879**	**-**	**1,864,805**	**5,270,109**
Balance at 1 July 2015	558,495	2,669,629	(751)	1,564,619	**4,791,992**
Comprehensive income for the period after tax					
Net result for the period after tax	-	-	-	153,360	**153,360**
Other comprehensive income for the period after tax	-	227,196	644	600	**228,440**
Total comprehensive income for the period after tax	-	227,196	644	153,960	**381,800**
Transactions with equity holders					
Dividends paid [b]	-	-	-	-	**-**
Net decrease in contributed equity [c]	(28,066)	-	-	-	**(28,066)**
Total transactions with owners	**(28,066)**	**-**	**-**	**-**	**(28,066)**
Balance at 30 June 2016	**530,429**	**2,896,825**	**(107)**	**1,718,579**	**5,145,726**

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes on pages 87 through to 137.

Note:
(a) In the current period, there was an adjustment of $16.8 million to the opening balance of the asset revaluation reserve and $8.9 million to the opening balance of retained profits. These adjustments are in relation to the 2015-16 revaluation of land and buildings and are not considered material
(b) A final dividend of $28.3 million was paid during 2016-17 in relation to 2015-16 (no dividend paid in the prior year). Dividends are determined by the Treasurer of Victoria after consultation with the Corporation's Board of Directors and the Minister for Water
(c) Total decrease in contributed equity is made up of transfers of crown assets of $4,000 in the 2016-17 financial year (2015-16: $266,000). There were no capital repatriations made during the year. (2015-16: $27.8 million)

Statement of Cash Flows

For the year ended 30 June 2017

($ thousands)

	Notes	2017	2016
Cash flows from operating activities			
Receipts from customers (inclusive of goods and service tax)		1,719,382	1,813,223
Developer charges and contributions		146,061	118,462
Payments to suppliers and employees (inclusive of goods and service tax) [(a)]		(590,438)	(583,689)
Income tax paid		(192,529)	(191,205)
Interest received		28	466
Interest and other costs of finance paid		(659,820)	(680,921)
Other receipts		17,034	49,706
Net cash inflow from operating activities	**5.2**	**439,718**	526,042
Cash flows from investing activities			
Payments for property, plant and equipment and intangibles		(462,060)	(388,853)
Proceeds from sales of property, plant and equipment and intangibles		17,650	31,189
Net cash outflow from investing activities		**(444,410)**	(357,664)
Cash flows from financing activities			
Proceeds from borrowings		79,547	-
Repayments of borrowings		-	(128,200)
Repayments for desalination plant finance lease liability		(45,301)	(51,100)
Dividends paid	**7.4**	(28,300)	-
Capital repatriation paid	**7.4**	-	(27,800)
Net cash inflow/(outflow) from financing activities		**5,946**	(207,100)
Net (decrease)/increase in cash and cash equivalents		1,254	(38,722)
Cash and cash equivalents at the beginning of the financial year		2,366	41,088
Cash and cash equivalents at the end of the financial year		**3,620**	2,366

The above Statement of Cash Flows should be read in conjunction with the accompanying notes on pages 87 through to 137.

Note:

(a) Includes Government rates and taxes (including land tax and FBT, excluding income tax)

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 2017. This report informs users about the Corporation's stewardship of the resources entrusted to it.

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 as modified by 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**)
- defined benefit superannuation asset/liability (refer to **7.1**)
- employee and provisions (refer to **3.2** and **3.11**)
- useful lives of plant, property and equipment (refer to **4.1.6**)
- recognition of deferred tax balances (refer to **3.8.1** and **3.8.2**)
- contingent liabilities (refer to **6.3**)
- Victorian Desalination Plant (VDP) operating commitments (refer to **5.3**).

Compliance

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

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

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 and it achieves this through providing water, sewerage services, flood mitigation and environmental protection.

Structure

2.1 Revenue

($ thousands)

	2017	2016
Sales revenue		
Bulk water services	912,343	964,153
Bulk sewerage services	419,729	532,295
Waterways and drainage charges	245,806	256,264
Government Water Rebate	-	(78,500)
Total sales revenue	**1,577,878**	**1,674,212**
Other revenue		
Developer charges and contributions	146,061	118,462
Developer contributed assets	40,846	44,233
Interest revenue	28	466
Rental income	3,122	2,924
Other revenue	14,644	13,025
Total other revenue	**204,701**	**179,110**
Total revenue	**1,782,579**	**1,853,322**

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

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

Waterways and drainage charges are recognised in the year for which the rate is levied. Charges are levied either quarterly or annually and are collected from both residential and non-residential properties 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.

The Essential Services Commission (ESC) regulates the prices and service standards for the provision of storage operator services and bulk water and sewerage services. The ESC's general regulatory powers are set out in:

- The *Essential Services Commission Act 2001*
- Part 1A of the *Water Industry Act 1994*
- A Water Industry Regulatory Order made under section 4D of the *Water Industry Act 1994*.

As part of the five-yearly review of the Corporation's prices, conducted in 2016, there has been a decrease in bulk water, sewerage, waterways and drainage prices, passed on to the customers, resulting in lower revenues for the 2017 period.

During 2014, the **Government Water Rebate** was introduced. The Government Water Rebate relates to payments made to the retail water businesses in relation to efficiency savings identified by the Corporation. The efficiency savings are to assist retail water businesses to provide residential customers an annual bill reduction of $100 per year over four years. From 2016-17 onwards, the Government water rebate has been incorporated into the Corporation's prices and will not be paid as a specific rebate (2015-16: $78.5 million).

Developer charges and contributions are recognised when received. **Developer contributed assets** consist of assets received free of charge or for nominal consideration and are recognised as revenue at fair value on practical completion of works and their acceptance by the Corporation.

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.

Other revenue includes legal settlements, fees and charges and other miscellaneous revenue.

2.2 Other Income

($ thousands)

	2017	2016
Net gain on disposal of property, plant and equipment	7,856	16,264
Government grants	928	2,036
Total other income	**8,784**	**18,300**

The **net gain on disposal of property, plant and equipment** from sales in relation to the Corporation's arrangements with Development Victoria (Places Victoria ceased on 31 March 2017 with all operations now performed by Development Victoria) are recognised upon settlement due to the nature of the arrangement between Development Victoria and the Corporation. Other property sales are recognised on signing of an unconditional contract of sale. Property sales are recognised in the Statement of Profit or Loss and Other Comprehensive Income on a net basis of sale proceeds less costs.

Government Grants are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Corporation will comply with all required conditions. Government grants were recognised as other income by the Corporation during the 2016-17 financial year for various projects. 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 deferred income (included in trade and other payables) 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)

	2017	2016
Trade debtors	42,887	53,656
Other receivables	17,169	18,561
Net GST receivable from the ATO	13,906	13,442
Less: provision for impaired other receivables	(91)	(23)
Total current receivables	**73,871**	**85,636**

Trade debtors and other receivables are recognised at the amounts receivable less any impaired other receivables. 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. A provision for impaired other receivables is established when there is objective evidence that the Corporation is highly unlikely to collect all amounts due according to the original terms of receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The amount of the provision is recognised in the Statement of Profit or Loss and Other Comprehensive Income.

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

	Current	Past due but not impaired			Impaired	Total
30 June 2017	**0-30 days**	**31-60 days**	**61-90 days**	**91 days +**		
Receivables						
Trade debtors	28,783	3,423	1,054	9,627	-	42,887
Other receivables	31,075	-	-	-	(91)	30,984
Total receivables	**59,858**	**3,423**	**1,054**	**9,627**	**(91)**	**73,871**

	Current	Past due but not impaired			Impaired	Total
30 June 2016	**0-30 days**	**31-60 days**	**61-90 days**	**91 days +**		
Receivables						
Trade debtors	38,741	2,918	1,110	10,887	-	53,656
Other receivables	32,003	-	-	-	(23)	31,980
Total receivables	**70,744**	**2,918**	**1,110**	**10,887**	**(23)**	**85,636**

The Cost of Delivering Our Services

Introduction

This section accounts for the major components of expenditure incurred by the Corporation in relation to operating activities during the year, as well as any related obligations outstanding as at 30 June 2017.

Structure

3.1 Operational expenses

($ thousands)

	2017	2016
VDP operating expenses [(a)]	113,474	111,376
Materials, chemicals and laboratory expenses	14,104	13,775
Energy expenses (including renewable energy)	30,760	27,796
Insurance expenses	3,062	2,266
Transport expenses	3,855	3,922
Grants and contributions expenses	9,184	9,879
External professional services expenses	13,385	12,399
Contract works	20,862	20,594
Other expenses	7,591	4,841
Total operational expenses	**216,277**	**206,848**

Note:
(a) In March 2017, the Minister for Water announced that Melbourne households will not face additional charges on their water bills for the 15 GL order or the 50 GL order made for 2016-17. As a result, Victorian Desalination Project payments by Melbourne Water have excluded attributable costs related to the 2016-17 water order

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

The Cost of Delivering Our Services

3.2 Employee benefits expenses and employee benefits provision

($ thousands)

	2017	2016
Salary expenses	86,259	80,320
Defined contribution plans (superannuation accumulation fund) expense [(a)]	9,673	8,461
Annual, long service and shift leave expenses [(a)]	10,997	11,854
Defined benefit superannuation plan expense	2,379	2,357
Other employee expenses	13,238	12,608
Total employee benefits expenses	**122,546**	**115,600**

Note:
(a) The prior year balances for defined contribution plans (superannuation accumulation fund) expense and annual, long service leave and shift leave expenses have been adjusted due to a classification issue. The difference is not material and has been reclassified for presentation purposes

Employee benefits expenses include all expenses related to employment including; salary expenses, defined contribution plans, annual, long service and shift leave expenses, rostered days off, leave loading, defined benefit superannuation plan expense, Work Cover (post-1985), workers' compensation (pre-1985), payroll tax, redundancy payments and performance payments.

Provision is made for benefits accruing to employees in respect of wages and salaries, annual leave and long service leave (LSL) for services rendered 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)

	2017	2016
Current		
Accrued salaries and wages		
Accrued salaries	3,544	2,635
Annual leave		
Unconditional and expected to settle after 12 months	6,235	5,541
Long service leave		
Unconditional and expected to settle within 12 months	1,892	1,850
Unconditional and expected to settle after 12 months	15,753	16,134
On-costs		
Unconditional and expected to settle within 12 months	1,380	319
Unconditional and expected to settle after 12 months	2,720	3,719
Other employee benefits	**4,908**	**3,474**
Total current employee benefits and on-costs	**36,432**	**33,672**
Non-current		
Long service leave	3,156	2,894
On-costs on long service leave	545	499
Other employee benefits	7,930	6,937
Total non-current employee benefits and on-costs	**11,631**	**10,330**
Total employee benefits and on-costs	**48,063**	**44,002**

Reconciliation of movement in on-cost provision	($ thousands)
	2017
Opening balance	4,537
Additional provisions recognised	1,499
Additions due to LSL transfers	18
Reductions arising from payments/other sacrificies of future economic benefits	(1,409)
Closing balance	**4,645**
Current	4,100
Non-current	545

Liabilities for **salaries 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 and annual leave are measured at:

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

Sick leave payments are made in accordance with relevant awards, determinations and Corporation policy. No provision is made in the Financial Statements for unused sick leave entitlements as these are non-vesting benefits.

Long Service Leave (LSL) is recognised in the provision for employee benefits. Unconditional LSL is disclosed in the notes to the financial statements as a current liability, even where the Corporation does not expect to settle the liability within 12 months because it will not have the unconditional right to defer the settlement of the entitlement should an employee take leave within 12 months. The components of this current LSL liability are measured at:

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

Conditional LSL is disclosed as a non-current liability. 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 at the end of the reporting period with terms to maturity that closely match the estimated future cash outflows (use of this rate is mandated by the Department of Treasury and Finance (DTF)).

Other employee benefits current and non-current liabilities include amounts for shift leave, rostered days off, Work Cover, workers' compensation and termination benefits. The Work Cover and workers' compensation provisions are based on independent actuarial assessments. A provision of $9.5 million (2015-16: $9.0 million) has been made for outstanding claims incurred and not settled, and for claims incurred but not reported at 30 June 2017. The value of the bank guarantee to the Victorian Work Cover Authority (as part of the Corporation's Work Cover self insurance commitments) at 30 June 2017 is $8.0 million (2015-16: $10.2 million).

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 commited 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)

	2017	2016
Repairs and maintenance	55,676	57,885
Information technology maintenance	5,087	5,412
Total repairs and maintenance expenses	**60,763**	**63,297**

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)

	2017	2016
Waterways charges billings and collection	12,989	12,295
Information technology and telecommunication expenses	16,908	14,891
Legal expenses	260	109
Education and training expenses	3,857	3,043
Other expenses	6,660	5,122
Total administrative expenses	**40,674**	**35,460**

Administrative expenses are the day-to-day administrative costs incurred in normal operations. They are expensed in the period in which they are incurred.

3.5 Government Rates and Taxes

($ thousands)

	2017	2016
Government rates and taxes	25,320	28,801
Total government rates and taxes	**25,320**	**28,801**

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)

	2017	2016
Asset transfers to council	24,904	20,474
Total asset transfers to council	**24,904**	**20,474**

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.

3.7 Other Expenses

($ thousands)

	2017	2016
Rental and lease expenses	7,783	7,558
Bad and doubtful debt expenses	96	(10)
Assets written off/written down	12,346	1,309
Other expenses	1,660	2,557
Total other expenses	**21,885**	**11,414**

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, rental and lease expenses and bad and doubtful debts. They are expensed in the period in which they are incurred.

3.8 Income and deferred tax

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

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the national corporate income tax rate of 30 per cent, adjusted by 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)
	2017	2016
Current tax	114,460	164,404
Deferred tax relating to temporary differences	(16,682)	(38,028)
Adjustments for current tax of prior periods	(10,258)	59,491
Total tax expense	**87,520**	**185,867**

Reconciliation of income tax to prima facie tax payable		($ thousands)
	2017	2016
Profit before income tax	237,954	339,227
Tax at the Australian tax rate of 30% (2015-16: 30%)	71,386	101,768
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:		
Adjustment in respect of income tax of previous year	(10,258)	59,491
Non assessable and non deductible for income tax purposes	26,396	22,452
Assessable income not booked	734	3,515
Research and development tax incentive	(738)	(1,359)
Income tax as reported in the Statement of Profit or Loss and Other Comprehensive Income	**87,520**	**185,867**

Income tax payable		($ thousands)
	2017	2016
Current tax payable	(7,066)	(88,737)
Total income tax payable	**(7,066)**	**(88,737)**

Income tax recognised in other comprehensive income		($ thousands)
	2017	2016
Deferred tax arising on items recognised in other comprehensive income		
Increment/(decrement) in deferred tax on land & buildings revalued	8,059	(2,044)
Reversal of deferred tax on disposal of land previously revalued	(218)	(122)
Increment in deferred tax on infrastructure assets revalued	-	79,433
Increase/(decrease) in deferred tax on actuarial gain on the defined benefit plan	4,327	(1,998)
Changes in fair value of cash flow hedges	46	276
Total income tax recognised in other comprehensive income	**12,214**	**75,545**

3.8.2 Net deferred tax liabilities - non-current

($ thousands)

	2017	2016
Amounts recognised in Profit or Loss		
Property, plant and equipment	284,153	306,826
Employee entitlements	(12,536)	(11,620)
Developer contributions	2,888	4,154
Provisions	(1,608)	(2,809)
Revenue in advance	(67)	(1,066)
Other	(2,452)	(1,720)
Total recognised in Profit or Loss	**270,378**	**293,765**
Amounts recognised in Other Comprehensive Income		
Gain on revaluation of land and buildings	52,799	44,959
Net gain on revaluation of infrastructure assets	907,585	907,585
Actuarial gain on the defined benefit plan	8,913	4,586
Net value loss on cash flow hedges	-	(46)
Total recognised in Other Comprehensive Income	**969,297**	**957,084**
Net deferred tax liability	**1,239,675**	**1,250,849**

Movements

($ thousands)

	2017	2016
Opening balance	1,250,849	1,241,818
Credited to Profit or Loss	(16,682)	(38,028)
Debited to Other Comprehensive Income	12,214	75,545
Adjustment in respect of deferred tax of prior period	(6,706)	(28,486)
Adjustment in respect to reversal of deferred tax on impairment of assets	-	-
Closing balance	**1,239,675**	**1,250,849**
Net deferred tax liabilities to be recovered after more than 12 months	1,252,767	1,264,844
Net deferred tax liabilities to be recovered within 12 months	(13,092)	(13,995)
Total non-current liabilities - deferred tax liabilities	**1,239,675**	**1,250,849**

The Cost of Delivering Our Services (continued)

3.9 Trade and other payables

($ thousands)

	2017	2016
Current trade and other payables		
Trade creditors	77,925	76,908
Interest payable	54,679	57,292
Accruals	176,385	194,712
Other payables	22,040	6,829
Total current trade and other payables	**331,029**	**335,741**
Non-current trade and other payables		
Other payables	648	924
Total non-current trade and other payables	**648**	**924**
Total trade and other payables	**331,677**	**336,665**

Trade creditors are recognised when the Corporation becomes obliged to make future payments resulting from the purchase of goods or services.

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

Accruals represent liabilities for goods or services provided to the Corporation prior to the end of the financial year, which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition or in accordance with contract terms.

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

3.10 Other current assets

	2017	2016
Prepayments	3,645	3,485
Inventories	7,939	8,132
Total other current assets	**11,584**	**11,617**

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

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.

3.11 Provisions

($ thousands)

	2017	2016
Current		
Insurance claims	1,359	1,382
Other provisions	6,285	5,866
Total provisions - current	**7,644**	**7,248**
Non-current		
Insurance claims	818	858
Other provisions	32	3,046
Total provisions - non-current	**850**	**3,904**
Total provisions	**8,494**	**11,152**

Reconciliation of movement in provisions

($ thousands)

	Insurance claims	Other provisions	Total
Carrying amount at 1 July 2016	2,240	8,912	11,152
Additional provisions recognised	398	2,647	3,045
Amounts utilised during the year	(461)	(5,242)	(5,703)
Carrying amount at 30 June 2017	**2,177**	**6,317**	**8,494**
Carrying amount at 1 July 2015	3,270	6,800	10,070
Additional provisions recognised	1,825	3,873	5,698
Amounts utilised during the year	(2,855)	(1,761)	(4,616)
Carrying amount at 30 June 2016	**2,240**	**8,912**	**11,152**

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

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

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

Insurance claims are independently assessed by actuaries. 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 increase the probability that the liability estimate will be sufficient. The actuaries take into account projected inflation and other factors to arrive at expected future payments. These are then discounted at the reporting date using a market determined, risk-free discount rate.

The disclosed assumptions are used in the measurement of the liability for outstanding insurance claims on the basis of actuarially estimated costs of future claims payments, which are discounted to a present value at balance sheet date. 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 and remediation works.

Assets Available to Support Output Delivery

Introduction

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

Structure

4.1 Land, buildings, infrastructure, plant and equipment

4.1.1 Total land, buildings, infrastructure, plant and equipment

($ thousands)

2017	Gross Carrying Amount	Accumulated Depreciation	Carrying Amount
Crown land at fair value	103,716	-	103,716
Freehold land at fair value	1,268,823	-	1,268,823
Buildings at fair value	27,871	(967)	26,904
Leasehold improvements at fair value	15,199	(5,049)	10,150
Plant and equipment at fair value	84,094	(62,338)	21,756
Fleet vehicles at fair value	18,421	(6,493)	11,928
Infrastructure assets at fair value	8,661,730	(219,182)	8,442,548
VDP infrastructure assets under finance lease at fair value (a)	4,662,793	(358,243)	4,304,550
Capital works in progress at cost	516,457	-	516,457
Total land, buildings, infrastructure, plant and equipment	**15,359,104**	**(652,272)**	**14,706,832**

2016	Gross Carrying Amount	Accumulated Depreciation	Carrying Amount
Crown land at fair value	103,728	-	103,728
Freehold land at fair value	1,261,799	-	1,261,799
Buildings at fair value	24,614	-	24,614
Leasehold improvements at fair value	15,101	(4,012)	11,089
Plant and equipment at fair value	84,055	(66,613)	17,442
Fleet vehicles at fair value	17,938	(5,398)	12,540
Infrastructure assets at fair value	8,400,750	-	8,400,750
VDP infrastructure assets under finance lease at fair value [(a)]	4,662,793	(280,689)	4,382,104
Capital works in progress at cost	450,826	-	450,826
Total land, buildings, infrastructure, plant and equipment	**15,021,604**	**(356,712)**	**14,664,892**

Note:
(a) The difference between total VDP assets under finance lease at fair value and the finance lease liability are principal repayments and other capital payments already made to 30 June 2017, which reduce the liability

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

	2017	2016
Land	577,446	648,818
Buildings	30,517	28,320
Infrastructure assets - owned	5,990,151	5,819,329
Infrastructure assets - under finance lease	4,304,550	4,382,104
Total	**10,902,664**	**10,878,571**

Recognition and measurement

Initial recognition

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

Items with a cost or value in excess of $500 (2015-16: $500 capitalisation threshold) and a useful life of more than 1 year are recognised as assets with the exception of lifecycle costs (total of all recurring and one-time costs over the full life span of a good, service, structure or system) for the VDP which are expensed. All items with a cost or value less than $500 (2015-16: $500) are expensed.

Subsequent measurement

All non-financial physical assets 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.

Revaluations are conducted either independently (as required under FRD 103F *Non-financial physical assets*) or using management expertise and classified as a managerial revaluation. Fair value assessment is performed annually as a managerial valuation and formal independent valuations are completed every five years. The Corporation also considers more frequent revaluations in regards to infrastructure during price determination years as valuations are closely linked to income. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. The last 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.

Assets Available to Support Output Delivery (continued)

The fair value of **Infrastructure** was assessed by an independent actuary in 2016-17 to determine if it 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 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 for 2016-17.

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. The significant assumptions used in determining fair value under the income approach at 30 June 2017 are summarised below:

- Nominal after tax discount rate in the range of 5.3% to 5.9% (2015-16: 5.6% to 6.2%) - representing the rate that market participants would expect to use in determining the fair market value of the Corporation after taking into account the market cost of debt and equity
- Operating expenditure and revenue growth (excluding developer contributions) applied post initial five year pricing period 3.0% (2015-16: 3.0%)
- Developer contributions growth at 2.5% (2015-16: 3.0%) applied post initial five year pricing
- Long term growth rate of 3.25% (2015-16: 3.25%) - representing inflation and volume growth
- A 10 year explicit cash flow projection period (reflecting one actual and one estimated price determination), with cash flows beyond the projection period reflected in the terminal value (2015-16: 10 years)
- Used the 5 year average of long-term capex forecasts, less the 5 year average of normalised long-term growth related capex, as a proxy for capex in the steady state (2015-16: 10 years).

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. This year was not a formal valuation year and as such an interim managerial valuation was conducted using Valuer-General Victoria (VGV) postcode indices. As adjustments of CSO are considered as significant unobservable inputs, specialised land would be classified as Level 3 assets.

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.

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.

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.

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 4.3).

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.

If there is an indication that there has been a change in the estimate of an asset's recoverable amount since the last impairment loss was recognised, the carrying amount would be increased to its recoverable amount. This reversal of the impairment loss occurs only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised in prior years.

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 is measured at the higher of depreciated replacement cost or fair value less costs to sell. Recoverable amount for assets held primarily to generate net cash inflows is 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.

Fair value determination of non-financial physical assets

The fair values of non-financial physical assets are determined as follows:

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

4.1.2 Land, buildings, infrastructure, plant and equipment assets at fair value

($ thousands)

		Fair value measurements		
	2017	Level 1 [a]	Level 2 [a]	Level 3 [a]
Non-financial assets held for sale	6,499	-	6,499	-
Non-specialised land	77,019	-	77,019	-
Specialised land	1,295,520	-	-	1,295,520
Total land	**1,379,038**	**-**	**83,518**	**1,295,520**
Non-specialised buildings	807	-	807	-
Specialised buildings	26,097	-	-	26,097
Total buildings	**26,904**	**-**	**807**	**26,097**
Leasehold improvements	10,150	-	-	10,150
Plant and equipment	21,756	-	-	21,756
Fleet vehicles	11,928	-	-	11,928
Infrastructure assets	8,442,548	-	-	8,442,548
Infrastructure assets under finance lease	4,304,550	-	-	4,304,550
Total other	**12,790,932**	**-**	**-**	**12,790,932**
Total land, buildings, infrastructure, plant and equipment	**14,196,874**	**-**	**84,325**	**14,112,549**

Note:
(a) Classified in accordance with the fair value hierarchy

Assets Available to Support Output Delivery (continued)

4.1.2 Land, buildings, infrastructure, plant and equipment assets at fair value

($ thousands)

	2016	Level 1 [(a)]	Level 2 [(a)]	Level 3 [(a)]
Non-financial assets held for sale	4,140	-	4,140	-
Non-specialised Land	81,005	-	81,005	-
Specialised Land	1,284,522	-	-	1,284,522
Total land	**1,369,667**	**-**	**85,145**	**1,284,522**
Non-specialised buildings	874	-	874	-
Specialised buildings	23,740	-	-	23,740
Total buildings	**24,614**	**-**	**874**	**23,740**
Leasehold improvements	11,089	-	-	11,089
Plant and equipment	17,442	-	-	17,442
Fleet vehicles	12,540	-	-	12,540
Infrastructure assets	8,400,750	-	-	8,400,750
Infrastructure assets under finance lease	4,382,104	-	-	4,382,104
Total other	**12,823,925**	**-**	**-**	**12,823,925**
Total land, buildings, infrastructure, plant and equipment	**14,218,206**	**-**	**86,019**	**14,132,187**

Note:
(a) Classified in accordance with the fair value hierarchy

4.1.3 Land, buildings, infrastructure, plant and equipment assets valuation techniques and significant unobservable inputs (Level 3 inputs)

Asset Category	Valuation Technique	Significant unobservable inputs	Range/weighted average		Sensitivity of fair value measurement to changes in significant unobservable inputs
2016 and 2017	2016 and 2017	2016 and 2017	2017	2016	2016 and 2017
Specialised land	Market Approach	Community Service Obligation (CSO) adjustment	20-70% (44% weighted average)	20-70% (44% weighted average)	A significant increase or decrease in the CSO adjustment would result in a significantly higher or lower fair value
Specialised buildings	Depreciated replacement cost	Direct cost per square metre	$20-$4,100	$25-$4,200	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 (65 years weighted average)	15-150 years (54 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

4.1.3 Land, buildings, infrastructure, plant and equipment assets valuation techniques and significant unobservable inputs (Level 3 inputs) (continued)

Asset Category	Valuation Technique	Significant unobservable inputs	Range/weighted average		Sensitivity of fair value measurement to changes in significant unobservable inputs
2016 and 2017	2016 and 2017	2016 and 2017	2017	2016	2016 and 2017
Leasehold improvements	Depreciated replacement cost	Cost per unit	$1,100-$5.2M per unit	$1,500-$5.8M 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)	5-15 years (15 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a significantly higher or lower fair value
Plant and equipment	Depreciated replacement cost	Cost per unit	$500-$1.2M per unit	$500-$1.4M 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 (6 years weighted average)	3-50 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
Fleet vehicles	Depreciated replacement cost	Cost per unit	$5,640-$279,337 per unit	$4,596-$132,691 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 (5 years weighted average)	1-10 years (4.0 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
Infrastructure assets (owned and VDP finance lease)	Income Approach	Terminal value growth rate	3.25%	3.25%	If the terminal growth rate had changed by +/-.25% from the year end valuation, the impact to the valuation would have been a decrease of $1,031.6 million and increase by $1,277.2 million
		Terminal value capital expenditure (excluding growth)	5 year average ($432.7 million)	10 year average ($402.6 million)	A significant increase or decrease in the average period used to calculate terminal value capital expenditure would result in a significantly higher or lower fair value
		Weighted average cost of capital (WACC)	5.3-5.9%	5.6-6.2%	If the WACC had changed by +/-.25% from the year end valuation, the impact to the valuation would have been a decrease of $997 million and increase by $1,877.9 million
		Useful life	3-200 years (77 years weighted average)	3-200 years (76 years weighted average)	A significant increase or decrease in estimated useful life of the asset would result in a higher or lower fair value

Assets Available to Support Output Delivery (continued)

4.1.4 Reconciliation of Level 3 fair value

($ thousands)

	Specialised land		Specialised buildings		Leasehold improvements	
	2017	2016	2017	2016	2017	2016
Opening balance	1,284,522	1,313,440	23,740	24,649	11,089	12,084
Purchased additions[a]	-	-	-	-	-	-
Developer contributed assets	6,263	7,372	200	-	-	-
Disposals and write-offs	(11,600)	(12,850)	-	90	-	-
Depreciation and amortisation	-	-	(814)	(1,376)	(1,028)	(1,024)
Transfers between classes	11	1,942	2,958	(1,942)	89	-
Transfers in/(out of Level 3)[b]	(2,428)	(70,989)	13	(874)	-	-
Revaluation increments	-	84,199	-	2,792	-	-
Revaluation decrements	-	(42,046)	-	-	-	-
Capitalisation of works in progress[a]	18,752	3,454	-	401	-	29
Carrying amount	**1,295,520**	**1,284,522**	**26,097**	**23,740**	**10,150**	**11,089**

	Plant and equipment		Fleet vehicles		Infrastrucuture	
	2017	2016	2017	2016	2017	2016
Opening balance	17,442	11,252	12,540	12,519	8,400,750	8,081,467
Purchased additions[a]	-	-	3,532	4,455	289	-
Developer contributed assets	-	-	-	-	34,383	36,861
Disposals and write-offs	(53)	(41)	(1,401)	(1,688)	(25,691)	(21,750)
Depreciation and amortisation	(8,501)	(7,392)	(2,780)	(2,758)	(282,916)	(274,682)
Transfers between classes	2,868	2,196	37	12	(9,169)	(2,372)
Transfers in/(out of Level 3)[b]	-	-	-	-	-	-
Revaluation increments	-	-	-	-	-	264,777
Revaluation decrements	-	-	-	-	-	-
Capitalisation of works in progress[a]	10,000	11,427	-	-	324,902	316,449
Carrying amount	**21,756**	**17,442**	**11,928**	**12,540**	**8,442,548**	**8,400,750**

	VDP infrastructure	
	2017	2016
Opening balance	4,382,104	4,459,657
Purchased additions[a]	-	-
Developer contributed assets	-	-
Disposals and write-offs	-	-
Depreciation and amortisation	(77,554)	(77,553)
Transfers between classes	-	-
Transfers in/(out of Level 3)[b]	-	-
Revaluation increments	-	-
Revaluation decrements	-	-
Capitalisation of works in progress[a]	-	-
Carrying amount	**4,304,550**	**4,382,104**

4.1.5 Reconciliation of movements in carrying values during the financial period

($ thousands)

	Total		Crown land	
	2017	2016	2017	2016
Opening balance	**14,664,892**	**14,294,355**	**103,728**	**146,400**
Purchased additions [a]	3,821	4,455	-	-
Developer contributed assets	40,846	44,233	-	-
Disposals and write-offs	(44,528)	(36,420)	(12)	-
Depreciation and amortisation	(373,647)	(364,785)	-	-
Transfers between classes [c]	(3,206)	(164)	-	(626)
Assets classified as held for sale	(2,359)	10,016	-	-
Revaluation increments	-	351,768	-	-
Revaluation decrements	-	(42,046)	-	(42,046)
Impairment losses	-	-	-	-
Impairment losses reversed	-	-	-	-
Capital expenditure [d][e][f]	421,013	403,480	-	-
Capitalisation of works in progress [a]	-	-	-	-
Carrying amount	**14,706,832**	**14,664,892**	**103,716**	**103,728**

	Freehold land		Buildings	
	2017	2016	2017	2016
Opening balance	**1,261,799**	**1,167,040**	**24,614**	**24,649**
Purchased additions [a]	-	-	-	-
Developer contributed assets	6,263	7,372	200	-
Disposals and write-offs	(15,643)	(12,850)	-	90
Depreciation and amortisation	-	-	(868)	(1,376)
Transfers between classes [c]	11	2,568	2,958	(1,942)
Assets classified as held for sale	(2,359)	10,016	-	-
Revaluation increments	-	84,199	-	2,792
Revaluation decrements	-	-	-	-
Impairment losses	-	-	-	-
Impairment losses reversed	-	-	-	-
Capital expenditure [d][e][f]	-	-	-	-
Capitalisation of works in progress [a]	18,752	3,454	-	401
Carrying amount	**1,268,823**	**1,261,799**	**26,904**	**24,614**

Note:

(a) Purchased additions and capitalisation of works in progress for 2016 have been restated for presentation purposes to show the split of capital expenditure across the different classes

(b) Transfers in/(out of Level 3) for 2016 for specialised buildings has been adjusted for presentation purposes

(c) Includes transfers to intangible assets, refer to 4.2

(d) Represents total capital expenditure, exclusive of intangibles, refer to 4.2

(e) The above includes the movement in assets that have been transferred to held for sale

(f) Capital expenditure has been adjusted in 2016 for intangibles, disclosed at 4.2, and has had the fleet vehicles balance removed to correct a classification issue

Assets Available to Support Output Delivery (continued)

4.1.5 Reconciliation of movements in carrying values during the financial period (continued)

($ thousands)

	Leasehold improvements		Plant and equipment	
	2017	2016	2017	2016
Opening balance	**11,089**	**12,084**	**17,442**	**11,252**
Purchased additions [a]	-	-	-	-
Developer contributed assets	-	-	-	-
Disposals and write-offs	-	-	(53)	(41)
Depreciation and amortisation	(1,028)	(1,024)	(8,501)	(7,392)
Transfers between classes [c]	89	-	2,868	2,196
Assets classified as held for sale	-	-	-	-
Revaluation increments	-	-	-	-
Revaluation decrements	-	-	-	-
Impairment losses	-	-	-	-
Impairment losses reversed	-	-	-	-
Capital expenditure [d][e][f]	-	-	-	-
Capitalisation of works in progress [a]	-	29	10,000	11,427
Carrying amount	**10,150**	**11,089**	**21,756**	**17,442**

	Fleet vehicles		Infrastructure	
	2017	2016	2017	2016
Opening balance	**12,540**	**12,519**	**8,400,750**	**8,081,467**
Purchased additions [a]	3,532	4,455	289	-
Developer contributed assets	-	-	34,383	36,861
Disposals and write-offs	(1,401)	(1,688)	(25,691)	(21,750)
Depreciation and amortisation	(2,780)	(2,758)	(282,916)	(274,682)
Transfers between classes [c]	37	12	(9,169)	(2,372)
Assets classified as held for sale	-	-	-	-
Revaluation increments	-	-	-	264,777
Revaluation decrements	-	-	-	-
Impairment losses	-	-	-	-
Impairment losses reversed	-	-	-	-
Capital expenditure [d][e][f]	-	-	-	-
Capitalisation of works in progress [a]	-	-	324,902	316,449
Carrying amount	**11,928**	**12,540**	**8,442,548**	**8,400,750**

4.1.5 Reconciliation of movements in carrying values during the financial period (continued)

($ thousands)

	VDP infrastructure		Capital works in progress	
	2017	2016	2017	2016
Opening balance	**4,382,104**	**4,459,657**	**450,826**	**379,287**
Purchased additions [a]	-	-	-	-
Developer contributed assets	-	-	-	-
Disposals and write-offs	-	-	(1,728)	(181)
Depreciation and amortisation	(77,554)	(77,553)	-	-
Transfers between classes [c]	-	-	-	-
Assets classified as held for sale	-	-	-	-
Revaluation increments	-	-	-	-
Revaluation decrements	-	-	-	-
Impairment losses	-	-	-	-
Impairment losses reversed	-	-	-	-
Capital expenditure [d][e][f]	-	-	421,013	403,480
Capitalisation of works in progress [a]	-	-	(353,654)	(331,760)
Carrying amount	**4,304,550**	**4,382,104**	**516,457**	**450,826**

Note:

(a) Purchased additions and capitalisation of works in progress for 2016 have been restated for presentation purposes to show the split of capital expenditure across the different classes

(b) Transfers in/(out of Level 3) for 2016 for specialised buildings has been adjusted for presentation purposes

(c) Includes transfers to intangible assets, refer to 4.2

(d) Represents total capital expenditure, exclusive of intangibles, refer to 4.2

(e) The above includes the movement in assets that have been transferred to held for sale

(f) Capital expenditure has been adjusted in 2016 for intangibles, disclosed at 4.2, and has had the fleet vehicles balance removed to correct a classification issue

Assets Available to Support Output Delivery (continued)

4.1.6 Depreciation and amortisation

($ thousands)

		2017	2016
Depreciation			
Buildings	**4.1.5**	868	1,376
Leasehold improvements	**4.1.4**	1,028	1,024
Plant and equipment	**4.1.4**	8,501	7,392
Fleet vehicles	**4.1.4**	2,780	2,758
Infrastructure assets at fair value	**4.1.4**	282,916	274,682
Total depreciation		**296,093**	**287,232**
Amortisation			
VDP infrastructure assets under finance lease	**4.1.4**	77,554	77,553
Intangible assets	**4.2**	10,187	9,044
Total amortisation		**87,741**	**86,597**
Total depreciation and amortisation		**383,834**	**373,829**

Depreciation and amortisation

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

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

Major depreciation and amortisation periods used are listed below:

Buildings	5 to 150 years (2015-16: 15 to 150 years)
Leasehold improvements	3 to 15 years (2015-16: 5 to 15 years)
Plant and equipment	3 to 50 years (2015-16: 3 to 50 years)
Infrastructure assets	3 to 200 years (2015-16: 3 to 200 years)
Fleet vehicles	1 to 15 years (2015-16: 1 to 10 years)
Intangible assets	2 to 25 years (2015-16: 2 to 16 years)
VDP under finance lease	9 to 100 years (2015-16: 9 to 100 years)

Indefinite life assets

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

4.2 Intangible assets

($ thousands)

	2017	2016
Intangible assets	142,638	92,708
Less: accumulated amortisation and impairment	(85,550)	(50,980)
Total intangible assets	**57,088**	**41,728**

Reconciliation of movements in intangible assets

($ thousands)

	Intangible assets	
	2017	2016
Opening balance	41,728	32,258
Purchased additions [a]	10,726	11,875
Disposals and write-offs	(1,379)	(1,248)
Amortisation	(10,187)	(9,044)
Transfers between classes [b]	3,206	164
Impairment losses	(97)	-
Capitalisation of works in progress [a]	13,091	7,723
Carrying amount	**57,088**	**41,728**

Note:
(a) Purchased additions and capitalisation of works in progress for 2016 have been restated for presentation purposes to show the capitalised portion of works in progress
(b) Includes transfers to physical assets, refer to 4.1.5

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

The Corporation amortises intangible assets with a limited useful life using the straight line method over the estimated useful lives. Amortisation begins when the asset is available for use, that is, when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. The useful life and amortisation method is reviewed at the 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

	2017	2016
Land	6,499	4,140
Total non-financial assets held for sale	**6,499**	**4,140**

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

This condition is regarded as met only when:

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

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

The Corporation currently holds land for sale mainly as part of the Riverwalk Estate (Werribee) development. As at 30 June 2017, the Corporation has a joint arrangement with Development Victoria to actively market these lots for private sale.

The fair value of non-financial assets held for sale has been included in table 4.1.2.

Financing Our Operations

Introduction

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

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

Structure

5.1 Interest bearing liabilities

($ thousands)

	2017	2016
Current interest bearing liabilities		
VDP finance lease	54,052	46,342
Borrowings	596,500	506,800
Total current interest bearing liabilities	**650,552**	**553,142**
Non-current interest bearing liabilities		
VDP finance lease	4,076,447	4,130,499
Borrowings	3,250,000	3,260,000
Total non-current interest bearing liabilities	**7,326,447**	**7,390,499**
Total interest bearing liabilities	**7,976,999**	**7,943,641**

Interest bearing liabilities mainly come from borrowings raised through the Treasury Corporation of Victoria (TCV), along with finance leases for the Victorian Desalination Plant.

Interest bearing liabilities 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. They are subsequently measured at amortised cost using the constant interest rate method, with interest expense recognised on an effective yield basis.

Breakdown of finance costs

($ thousands)

	2017	2016
Interest expense	171,423	183,654
Interest expense on cash flow hedge	-	219
VDP finance lease interest	443,798	452,383
Financial Accommodation Levy	41,986	40,416
Total	**657,207**	**676,672**

Finance costs are recognised as expenses 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. Therefore, any 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.

Finance costs include interest on short-term and long-term borrowings, finance lease charges associated with the Victorian Desalination Plant and the Victorian Government's Financial Accommodation Levy.

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.

Bank overdrafts (if applicable) are shown within interest bearing liabilities in the Statement of Financial Position.

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

Reconciliation of net result to net cash flows from operating activities

($ thousands)

	2017	2016
Profit for the period after tax	150,433	153,360
Plus/(less) non cash items:		
Depreciation and amortisation	383,834	373,829
Net gain on sale of non-current assets	(7,856)	(16,264)
Assets written off/written down	29,888	21,783
Developer contributed assets	(40,846)	(44,233)
Defined benefit superannuation plan expense	2,379	2,357
RECs received	(2)	(9,833)
Net gain on sale of RECs	(361)	(1,415)
Interest expense on cashflow hedge	-	219
Changes in operating assets and liabilities (net of investing items):		
Decrease in trade and other receivables	11,697	38,465
Decrease/(Increase) in other current assets	33	(1,813)
(Decrease)/Increase in provision for impaired receivables	68	(36)
Increase in trade and other payables	14,057	13,465
Increase in provisions and employee benefits provisions	1,403	576
Increase in other liabilities (interest rate swap)	-	920
(Decrease)/increase in current tax liability	(81,671)	61,174
Decrease in deferred tax liabilities	(23,338)	(66,512)
Net cash provided by operating activities	**439,718**	**526,042**

Financing Our Operations (continued)

5.3 Commitments

Commitments for future expenditure include operating and capital commitments arising from contracts.
These commitments are disclosed at their nominal value and inclusive of the GST payable, except for finance lease liabilities.

($ thousands)

	2017	2016
Capital expenditure commitments		
Total capital expenditure contracted for the construction of water, sewerage and waterways and drainage infrastructure:		
Less than 1 year	226,538	179,062
1 year but less than 5 years	59,957	11,093
Total capital expenditure commitments	**286,495**	**190,155**

	2017	2016
Operating and lease commitments		
The Corporation leases buildings and motor vehicles under non-cancellable operating leases. The building lease agreements have varying terms, escalation clauses and renewal rights. On renewal, the terms of the leases are renegotiated. Commitments for minimum lease payments in relation to non-cancellable operating leases are payable as follows:		
Less than 1 year	9,131	8,916
1 year but less than 5 years	39,812	39,120
5 years or more	57,254	69,957
Total operating and lease commitments	**106,197**	**117,993**

Other operating commitments		
Total other operating expenditure (excluding leases) contracted for at balance date are as follows:		
Less than 1 year	28,496	27,837
1 year but less than 5 years	54,105	54,726
Later than 5 years	91,451	102,538
Total other operating commitments	**174,052**	**185,101**

Build, Own and Operate (BOO) commitment

The Corporation has allocated a parcel of land at the Western Treatment Plant (WTP) for the operation of a 9.9 Megawatts biogas electricity generation plant, managed under a BOO contract with AGL. The Corporation delivers biogas extracted from the treatment process to AGL, who in turn provides this generated electricity exclusively to the Corporation. The arrangement commenced on 25 February 2000 and expires on 31 December 2020.

Less than 1 year	4,415	3,037
1 year but less than 5 years	11,513	15,412
Total Build, Own and Operate commitment	**15,928**	**18,449**

The Corporation as lessor

Operating lease receivable

Operating leases primarily relate to land owned by the Corporation. All operating lease contracts contain market review clauses. The lessee does not have an option to purchase the land at the expiry of the lease period.

Commitments for minimum lease receipts in relation to non-cancellable operating leases are as follows:

Within 1 year	1,738	1,106
Later than 1 year but not later than 5 years	4,336	2,238
Later than 5 years	4,821	2,234
Total operating lease receivable	**10,895**	**5,578**

Victorian Desalination Plant (VDP) finance lease and other commitments

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

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

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

Financing Our Operations (continued)

Victorian Desalination Plant (VDP) finance lease and other commitments (continued)

Under the arrangement, the Corporation has an obligation to make Project Deed Payments to DELWP, which is managing the contract with AquaSure on behalf of the State government. The portions of the Project Deed Payments that relate to the right to use the project assets are accounted for as a finance lease as disclosed below. In addition, the Project Deed Payments also include other commitments for operating, maintenance and lifecycle costs. The desalination plant assets will transfer from DELWP to the Corporation at the end of the project contract term presently planned for 2039.

On 3 May 2017 the Minister for Water issued the 2017-18 Supply Notice with a Required Annual Water Volume for 15GL in 2017-18 and non-binding forecasts of 50GL for each 2018-19 and 2019-20.

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

($ thousands)

	Minimum future lease payments		Present value of minimum future lease payments	
	2017	2016	2017	2016
VDP finance lease liability				
Less than 1 year	492,626	490,140	54,052	46,342
1 year but less than 5 years	1,911,076	1,944,354	217,313	227,414
Later than 5 years	8,516,071	8,975,420	3,859,134	3,903,085
Minimum future lease payments	**10,919,773**	**11,409,914**	**4,130,499**	**4,176,841**
Less: Future finance charges	(6,789,274)	(7,233,073)	-	-
Total finance lease liability	**4,130,499**	**4,176,841**	**4,130,499**	**4,176,841**
Representing finance lease liability:				
Current (refer to 5.1) [(a)]			54,052	46,342
Non-current (refer to 5.1) [(a)]			4,076,447	4,130,499
Total finance lease liability			**4,130,499**	**4,176,841**

Note:
(a) The present value of the minimum future lease payments have been discounted to 30 June of the respective financial years using the weighted average interest rate of 10.68% (2016: 10.72%). These payments exclude finance charges

Other commitments payable

Under the PPP arrangement that the State entered into with AquaSure, the State pays a base Water Security Payment, provided the plant is maintained to the appropriate standard, that includes other commitments for its operation, maintenance and lifecycle costs. The nominal amounts for the other commitments below represent the charges payable under the agreement at the end of the reporting period.

The Project Deed requires a minimum number of 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. In May 2017, the Minister for Water announced Melbourne households will not face additional charges on their water bills for this year's 50 GL water order and the subsequent three minimum water orders. These orders will instead be funded from the sale of surplus Renewable Energy Certificates, which were previously purchased to offset power used by the plant with green energy, and were not fully utilised as no water orders were made until 2016. DELWP will fund the additional charges through sale of the RECs, and as a result, the attritutable costs related to the 2017-18 15 GL water order are excluded from the Corporation's Commitments below.

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

($ thousands)

	2017	2016
Less than 1 year	128,031	155,854
1 year but less than 5 years	585,147	569,526
Later than 5 years	3,796,104	4,036,758
Total other commitments (inclusive of GST)	**4,509,282**	**4,762,138**
Less GST recoverable from the Australian Taxation Office	(409,935)	(432,922)
Total other commitments (exclusive of GST)	**4,099,347**	**4,329,216**
Present value of other commitments [a]	**1,416,804**	**1,587,009**

Note:
(a) As per standard practice, the present value of the 'other commitments' has been discounted to 30 June of the respective financial years. The discount rate of 9.99% is the nominal pre-tax discount rate representative of the overall risk of the project at inception. 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

Risks and Judgements

Introduction

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

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

Structure

6.1 Financial instruments

Financial instruments arise out of contractual agreements that give rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Due to the nature of the Corporation's activities, certain financial assets and financial liabilities arise under statute rather than a contract (for example, taxes, fines and penalties). Such assets and liabilities do not meet the definition of financial instruments in AASB 132 *Financial Instruments: Presentation*.

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

- Cash and cash equivalents
- Trade debtors and other receivables
- Trade creditors, accruals and interest payable
- VDP lease liabilities
- Other payables
- Borrowings
- Interest rate swaps.

Categories of financial instruments ($ thousands)

	2017	2016
Financial assets		
Cash and cash equivalents	3,620	2,366
Trade debtors	42,887	53,656
Other receivables	17,078	18,538
Total financial assets	**63,585**	**74,560**
Financial liabilities		
Trade and other payables	331,677	336,665
Interest rate swap	-	153
VDP lease liabilities	4,130,499	4,176,841
Short term borrowings	96,500	101,800
Floating rate notes	400,000	400,000
Fixed interest	3,350,000	3,265,000
Total financial liabilities	**8,308,676**	**8,280,459**

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, the Treasury Management Guidelines issued by DTF and the Victorian Public Sector Debt Management Objectives.

The Corporation's treasury management policy manages financial risk by:

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

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

Portfolio composition (i.e. fixed and floating) - During the 2016-17 financial year the Corporation updated its Treasury Management Policy to manage its debt portfolio within the bands of (with exceptions as per the Treasury Management Policy):

Floating interest rate borrowings 0-30% (2015-16: 0-20%)
Fixed interest rate borrowings 70-100% (2015-16: 80-100%)

Physical maturity profile - Debt maturity of fixed and floating interest rate borrowings 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. Our 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 2016-17 of $4,086.7 million (2015-16: $4,139.7 million) was not exceeded at any stage throughout the financial year.

Risks and Judgements (continued)

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 2017 was 53.6% (2015-16: 53.6%) and interest cover cash ratio was 2.0 times (2015-16: 2.1 times).

Gearing and Interest Cover ratios are some of a number of benchmarks that are considered by the Board when considering an appropriate capital structure. These ratios are approved via the Corporate Plan.

Interest rate risk is the risk that over the regulatory period the actual cost of debt is higher than the regulatory cost of debt allowance that the Corporation receives as part of the regulatory determination.

Interest rate risk is managed by:

- Strategic management of the mix of floating and fixed rate debt within a range of Board approved parameters, in order to minimise exposure to fluctuations in variable rates and to minimise the long-term net cost of funding
- Aligning the Corporation's modified duration with the regulatory benchmark portfolio modified duration
- The utilisation of interest rate swaps to align the re-pricing of the actual costs of debt with the timing of the setting of the regulatory cost of debt allowance.

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 2017	Weighted average	Floating interest	Fixed interest	Non-interest bearing	Total carrying amount
					($ thousands)
Financial assets					
Cash and cash equivalents	1.47%	3,620	-	-	3,620
Trade debtors	-	-	-	42,887	42,887
Other receivables	-	-	-	17,078	17,078
Total financial assets		**3,620**	**-**	**59,965**	**63,585**
Financial liabilities					
Trade and other payables	-	-	-	331,677	331,677
VDP lease liabilities [(a)]	10.68%	-	4,130,499	-	4,130,499
Short term borrowings	1.69%	96,500	-	-	96,500
Floating rate notes	2.25%	400,000	-	-	400,000
Fixed interest	4.75%	-	3,350,000	-	3,350,000
Total financial liabilities		**496,500**	**7,480,499**	**331,677**	**8,308,676**

Interest rate exposure as at 30 June 2016	Weighted average	Floating interest	Fixed interest	Non-interest bearing	Total carrying amount
					($ thousands)
Financial assets					
Cash and cash equivalents	1.95%	2,366	-	-	2,366
Trade debtors	-	-	-	53,656	53,656
Other receivables	-	-	-	18,538	18,538
Total financial assets		**2,366**	**-**	**72,194**	**74,560**
Financial liabilities					
Trade and other payables	-	-	-	336,665	336,665
Interest rate swap	3.20%	153	-	-	153
VDP lease liabilities [(a)]	10.72%	-	4,176,841	-	4,176,841
Short term borrowings	2.10%	101,800	-	-	101,800
Floating rate notes	2.68%	300,000	-	-	300,000
Floating rate notes - fixed with swap [(b)]	3.20%	-	100,000	-	100,000
Fixed interest	5.06%	-	3,265,000	-	3,265,000
Total financial liabilities		**401,953**	**7,541,841**	**336,665**	**8,280,459**

Note:
(a) The weighted average interest rate for VDP lease liabilities is the interest rate implicit in the lease
(b) Of the $400M Floating Rate Notes, in the prior year $100M was fixed with an interest rate swap the Corporation had in place in order to hedge against regulatory interest rate risk. The swap was terminated in the current period

Risks and Judgements (continued)

Interest rate risk sensitivity analysis

2017	Profit or Loss		Equity	
	-50 basis points	+50 basis points	-50 basis points	+50 basis points
Cash	(6)	6	(4)	4
Interest Bearing Liabilities	2,483	(2,483)	1,738	(1,738)
Total	**2,477**	**(2,477)**	**1,734**	**(1,734)**

2016	Profit or Loss		Equity	
	-50 basis points	+50 basis points	-50 basis points	+50 basis points
Cash [(a)]	(63)	63	(44)	44
Interest Bearing Liabilities [(a)]	2,009	(2,009)	1,406	(1,406)
Total [(a)]	**1,946**	**(1,946)**	**1,362**	**(1,362)**

Note:
(a) The prior year equity impact has been restated to be net of tax

Exposures arise predominately from liabilities bearing variable interest rates as the Corporation intends to hold fixed rate liabilities to maturity. At 30 June 2017, 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 million. The Corporation's policy requires all hedging to be undertaken through TCV in the form of forward Foreign Exchange Contracts.

At 30 June 2017, the Corporation did not have any forward foreign exchange contracts.

6.1.3 Price risk

Price risk is the risk that the Corporation will suffer financial loss due to adverse movements in the price of commodity inputs and/or outputs related to its business operations.

The main price risk exposure to the Corporation is the potential decline in market value of the RECs. This may impact on the realisable value of RECs the Corporation currently holds and future RECs it will be receiving. The current strategy is to realise on an ongoing basis the value of the RECs given they are no longer required by the Corporation. Other lower level exposures will exist with supply and service contracts mitigating this risk where possible. Refer to Note 4.2 for the results of the annual impairment test on RECs.

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 allowance for impaired receivables. Receivables are reviewed on an ongoing basis to identify amounts which cannot be collected. Debts which cannot be collected are written off. A provision for impaired receivables is established when there is objective evidence that the Corporation will not be able to collect all amounts due according to the original terms of receivables.

The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The amount of the provision is recognised in the Statement of Profit or Loss and Other Comprehensive Income.

The major exposure to credit risk arises from Trade Debtors and Other Receivables, which have been recognised net of any provision for doubtful debts.

Trade Debtors are made up predominantly by the metropolitan retail water businesses with minimal credit risk exposure to the Corporation. These debtors are invoiced in two parts. The first part is a usage charge that is invoiced weekly and paid within 7 days. The second part is an availability charge that is invoiced monthly and paid within 14 days.

Other receivables primarily consist of a large number of residential and business customers across a diverse range of industries to which the Corporation provides waterways and drainage services. These receivable balances are monitored on an ongoing basis to ensure that exposure to bad debts is not significant. The collection of payments and overdue receivables is managed by the metropolitan retail water businesses as part of billings and collection agreements with the Corporation. In addition any unpaid debt is allocated against the property title and will be extinguished if there is a change in property ownership.

All financial risk management instruments are transacted with TCV, whose liabilities are guaranteed by the Victorian Government. The Corporation potentially has a concentration of credit risk with TCV as the central borrowing authority of Victoria. This risk is considered minimal.

Risks and Judgements (continued)

6.1.5 Liquidity risk

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 Corporation obtains annual approval from the Treasurer of Victoria for new borrowings, borrowings to refinance maturing and non-maturing loans and temporary purpose borrowing facilities.

The objective of the Corporation's financial risk management policies is the optimal utilisation of cash with all surplus funds used to repay borrowings.

Undiscounted maturity analysis of financial liabilities ($ thousands)

2017

	Total carrying amount	Total contractual cash flows	1 year or less	1 to 5 years	Over 5 years
Non-interest bearing	331,677	331,677	331,029	648	-
Variable rate	496,500	530,064	106,577	373,266	50,221
Fixed rate	7,480,499	15,891,825	1,261,695	3,930,438	10,699,692
Total	**8,308,676**	**16,753,566**	**1,699,301**	**4,304,352**	**10,749,913**

2016

	Total carrying amount	Total contractual cash flows	1 year or less	1 to 5 years	Over 5 years
Non-interest bearing	336,665	336,665	335,741	924	-
Variable rate	401,800	439,075	110,975	150,540	177,560
Fixed rate	7,538,803	16,614,811	1,101,594	4,401,569	11,111,648
Interest rate swap	153	153	153	-	-
Total	**8,277,421**	**17,390,704**	**1,548,463**	**4,553,033**	**11,289,208**

6.1.6 Other matters

Net holding gain/(loss) on financial instruments by category ($ thousands)

	2017	2016
Interest revenue/(expense)		
Financial assets	28	466
Financial liabilities at amortised cost	(657,207)	(676,672)
Net holding gain/(loss)	**-**	**-**
Financial liabilities recognised in other comprehensive income [(a)]	-	(153)
Total	**(657,179)**	**(676,359)**

Note:
(a) This disclosure has been updated to include the prior year loss on the interest rate swap. Although it is not deemed material, it has been updated to assist in the understanding of the financial statements

6.2 Fair value determination of financial assets and liabilities

The fair values of the Corporation's financial assets and liabilities are determined as follows:

- Level 1 – the financial instruments with standard terms and conditions and traded in an active liquid market are determined with reference to quoted market prices;
- Level 2 – the fair value of other financial assets and financial liabilities (excluding derivative instruments) are determined in accordance with generally accepted pricing models based on discounted cash flow analysis, using prices from observable current market transactions; and
- Level 3 – the fair value of derivative instruments are calculated using quoted prices. Where such prices are not available, use is made of discounted cash flow analysis using the applicable yield curve for the duration of the instrument for non-optional derivatives, and option pricing models for optional derivatives.

Carrying amounts, fair values and fair value hierarchy

($ thousands)

	2017		2016	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Cash and cash equivalents	3,620	3,620	2,366	2,366
Trade debtors	42,887	42,887	53,656	53,656
Other receivables	17,078	17,078	18,538	18,538
Total financial assets	**63,585**	**63,585**	**74,560**	**74,560**
Financial liabilities				
Trade and other payables	331,677	331,677	336,665	336,665
Interest rate swap	-	-	153	153
VDP lease liabilities	4,130,499	4,130,499	4,176,841	4,176,841
Short term borrowings	96,500	96,500	101,800	101,800
Floating rate notes	400,000	403,764	400,000	405,395
Fixed interest	3,350,000	3,566,774	3,265,000	3,607,700
Total financial liabilities	**8,308,676**	**8,529,214**	**8,280,459**	**8,628,554**

Financial assets and liabilities measured at fair value

($ thousands)

2017	Total	Level 1	Level 2	Level 3
Financial liabilities				
Interest rate swap [(a)]	-	-	-	-
Total financial liabilities	**-**	**-**	**-**	**-**

Financial assets and liabilities measured at fair value

($ thousands)

2016	Total	Level 1	Level 2	Level 3
Financial liabilities				
Interest rate swap [(a)]	(153)	-	(153)	-
Total financial liabilities	**(153)**	**-**	**(153)**	**-**

Note:
(a) Interest rate swaps are the only financial liabilities measured at fair value, terminated in 2016/17. There are no financial assets measured at fair value

Risks and Judgements (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
- 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.

These are not recognised in the Statement of Financial Position, but if quantifiable are disclosed below.

($ thousands)

	2017	2016
Contingent assets		
Legal claims arising out of the Corporation's business dealings	10,433	10,608
Total contingent assets	**10,433**	**10,608**
Contingent liabilities		
Legal claims arising out of the Corporation's business dealings [(a)]	17,950	17,290
Total contingent liabilities	**17,950**	**17,290**

Note:
(a) Included within total contingent liabilities for 2016-17 is $17.9 million (2015-16: $17.2 million) of compulsory land acquisitions where the Corporation will receive an equivalent land asset, which has not been disclosed separately. Compulsory land acquisitions are considered assets due to the Corporation receiving equivalent land. Given the significant estimation uncertainty, these are not treated as provisions. The Corporation only recognises assets and liabilities once the Notice of Acquisition has been issued to the landowner

Other Disclosures

Introduction

This section includes those additional disclosures required by accounting standards or otherwise, that are material, for the understanding of this financial report.

Structure

7.1 Superannuation - defined benefit plan

Defined benefit plans provide benefits based on years of service and final average salary. 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 superannuation 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 superannuation 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, the return on plan assets (excluding interest) and the 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 a 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 the settlement of a defined benefit superannuation plan when the settlement occurs.

The superannuation plan ('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.

	($ thousands)	
	2017	2016
Employer contributions to the defined benefit superannuation 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.

Other Disclosures (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; and
- Compliance with superannuation law and other applicable regulations.

The prudential regulator, the Australian Prudential Regulation Authority (APRA), licenses and supervises regulated superannuation plans.

There are a number of risks to which the Plan exposes the Corporation. The more significant risks relating to the defined benefits are:

Investment risk - The risk that investment returns will be lower than assumed and the Corporation will need to increase contributions to offset this shortfall.

Salary growth risk - The risk that wages/salaries (on which future benefit amounts will be based) will rise more rapidly than assumed, increasing defined benefit amounts and thereby requiring additional employer contributions.

Legislative risk - The risk that legislative changes could be made which could increase the cost of providing the defined benefits.

Pension risk - The risk is firstly that pensioner mortality will be higher than expected, resulting in pensions being paid for a longer period. Secondly, the risk that a greater proportion of eligible members will elect to take a pension benefit, which is generally more valuable than the corresponding lump sum benefit.

The Plan assets are invested by the Trustee in a pool of assets with plans providing defined benefits for other employers. The allocation both globally and across sectors is diversified.

7.1 Superannuation

Reconciliation of the present value of the defined benefit superannuation obligation

($ thousands)

	2017	2016
Present value of defined benefit obligation at beginning of the year	80,833	97,224
Current service cost	2,561	2,830
Interest cost	1,517	2,658
Contributions by Plan participants	758	850
Benefits paid	(9,346)	(28,111)
Taxes and premiums paid	(452)	(513)
Actuarial (gains)/losses arising from changes in demographic assumptions	(7)	-
Actuarial (gains)/losses arising from changes in financial assumptions	(1,526)	5,379
Actuarial (gains)/losses arising from liability experience	(4,728)	516
Present value of the defined benefit obligation at year end	**69,610**	**80,833**

Reconciliation of the fair value of plan assets

($ thousands)

	2017	2016
Fair value of plan assets at beginning of the year	91,379	116,786
Contributions by Plan participants	758	850
Benefits paid	(9,346)	(28,111)
Taxes and premiums paid	(452)	(513)
Interest Income	1,699	3,131
Actual return on Plan assets less interest income	8,161	(764)
Fair value of Plan assets at year end	**92,199**	**91,379**

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

($ thousands)

	2017	2016
Net defined benefit (asset)/liability at start of year	(10,546)	(19,562)
Current service cost	2,561	2,830
Net interest	(182)	(473)
Actual return on plan assets less interest income [(a)]	(8,161)	764
Actuarial (gains)/losses arising from changes in demographic assumptions [(a)]	(7)	-
Actuarial (gains)/losses arising from changes in financial assumptions [(a)]	(1,526)	5,379
Actuarial (gains)/losses arising from liability experience [(a)]	(4,728)	516
Net defined benefit asset at year end	**(22,589)**	**(10,546)**

Note:
(a) Actuarial (gains)/losses before tax ($14,422K) (after tax ($10,095K))

The Corporation has recognised an asset in the Statement of Financial Position in respect of its defined benefit superannuation Plan arrangements at 30 June 2017 (2015-16: 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 2016-17, the contributions rate continued to be zero due to sufficient surplus in the Plan (2015-16: zero).

Other Disclosures (continued)

Fair value of the Plan assets as at 30 June 2017

($ thousands)

	Total	Level 1 [a]	Level 2 [b]	Level 3 [c]
Asset category				
Investment funds	92,199	-	92,199	-
Total	**92,199**	**-**	**92,199**	**-**

Fair value of the Plan assets as at 30 June 2016

($ thousands)

	Total	Level 1 [a]	Level 2 [b]	Level 3 [c]
Asset category				
Investment funds	91,379	-	91,379	-
Total	**91,379**	**-**	**91,379**	**-**

Notes:
(a) Quoted prices (unadjusted) in active markets for identical assets or liabilities
(b) Inputs based on observable market data (either directly using prices or indirectly derived from prices)
(c) Inputs not based on observable market data

Significant actuarial assumptions at the balance sheet date

($ thousands)

	2017	2016
Assumptions to determine defined benefit cost		
Discount rate	2.00%	2.80%
Expected salary increase rate	3.25%	3.25%
Expected pension increase rate	3.00%	3.00%
Assumptions to determine defined benefit obligation		
Discount rate	2.20%	2.00%
Expected salary increase rate	3.25%	3.25%
Expected pension increase rate	2.50%	3.00%

7.2 Responsible persons

The relevant 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 the Ministerial Directions issued by the Minister for Finance under the *Financial Management Act 1994*, 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 2016 to 30 June 2017
Chairman	John Thwaites	1 July 2016 to 30 June 2017
Managing Director	Michael Wandmaker	1 July 2016 to 30 June 2017
Deputy Chairman	Merran Kelsall	1 July 2016 to 30 June 2017
Director	Dana Hlavacek	1 July 2016 to 30 June 2017
Director	Garry Smith	1 July 2016 to 30 June 2017
Director	Kathleen Bailey-Lord	1 July 2016 to 30 June 2017
Director	Hugh Gleeson	1 July 2016 to 30 June 2017
Director	David Buckingham	1 July 2016 to 30 June 2017
Director	Robyn McLeod	1 July 2016 to 30 June 2017

Remuneration

The Minister's remuneration and allowances is set by the *Parliamentary Salaries and Superannuation Act 1968* and is reported within the Department of Parliamentary Services' Financial Report. Other relevant interests are declared in the Register of Members' Interests which each Member of Parliament completes.

The number of responsible persons whose remuneration from the Corporation was within the specified bands were as follows:

	Total Remuneration	
	2017	2016
Income Band ($)	Number	Number
10,000 - 19,999	-	4
20,000 - 29,999	-	1
30,000 - 39,999	-	5
40,000 - 49,999	7	1
50,000 - 59,999	-	1
60,000 - 69,999	-	1
90,000 - 99,999	1	-
480,000 - 489,999[(a)]	1	1
Total numbers	**9**	**14**
Total remuneration ($000)	**919**	**910**

Note:
(a) Remuneration received by the Managing Director

Other Disclosures (continued)

7.3 Remuneration of executives

The number of executives, other than ministers and the accountable officer, 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 on a discrete basis 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.

($ thousands)

Remuneration of executive officers (including Key Management Personnel disclosed in Note 7.4)	2017	2016[a]
Short-term employment benefits	3,148	
Post-employment benefits	241	
Other long-term benefits	79	
Termination benefits	-	
Total remuneration[a][b]	**3,468**	
Total number of executives	**12**	
Total annualised employee equivalent[c]	**11**	

Note:
(a) No comparatives have been reported because remuneration in the prior year was determined in line with the basis and definition under FRD 21B. Remuneration previously excluded non-monetary benefits and comprised any money, consideration or benefit received or receivable, excluding reimbursement of out-of-pocket expenses, including any amount received or receivable from a related party transaction. Refer to the prior year's financial statements for executive remuneration for the 2015-16 reporting period
(b) 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
(c) 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 and their close family members, 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.

Key management personnel (KMP) of the Corporation include the Portfolio Minister and all Directors 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.

Compensation of KMP	2017	2016
Short-term employment benefits	1,222	3,750
Post-employment benefits	76	217
Other long-term benefits	19	383
Termination benefits	-	288
Total[(a)(b)]	**1,317**	**4,638**

Note:
(a) The calculation of the compensation for KMP has been updated in 2017 in line with guidance provided by DTF
(b) Note that KMP are also reported in the disclosure of remuneration of executive

Transactions with key management personnel 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 related parties and the information available to the organisation.

Significant related party transactions include transactions between a KMP or a KMP related-party and a department or a public body. Transactions have been assessed on an arms length basis with a materiality threshold set at $100,000.

These transactions are as follows:	($ thousands)	
	2017	2016
Lisa Neville MP - Minister for Water		
The Honourable Lisa Neville is one of the Ministers responsible for the Department of Environment, Land, Water and Planning. All dealings with this entity were on normal terms and conditions during the reporting period.		
Total payments made to DELWP were:	667,554	679,438
Michael Wandmaker - Managing Director		
Michael Wandmaker was a member of Monash University Council of Advisors. He ceased to be a Director of Water Services Association of Australia in 2016. All dealings with these agencies were on normal terms and conditions during the reporting period.		
Total payments made to Water Services Association of Australia:	348	407
Total payments made to Monash University were:	612	-
Merran Kelsall - Director		
Merran Kelsall is the Chairman of the Risk, Audit and Compliance Committee for the Environmental Protection Authority Victoria (EPAV) and a Member of the Business Advisory Committee for Monash University. All dealings with these entities were on normal terms and conditions during the reporting period.		
Total payments made to EPAV were:	928	784
Total payments made to Monash University were:	612	-
Dana Hlavacek - Director		
Dana Hlavacek is a Director of the Victorian Water Industry Association. All dealings with this agency were on normal terms and conditions during the reporting period.		
Total payments made to Victorian Water Industry Association were:	139	155

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)

Entities with significant influence - Department of Environment, Land, Water & Planning (DELWP) and Department of Treasury and Finance (DTF)

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. 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 (2015-16: $50 million). DTF also collects income taxes, the Financial Accommodation Levy, Local Government Rates Equivalent and dividend payments from the Corporation.

Related parties with significant transactions

Entities that have 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:

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 is a new organisation that combines the expertise and capabilities of Places Victoria and Major Projects Victoria to create and deliver economic and social value to Victoria. Development Victoria will deliver property and precinct development projects to meet government's policy objectives and apply its experience and expertise to the delivery of civic projects.

Other related parties

- Australian Institute of Management
- Department of Health and Human Services
- Environment Protection Agency Victoria
- Gippsland Water Corporation
- Level Crossing Removal Authority
- Melbourne Metro Railway Authority
- Monash University
- Westernport Region Water Corporation
- Port Philip & Westernport Catchment Management Authority
- Parks Victoria
- Southern Rural Water Corporation
- Victoria State Emergency Service
- Victorian Water Industry Association
- Victorian Workcover Authority
- Water Services Association of Australia
- Department of Economic Development, Jobs, Transport and Resources

Other related parties with arms-length transactions greater than $100,000 have been disclosed above.

In the below summaries, all other related parties transactions and payable balances below $100,000 have also been included.

Material transactions with related parties

($ thousands)

	2017	2016
Receipts from related parties (inclusive of GST)		
DELWP	1,168	2,948
City West Water	404,440	444,636
South East Water	584,619	651,976
Yarra Valley Water	582,892	650,328
Western Water	9,135	12,166
Barwon Water	21,482	479
TCV	-	466
Development Victoria	2,817	4,245
Other related parties	1,692	1,912

($ thousands)

	2017	2016
Payments to related parties (inclusive of GST)		
DELWP	667,554	679,438
DTF	263,372	236,176
City West Water	5,197	21,385
South East Water	5,370	35,039
Yarra Valley Water	5,381	35,001
Western Water	159	2,791
Barwon Water	6	10
TCV	174,036	188,644
Development Victoria	8,399	16,482
Other related parties	5,228	5,084
Dividend paid		
DTF	28,300	-
Repayment of equity contributions		
DTF	-	27,800
DELWP	4	266

Other Disclosures (continued)

Material transactions with related parties (continued)

Outstanding balances arising from sales/ purchases of goods and services

($ thousands)

	2017	2016
Receivables		
DELWP	107	60
City West Water	10,055	11,709
South East Water	8,611	12,271
Yarra Valley Water	13,375	16,501
Development Victoria	36	13
Other related parties	44	153
Payables		
DELWP	4,130,863	4,177,006
DTF	17,714	98,602
Yarra Valley Water	5	9
TCV	3,901,179	3,824,092
Development Victoria	-	3,392
Other related parties	385	147

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)

	2017	2016
Audit of financial report	170	166
Additional charge for audit of 2015/16 financial year	-	15
Total amount paid/payable	**170**	**181**

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 $5000) expenses.

For 2016-17, the Corporation incurred no ex-gratia expenses (2015-16: $23,200).

7.7 Subsequent events

No matters or circumstances have arisen since the end of the reporting period which significantly affected or may significantly affect the operations of the Corporation, or the results of those operations.

7.8 Prospective accounting and reporting changes

Certain new accounting standards and interpretations that are deemed relevant to the Corporation have been published, but are not mandatory for the 30 June 2017 reporting period. The Corporation has not adopted these standards early in accordance with DTF stating that entities must not early adopt (to achieve consistency at the whole of State level).

The Corporation's assessment of the impact of these new standards and interpretations is set out below:

AASB 15 *Revenue from Contracts with Customers*

The core principle of the standard requires an entity to recognise revenue when the entity satisfies a performance obligation by transferring a promised good or service to a customer and is effective from 1 January 2018. The new standard is based on the principle that revenue is recognised when control of a good or service transfers to a customer with the notion of control replacing the existing notion of risks and rewards. Management is currently assessing the new revenue principles over existing and future contracts, specifically identifying whether there is any impact in regards to the timing of revenue recognition and disclosure requirements for the implementation year. The corporation has also assessed the following amendments to AASB 15 and will apply these to both the application and impact assessment of the standard:

- AASB 2014-5 Amendments to Australian Accounting Standards arising from AASB 15
- AASB 2015-8 Amendments to Australian Accounting Standards – Effective Date of AASB 15
- AASB 2016-3 Amendments to Australian Accounting Standards – Clarifications to AASB 15

AASB 16 *Leases*

This standard will primarily affect the accounting by lessees and will result in the recognition of almost all leases on the balance sheet and is effective 1 January 2019. The standard removes the current distinction between operating and financing leases and requires recognition of an asset (the right to use the leased item) and a financial liability to pay rentals for almost all lease contracts. Accounting by lessors, however, will not significantly change. Management is currently assessing the impact on the balance sheet for existing operating leases and updated disclosure requirements.

AASB 9 Financial Instruments

The key changes include the simplified requirements for the classification and measurement of financial assets, a new hedging accounting model and a revised impairment loss model to recognise impairment losses earlier, as opposed to the current approach that recognises impairment only when incurred. The assessment has identified that the amendments are likely to result in earlier recognition of impairment losses and at more regular intervals. While there will be no significant impact arising from AASB 9, there will be a change to the way financial instruments are disclosed. This is effective 1 January 2018.

VAGO

Victorian Auditor-General's Office

Independent Auditor's Report

To the Board of the Melbourne Water Corporation

Opinion	I have audited the financial report of the Melbourne Water Corporation (the corporation) which comprises the: • statement of financial position as at 30 June 2017 • 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 • statement by directors and chief financial officer. In my opinion the financial report presents fairly, in all material respects, the financial position of the corporation as at 30 June 2017 and their financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Part 7 of the *Financial Management Act 1994* and applicable Australian Accounting Standards.
Basis for Opinion	I have conducted my audit in accordance with the *Audit Act 1994* which incorporates the Australian Auditing Standards. My responsibilities under the Act are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of my report. My independence is established by the *Constitution Act 1975*. My staff and I are independent of the corporation in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the financial report in Australia. My staff and I have also fulfilled our other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.
Board's responsibilities for the financial report	The Board of the corporation is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the *Financial Management Act 1994*, and for such internal control as the Board determines is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error. In preparing the financial report, the Board is responsible for assessing the corporation's ability to continue as a going concern, and using the going concern basis of accounting unless it is inappropriate to do so.

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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.

MELBOURNE
31 August 2017

Roberta Skliros
as delegate for the Auditor-General of Victoria

Performance Reporting

Contents

Performance Report

Financial Performance Indicators

KPI Number [1]	Key Performance Indicator	2015-16 Result	2016-17 Result	2016-17 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	2.0	1.7	-4.8%		17.6%	[5]
F2	**Gearing Ratio** Total Debt (including finance leases) / total assets * 100	53.6%	53.6%	56.7%	0.0%		-5.5%	
F3	**Internal Financing Ratio** Net operating cash flow less dividends / net capital expenditure * 100	135.3%	89.0%	68.8%	-34.2%	[2]	29.4%	[6]
F4	**Current Ratio** Current assets / current liabilities (excluding long-term employee provisions and revenue in advance)	0.10 times	0.09 times	0.06 times	-10.0%	[3]	50.0%	[7]
F5	**Return on Assets** Earnings before net interest and tax / average assets * 100	6.9%	6.0%	5.2%	-13.0%	[4]	15.4%	[8]
F6	**Return on Equity** Net profit after tax / average total equity * 100	3.1%	2.9%	0.6%	-6.5%		383.3%	[9]
F7	**EBITDA Margin** Earnings before Interest, Tax, Depreciation and Amortisation / total revenue * 100	74.2%	71.4%	69.2%	-3.8%		3.2%	

Water, sewerage and other service performance indicators

KPI Number [1]	Key Performance Indicator	2015-16 Result	2016-17 Result	2016-17 Target	Variance to prior year	Notes	Variance to target	Notes
WQ1	**Water Quality** Compliance with Bulk Water Service Agreement (BWSA): Microbiological Standards — *E. coli*	100.0%	100.0%	100.0%	0.0%		0.0%	
WQ2	**Water Quality** Compliance with BWSA: Aesthetics — Turbidity	100.0%	97.8%	91.5%	-2.2%		6.9%	[10]
CRM1	**Customer Responsiveness** Complaints referred to Energy and Water Ombudsman Victoria (EWOV) responded to within EWOV established time	100.0%	98.0%	100.0%	-2.0%		-2.0%	

Performance Report

Water, sewerage and other service performance indicators (continued)

KPI Number [1]	Key Performance Indicator	2015-16 Result	2016-17 Result	2016-17 Target	Variance to prior year	Notes	Variance to target	Notes
EM1	**Non-Compliance with other EPA Victoria License and SEPP parameters — Sewerage system failure** Zero spills due to sewerage system failure	0	0	0	0.0%		0.0%	
EM2	**Compliance with EPA Victoria discharge licence requirements**							
EM2.1	WTP	100.0%	100.0%	100.0%	0.0%		0.0%	
EM2.2	ETP	100.0%	100.0%	100.0%	0.0%		0.0%	
WW1	**Waterways — Drainage and Flood protection** A 15% reduction in flood effects achieved by projects in delivery by Melbourne Water	N/A	N/A	3% by 2016-17	N/A	[11]	N/A	[11]
WW2	**Waterways condition** Achievement of Water Plan implementation targets set out in the *Healthy Waterways Strategy*	100.0%	94.0%	100.0%	-6.0%	[12]	-6.0%	[12]
RW1	**Recycled Water** WTP recycled water schemes fully compliant with regulatory obligations and their contractual requirements, as outlined in the relevant Bulk Recycled Water Service Agreements (BRWSAs)							
RW1.1	Volume demands	100.0%	100.0%	100.0%	0.0%		0.0%	
RW1.2	Reliability	100.0%	100.0%	100.0%	0.0%		0.0%	
RW1.3	Quality	100.0%	100.0%	100.0%	0.0%		0.0%	
RW2	**Recycled Water** ETP recycled water schemes fully compliant with regulatory obligations and their contractual requirements, as outlined in the relevant BRWSAs							
RW2.1	Volume demands	100.0%	100.0%	100.0%	0.0%		0.0%	
RW2.2	Reliability	100.0%	N/A	100.0%	N/A		N/A	[13]
RW2.3	Quality	100.0%	100.0%	100.0%	0.0%		0.0%	

Notes — to Performance Report:

[1] Performance indicators as mandated in Ministerial Reporting Direction 01 — Performance Reporting (MRD 01) have been marked with their MRD 01 reference numbers.

[2] The variance to prior year is unfavourable due to lower operating cash flows in relation to a reduction in customer receipts of $93.8 million resulting from lower revenue as per the 2016 pricing determination and higher cash payments of $73.0 million for capital expenditure. Also, a dividend of $28.3 million (zero for 2015-16) was paid during the period. The 2016-17 result is above the target range and in line with business expectations. It's anticipated that future year on year variances will fluctuate in line with expected revenue as per the 2016 pricing determination and capital expenditure profile.

[3] The variance to prior year is unfavourable resulting from higher current borrowings of $89.7 million mainly to fund capital expenditure. This is in line with the Corporation's liquidity strategy which involves optimal utilisation of cash and borrowings.

[4] The variance to prior year is unfavourable due to lower Earnings Before Net Interest and Tax as a result of a decrease in revenues by $80.3 million mainly from bulk water and bulk sewerage services following a priced reduction from the 2016 pricing determination. The 2016-17 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 as per the 2016 pricing determination.

[5] The favourable variance to target is due to lower borrowing levels and interest rates which have resulted in lower finance charges and higher operating cash flows.

[6] The favourable variance to target is due to an increase in operating cash flows that were used to fund the 2016-17 capital expenditure program.

[7] The favourable variance to target is due to lower borrowings as a result of higher operating cash flows.

[8] The favourable variance to target is due to higher Earnings Before Net Interest and Tax during the year driven by higher than anticipated revenue from developer charges and contributed assets. Average assets were also higher due to the 2015-16 asset revaluations not included in plan.

[9] The favourable variance to target is due to higher Net Profit After Tax in 2016-17 compared to plan. Improved performance is due to higher than anticipated revenue from developer charges and contributed assets. An increase in the asset revaluation reserve resulting from the 2015-16 asset revaluations not included in plan contributed to an increase in the average equity.

[10] The positive result is due to major storage reservoirs being well managed and there were no significant events impacting water turbidity.

[11] The actual and variance results for the "reduction in flood effects" metric is N/A due to the timing of the *2016-17 Corporate Plan* process and new targets established in the *Waterways, Drainage Investment Plan* (WDIP) which were based on best estimates at the time of the *2016-17 Corporate Plan* publication. The flooding target of 3% was subsequently revised to 0% for 2016-17 once the WDIP was finalised. This is now in-line with WDIP and 2017-18 Corporate plan targets.

The 2015-16 target "A further 10% of currently known intolerable (extreme) flood risks will be reduced" was completed in 2015-16 and new targets were set by the *Flood Management Strategy – Port Phillip and Westernport*. The 2015-16 result has been reported as N/A given the 2016-17 is a new target.

[12] The *Healthy Waterways Strategy* achieved 16 out of 17 targets. The five-year target for stock exclusion fencing is behind plan having so far achieved 373 kilometres out of 545 kilometres. A change in government policy in the Yellingbo area has affected predicted uptake for stock exclusion fencing and as a result measures are being put in place to target fencing through our grants program in 2017-18.

The variance compared to previous years was due to all targets being achieved in 2015-16.

[13] ETP — Recycled Water (Reliability) metric is not applicable as the retailer has not specified any contractual service or regulatory obligation based on their customer requirements. Communication protocols have been established between the plant and retailer regarding any scheduled or unexpected outages.

Certification of Performance Report for 2016-17

We certify that the accompanying Performance Report of Melbourne Water Corporation in respect of the 2016-17 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 *2016-17 Corporate Plan*, the actual and comparative results achieved for the financial year against predetermined performance targets and these indicators, and an explanation of any significant variance between the actual results and performance targets and/or between the actual results in the current year and the previous year.

As at the date of signing, we are not aware of any circumstances which would render any particulars in the Performance Report to be misleading or inaccurate.

John Thwaites
Chairman

25 August 2017

Michael Wandmaker
Managing Director

25 August 2017

Anthony O'Shannessy
Chief Financial Officer

25 August 2017

Dated this 25th day of August 2017

VAGO

Victorian Auditor-General's Office

Independent Auditor's Report

To the Board of the Melbourne Water Corporation

Opinion	I have audited the accompanying performance report for the year ended 30 June 2017 of the Melbourne Water Corporation (the corporation) which comprises the: • financial performance indicators • water and sewerage and other service performance indicators • notes to the performance report • certification of performance report for 2016-2017. In my opinion, the performance report of the corporation in respect of the year ended 30 June 2017 presents fairly, in all material respects, in accordance with the performance reporting requirements 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. My responsibilities under the Act are further described 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*. I and my staff 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 Australia 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.

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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 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 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 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
31 August 2017

Roberta Skliros
as delegate for the Auditor-General of Victoria

Appendices

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Appendix A – Disclosure index

The *Melbourne Water Annual Report 2016-17* 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 2016-17 year. Details of individual consultancies are outlined on Melbourne Water's website at www.melbournewater.com.au

Consultancies valued at $10,000 or greater

In 2016-17, there were 22 consultancies engaged during the year where the total fees payable to the consultants were $10,000 or greater. The total expenditure incurred during 2016-17 in relation to these consultancies was $1,117,069 (excl. GST).

Consultancies valued at less than $10,000

In 2016-17, there were three consultancies engaged during the year where the total fees payable to the consultants were less than $10,000. The total expenditure incurred during 2016-17 in relation to these consultancies was $7377 (excl. GST).

Advertising Campaigns

Melbourne Water had no advertising campaigns with a value greater than $100,000.

ICT Expenditure

For the 2016-17 reporting period, Melbourne Water had a total ICT expenditure of $55,526,957 (2015-16: $51,417,590) with the details shown below.

Business as usual (BAU) ICT expenditure	Non- business as usual (non-BAU) ICT expenditure (operational and capital expenditure)	Non-BAU ICT expenditure (operational expenditure)	Non-BAU ICT expenditure (capital expenditure)
$29, 658,000	$25,869,000	$173,000	$25,696,000

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 2017. Details of contracts can be viewed at: www.melbournewater.com.au

National Competition Policy

Melbourne Water is corporatised and therefore has an independent Board, with independent and objective performance monitoring. We face equivalent tax treatment, borrowing requirements and regulations as a private business. As outlined above, we also operate in an environment where the Essential Services Commission determines cost-based pricing. In this regard our processes are consistent with the requirements of the Victorian Competitive Neutrality Policy.

Melbourne Water has had no actions for anti-competitive behaviour.

Pricing

Following an 11 per cent decrease (plus inflation) in 2016-17 Melbourne Water's wholesale water and sewerage prices for the remaining four years of the Essential Service Commission Price Determination will increase approximately in line with inflation. Average household water bills will increase by approximately $25 (depending on inflation) for the remaining four years. The annual waterways and drainage charge of $96.83 for 2016-17 will also increase by inflation.

Freedom of Information

Melbourne Water is subject to the *Freedom of Information Act 1982* (FOI Act) and is committed to releasing documents in our possession unless exempt. We also welcome enquiries about the broad range of documents we provide outside the FOI Act.

The designated persons for the purpose of the FOI Act are:

Principal Officer
Mr J Thwaites
Chair, Melbourne Water Board

Authorised Officer
Mr M Keough
FOI and Privacy Advisor and Government Liaison

Requests for information

We received 22 requests of which eight were finalised, six were not yet valid, three did not proceed and two were withdrawn. One request was transferred to another agency and one processed outside the Act.

Fourteen requests were from members of the public, five from lawyers on behalf of clients, two from members of parliament and one from a journalist. Three requests were for personal information.

We released 194 documents, 192 in full. Exemptions applied to documents obtained in confidence, and where disclosure would unreasonably affect personal privacy, unreasonably disadvantage commercial undertakings, or affect legal proceedings.

Outcomes	Finalised requests related to:	Reviews and complaints
Finalised requests 8: Release in full 4 Release in part 4 No documents 0	Environment and planning 7	0
Transferred 1	Business administration 5	
Not yet finalised 1	Personal 3	
Withdrawn 2	Property damage 1	
	Water quality 1	
	Water supply 4	

Reviews and complaints

No decisions were subject to review or complaint.

Access to documents

People wanting access to Melbourne Water documents under the Freedom of Information Act 1982 should write 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 ($28.40 from 1 July 2017).

General enquiries concerning Freedom of Information may be made by contacting the Freedom of Information Officer by telephone on (03) 9679 7111 between 9am and 5pm Monday to Friday or via email to foi@melbournewater.com.au

Information required under Part II of the *Freedom of Information Act* 1982 is available on our website, melbournewater.com.au under About us, Who we are, Legislation and Policies.

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 Act.

Categories of documents

Melbourne Water uses a computerised records management system to manage our correspondence and documents. We use online computer systems to manage our financial, human resource and other operational activities and plans relating to water supply, waterways, drainage and sewerage responsibilities. Historical archives of our activities are available through the Public Records Office Victoria. More information is in the Part II Information Statement on our website.

Appendix B – Corporate Information (continued)

Building Compliance

Melbourne Water continues to work toward compliance with the *Building Act 1993* across our substantial property and building portfolio. We have in place a compliance program which we continue to action.

Privacy Legislation

Melbourne Water is subject to the *Privacy and Data Protection Act 2014* and the *Health Records Act 2001* and is committed to protecting the privacy of personal and health information it collects and handles. Melbourne Water collects and handles personal and health information only to carry out its functions and activities.

Melbourne Water received no complaints in relation to privacy intrusions this year or notifications of complaints received by the Commissioner for Privacy and Data Protection or the Health Services Commissioner.

Melbourne Water is committed to openness and transparency and welcomes any queries about its approach to privacy. We endeavour to resolve any privacy complaints quickly and effectively.

People may access their personal and health information at Melbourne Water. People wanting to access their information, seek a copy of our Privacy Policy or make a privacy complaint, should call 131 722 (within Victoria) or (03) 9679 7100 (within the rest of Australia) or write to:

Privacy Advisor
Melbourne Water
PO Box 4342
Melbourne VIC 3001

Financial Management

Other information as required under the *Financial Management Act 1994*, but not specifically referred to, has been retained by the Accountable Officer and is available to the Minister, Members of Parliament and the public on request.

Other Information Available on Request

In compliance with the requirements of the Standing Directions of the Minister for Finance, details in respect of the items listed below have been retained by Melbourne Water and are available on request, subject to the provisions of the *Freedom of Information Act 1982*:

Further information is available on request about:

- pecuniary interests of relevant officers
- details of shares held by a senior officer as nominee or held beneficially in a statutory authority or subsidiary
- details of changes in prices, fees, charges, rates and levies charged if relevant
- details of Melbourne Water publications
- committees chaired by Melbourne Water
- major external reviews carried out on Melbourne Water
- research and development activities
- overseas visits
- major promotional, public relationship and marketing activities
- Melbourne Water's Code of Conduct.
- assessments and measures to improve the occupational health and safety of employees
- statement of industrial relations
- details of time lost through industrial accidents and disputes
- major sponsorships.

Phone 131 7822 or (03) 9679 7100 (within the rest of Australia) or visit www.melbournewater.com.au

Protected Disclosure

The *Protected Disclosure Act 2012* encourages and assists people in making disclosures of improper conduct by public officers and public bodies. The Act provides protection to people who make disclose in accordance with the Act and establishes a system for the matters disclosed to be investigated and rectifying action to be taken.

Melbourne Water does not tolerate improper conduct by employees nor reprisals against those who come forward to disclosure such conduct. We are 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 Protected Disclosure Procedures.

Where a disclosure is brought to Melbourne Water's attention by an investigative body, Melbourne Water will take all reasonable steps to protect people who make such disclosures from any detrimental action in reprisal for making the disclosure. We will also afford natural justice to the person who is the subject of the disclosure to the extent it is legally possible.

How do I make a 'protected disclosure'?

You can make a protected disclosure about Melbourne Water or its Board members, officers or employees by contacting the Independent Broad-Based Anti-Corruption Commission (IBAC) Victoria using the contact details provided below.

Please note that Melbourne Water is not able to receive protected disclosures. Melbourne Water has had no incidents of corruption in 2016-17

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 in reprisal for making a protected disclosure about Melbourne Water or its employees. You can access our procedures at melbournewater.com.au

Contacts

Melbourne Water
Bernadette Doyle, General Counsel
Melbourne Water
PO Box 4342
Melbourne VIC 3001
Phone (03) 9679 7111

Independent Broad Based Anti-Corruption Commission Victoria
Level 1, North Tower, 459 Collins Street
MELBOURNE VIC 3000

GPO Box 24234
Melbourne VIC 3000

www.ibac.vic.gov.au
Phone: 1300 735 135

See the IBAC website for the secure email disclosure process which also provides for anonymous disclosures.

Industry Memberships

Melbourne Water maintains several industry memberships and associations, particularly those associated with the Australian water industry and provision of infrastructure. We frequently serve on committees from both a governance perspective and on issue specific initiatives. We engage frequently with the following organisations:

- Water Services Association of Australia
- VicWater
- Stormwater Victoria
- Water Research Australia
- Australian Water Association
- Infrastructure Partnerships Australia
- Institute of Water Administration
- Committee for Melbourne
- Global Compact Network
- CEDA – Committee for the Economic Development of Australia
- Association of Land Development Engineers Australia
- Engineers Australia.

As a 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 the 1 July 2014. These reforms introduced a 'source' and 'delivery' bulk entitlement 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').

As the Resource Manager for the Melbourne headworks system, Melbourne Water allocates water to the primary entitlement holders by making seasonal determinations to them. Melbourne Water is also the Storage Manager (under section 171B of the *Water Act 1989*) for water sources in the Melbourne headworks system. The following table fulfils the reporting requirements in Melbourne Water's bulk entitlements.

Melbourne Water's Thomson bulk entitlement was amended in 2017 as a consequence of amendments to the Victorian Environmental Water Holder's Thomson bulk entitlement.

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[10] (WSE000041)
The amount of water taken by PEHs in 2016-2017 (i) Total inflows[a]; (ii)Total storage volumes[b]; and (iii)Total outflows[c]	N/A	Clause 15.1 (a) (i). 351,269 ML (ii). 448,995 ML (iii). 355,627 ML	Clause 14.1 (a) (i). 3,058 ML (ii). No storage is available in Silver & Wallaby (iii). 3,058 ML	Clause 15.1 (a) (i). 127,858 ML (ii). 644,456 ML (iii). 86,383 ML	Clause 15.1 (a) (i). 15,703 ML (Tarago) 2,190 ML (Bunyip) (ii). 33,181 ML (Tarago) No storage is available in Bunyip (iii). 13,475 ML (Tarago) 2,190 ML (Bunyip)
Compliance with the diversion limit	393,499 ML[1]	Clause 15.1 (b) 277,520 ML[3]	Clause 14.1 (b) 5,571 ML[6]	Clause 15.1 (b) 113,009 ML[8]	Clause 15.1 (b) 8,862 ML (Tarago)[11] 2,191 ML (Bunyip)[12]
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
Any amendment to this bulk entitlement	N/A	Clause 15.1 (e) Nil	Clause 14.1 (e) Nil	Clause 15.1 (e), Yes[9]	Clause 15.1 (e) Nil
Volume of water made available to PEHs from seasonal determinations (on 1 June 2017)	N/A	Clause 15.1 (f)	Clause 14.1 (f)	Clause 15.1 (f)	Clause 15.1 (f)
		Greater Yarra System – Thomson River Pool[4] 126,159 ML (City West Water) 170,319 ML (South East Water) 181,461 ML (Yarra Valley Water) 13,211 ML (Barwon Water) 826 ML (South Gippsland Water) 826 ML (Westernport Water) 15,068 ML (Western Water)			

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[10] (WSE000041)
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 2017 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 Compliance with the long-term average diversion limit of 555,000 ML was assessed and confirmed using a 15-year rolling average annual diversion. Melbourne Water has proposed a new diversion limit compliance method as required by its bulk entitlements that became effective on 1 July 2014.

Yarra River

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

3 Compliance with the long-term average diversion limit of 400,000 ML was assessed and confirmed using a 15-year rolling average annual diversion. Melbourne Water has proposed a new diversion limit compliance method as required by its bulk entitlements that became effective on 1 July 2014.

Greater Yarra System – Thomson River Pool

4 Greater Yarra System – Thomson River Pool includes the following Bulk Entitlements holds 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 Compliance with the long-term average diversion limit of 171,800 ML was assessed and confirmed using a 15-year rolling average annual diversion. Melbourne Water has proposed a new diversion limit compliance method as required by its bulk entitlements that became effective on 1 July 2014.

9 Amendments as specified in Bulk Entitlement (Thomson River – Melbourne Water) Amendment Order 2017.

Tarago and Bunyip rivers

10 Melbourne Water holds the Bulk Entitlement (Tarago and Bunyip Rivers – Melbourne Water) Order 2014 – WSE000041.

11 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.

12 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.

Appendix C – Bulk Entitlements (continued)

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 2016–17	Clause 19.1 (b), 467 ML
Compliance with the five-year rolling average annual Bulk Entitlement diversion limit of 1056 ML	360 ML
Melbourne Water's share of flow into Rosslynne Reservoir in 2016–17	Clause 19.1 (a,iii), 869 ML
Melbourne Water's share of storage volume in Rosslynne Reservoir at 30th June 2017	Clause 19.1 (a,ii), 986 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 2016–17	Clause 19.1 (a, i), 298 ML
Releases from Melbourne Water's share of flow to meet minimum flows	Clause 19.1 (a,v), 176 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[3]
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

[3] In total 33 transfers of licences were made: 1) two licences traded; 2) two licences surrendered; 3) 29 licence transfers to Victorian Environmental Water Holder with 304ML.

Appendix D – Private Diversion Licences

Melbourne Water manages 1828 licences to use water from farm dams and waterways in the Yarra River, Maribyrnong River, Stony Creek, Kororoit Creek, Laverton 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 1217 with a combined volume of 35,099.8 ML.

Outside of the permanent management trigger and restriction conditions enacted under the Diversions Water Sharing Plan for all Licenced Water Users, Melbourne Water has not invoked its Drought Response Plan during 2016-17.

Licence Totals	No. Licences	Volume (ML)	Metered Usage
Farm Dam Registrations	524	6,860.5	24.0
Farm Dam Licences	41	943.5	163.8
Take & Use Licences Yarra	1172	34,079.4	6,797.1
Take & Use Licences Maribyrnong	45	1,020.4	74.6
Stormwater Licences	42	2,516.4	763.3
Environmental Water Licence	4	114.0	N/A

Appendix E – Flooding and Drainage

	2016-17	2015-16	2014-15	
Underground Drains				
Total Length of Melbourne Water Assets	1668	1618	1604	km
Total Length of Melbourne Water Assets excluding drainage scheme areas	1061	1022	1008	km
Mapped 100yr ARI	867	809	809	km
Percentage Mapped	81	79	80	%
Mapped 20yr ARI	517	486	Not estimated	km
Percentage Mapped	49	47	Not estimated	%
Mapped 10yr ARI	196	180	180	km
Percentage Mapped	18	18	18	%
Mapped 5yr ARI	154	138	11	km
Percentage Mapped	15	14	1	%
Natural Waterways				
Total Length of Melbourne Water Assets	8684	8685	8647	km
Total Length of Melbourne Water Assets excluding drainage scheme areas, forested areas and French Islands	5616	5661	5447	km
Mapped 100yr ARI	3990	3350	2815	km
Percentage Mapped	71	60	52	%
Mapped 20yr ARI	254	194	Not estimated	km
Percentage Mapped	5	4	Not estimated	%
Mapped 10yr ARI	256	196	104	km
Percentage Mapped	5	4	4	%
Mapped 5yr ARI	236	178	127	km
Percentage Mapped	4	4	4.5	%
Channels				
Total Length of Melbourne Water Channels	1859	1490	1490	km
Mapped 100yr ARI (underground drains)	134	81	76	km
Mapped 100yr ARI (waterways)	1416	1288	1163	km
Mapped 100yr ARI (total)	1560	1369	1239	km
Percentage Mapped	84	92	83	%
Total				
Total length of Melbourne Water Assets	12,211	11,793	Not estimated	
Total length of Melbourne Water Assets excluding drainage scheme areas, forested areas and French Island	8536	8173	Not estimated	
Mapped 100yr ARI	6417	5528	Not estimated	
Percentage Mapped	75	68	Not estimated	

Appendix F – Environmental Data

Energy Consumption

Our electricity consumption for water supply and waste water treatment over the past five years in megawatt hours (MWh) is set out in the following tables.

Electricity consumed for water supply	2012-13	2013-14	2014-15	2015-16	2016-17	Variance	Commentary
Electricity consumption - water supply (MWh)	41,540	43,989	32,662	51,855	57,950	12%	Increased water pumping at Winneke treatment plant to supply Sugarloaf reservoir.
Electricity export - water supply (MWh)	35,668	52,240	55,753	63,865	53,281	-17%	Reduced hydrogeneration in 2016-2017.
Net electricity consumption - water supply (MWh)	5872	-8250	-23,091	-12,010	4670	-139%	More electricity from the grid and less electricity supplied from hydrogeneration.

Electricity consumed and during waste transfer and treatment (MWh)	2012-13	2013-14	2014-15	2015-16	2016-17	Variance	Commentary
Electricity consumption (total) – wastewater (MWh)	242,345	232,500	239,512	244,520	260,551	7%	Increased grid import at the Eastern Treatment Plant.
Electricity consumption (generated and used on site) – wastewater transfer and treatment (MWh)	90,203	80,864	87,322	93,917	96,225	2%	
Net electricity consumption – wastewater transfer and treatment (MWh)	151,616	150,630	151,548	149,975	159,681	6%	Reduced generation at Eastern Treatment Plant and increased grid import.
Electricity export – wastewater transfer and treatment (MWh)	526	1006	641	627	4645	641%	Increased generation at Western Treatment Plant due to higher volumes of biogas.

Appendix F – Environmental Data (continued)

Greenhouse Gas Emissions

Greenhouse gas emissions over the past five years in equivalent tonnes of carbon dioxide (t-CO2e)	2012-13	2013-14	2014-15	2015-16	2016-17	Variance	Commentary
Water transfer and treatment (t-CO2e)	49,914	52,500	38,352	58,631	63,315	8%	Increased scope 2 emissions due to imported electricity.
Wastewater transfer and treatment (t-CO2e)	325,010	277,335	265,274	403,533	368,955	-9%	Increased generation at Western Treatment Plant lower scope 2 emissions.
Waste disposal (t-CO2e)	-	-	-	-			
All other energy use (non-fleet) (t-CO2e)	2414	9680	10,219	3154	3370	7%	Increase in stationary energy usage increasing scope 1 emissions.
Vehicle fleet (t-CO2e)	6860	2226	2362	2750	2689	-2%	

Melbourne Water Corporate Consumption

Melbourne Water's consumption is 1.997kl or 1.9kl/FTE/year based on our operations at our corporate office at 990 La Trobe Street.

Appendix G – Workforce Statistics

Safety

The following safety statistics are provided as additional information in support of statutory reporting and other obligations.

Table G1 – Number of reported safety incidents per 100 full time equivalent (FTE) staff

	FTE	Hazards	Hazards/ 100 FTE	Incidents	Incidents/ 100 FTE	Total	Total/ 100 FTE
2015-16	972	467	48.0	409	42.1	876	90.1
2016-17	1002	503	50.2	438	43.7	941	93.9

Table G2 – Number of lost time standard claims for the year per 100 FTE

	Number of Claims	Claims/100 FTE
2015-16	4	0.41
2016-17	1	0.10

Table G3 – Average cost per claim for the year (including payments to date and estimates of outstanding claim costs advised by WorkCover)

	Cost of Claim $
2015-2016	34,730
2016-2017	65,339

Table G4 – Types of Injury

	2016-17
Lost time injury (LTI)	6
Restricted work injury (RWI)	1
Medical treatment injury (MTI)	5
First Aid	78
Total	**90**

Total lost days in 2016-17 were 21.

Appendix G – Workforce Statistics (continued)

People

The following employee related statistics are provided as additional information in support of statutory reporting and other obligations.

Table G5 – Employee profile 2016-17

	Full time permanent employees (Headcount)	Part time permanent employees (Headcount)	Permanent employees (Headcount)	Fixed term and casual employees (Headcount)	Permanent employees (FTE)	Fixed term and casual employees (FTE)
Jun-16	812	126	938	N/A	885	74
Jun-17	834	144	978	136	946	94

Employee profile by type 2016-17

	Jun-16			Jun-17						
	Ongoing Full Time		Fixed term and casual	All Employees[5]		Ongoing			Fixed term and casual	
	Headcount	FTE	FTE	Number Headcount	FTE	Full Time Headcount	Part Time Headcount	FTE	Number Headcount	FTE
Gender										
M	638	632	43	723	700	618	35	648	70	52
F	300	253	30	391	340	216	109	298	66	42
Age										
Under 25	10	10	9	19	16	10	0	10	9	6
25-34	251	238	25	288	272	224	24	243	40	29
35-44	313	282	13	363	338	257	74	312	32	26
45-54	226	219	15	255	243	205	29	228	21	15
55-64	127	126	10	166	153	131	12	142	23	12
Over 65	11	10	1	23	17	7	5	11	11	7
Classification										
Casual			16	75	36				75	36
Total 1-Senior Officer	606	566	48	653	631	517	86	10	50	48
1				2	2	1	0	243	1	1
2	49	46	2	47	46	43	2	312	2	2
3	72	71	8	68	67	67	1	228	0	0
4	51	49	6	50	48	38	9	142	3	3
5	117	113	12	128	126	105	8	11	15	14
6	104	94	6	111	106	85	21	10	5	5
7	207	189	14	237	227	172	43	243	22	21
Senior Officer	6	6		10	9	6	2	312	2	2
Senior Employees[6]	332	318	9	386	373	317	58	363	11	10
Senior Manager	274	262	9	373	360	304	58	350	11	10
Executives[7]	58	56		13	13	13	0	13	0	0

[5] Graduates are excluded from workforce data, as per FRD29B guidance
[6] Senior employees in FY2017 include Direct Reports to the Leadership Team, who were included in Executives in FY2016
[7] Executive employees in FY2017 are the Leadership Team members only. In FY2016, this also included their Direct Reports. Employees on leave without pay or maternity leave without pay are excluded, as per FRD29B guidance

Total number and rates of new employee hires by age group and gender

Gender	Headcount
M	82
F	73

Age	
Under 25	5
25-34	56
35-44	61
45-54	25
55-64	8
Over 65	0

Total number and rates of employee turnover by age group and gender

Gender	Headcount
M	60
F	43

Age	
Under 25	0
25-34	25
35-44	45
45-54	17
55-64	13
Over 65	3

Hours of training for the financial year 2016-17

	All Melbourne Water		
Age	F	M	All
Total Completed Hours of Training	8296	18851	27147
Total Number of Employees Completed Training	403	747	1150
Average Completed Training Hours Per Employee	21	25	24

Ratio of basic salary and remuneration of women to men by employee category by significant locations of operation

	Ratio (F/M)	
Corporate	Base	Remuneration
MW EA 2	NA	NA
MW EA 3	1.00	1.01
MW EA 4	1.00	1.00
MW EA 5	1.00	0.97
MW EA 6	1.00	1.00
MW EA 7	0.99	0.99
SO	NA	NA
Senior Management	0.98	0.97
Executive	0.95	0.96

	Ratio (F/M)	
Service Delivery	Base	Remuneration
MW EA 2	1.10	1.00
MW EA 3	1.01	0.95
MW EA 4	1.06	0.93
MW EA 5	0.98	0.86
MW EA 6	0.99	0.88
MW EA 7	0.99	0.92
SO	0.89	0.86
Senior Management	0.92	0.89
Executive	1.05	1.06

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
- 93.8% of employees were covered by the Enterprise Agreement
- Human rights are not part of Melbourne Water's current training program
- No incidents of discrimination have been raised with Melbourne Water
- No incidents of violations involving the rights of indigenous peoples have occurred
- No incidents of human rights violations have been recorded.

Appendix G – Workforce Statistics (continued)

Local Jobs First – Victorian Industry Participation Policy (VIPP)

In accordance with the *VIPP Act 2003*, the following VIPP contracts commenced or were completed during the 2016-17 financial year.

Contracts commenced to which the VIPP applied

Melbourne Water commenced 10 metropolitan contracts to which the VIPP applied. These contracts totalled $90.5 million. The Industry Capability Network (ICN) deemed that there were no contestable items on 4 contracts and therefore a VIPP plan was not required.

The commitments by contractors that required a VIPP plan included:

- local content of 84% of the total value of the contracts
- 389 full time equivalent jobs
- 18 full time equivalent apprenticeships and traineeships.

Contracts completed to which the VIPP applied

The Corporation completed 11 metropolitan contracts to which the VIPP applied. These contracts totalled $111.7 million.

The outcomes reported by contractors under the VIPP included:

- local content of 95% of the total value of the contracts
- 266 full time equivalent jobs
- 12 full time equivalent apprenticeships and traineeships.

Please Note: Outcomes for one contractor have not been included as the contractor did not provide the VIPP Monitoring Table and Statutory Declaration in the required timeframe.

Grants and Design Contracts

For design contracts where the project being designed is over the $3.0 million VIPP threshold, the successful contractor must involve the ICN in the design process. The ICN's involvement ensures that the design, where possible, does not disadvantage local suppliers. The issue of an interaction reference number (IRN) signifies that this has occurred. For the year ending 30 June 2017 the following design contracts over the $3M threshold will require an IRN number:

- Murrumbeena Main Drain
- RIS Penstocks Detailed Design
- North Yarra Deviator Sewer Functional Design.

Strategic Projects:

One Strategic Project was commenced to which VIPP was applied. This contract was for the WTP Treatment Capacity Increase Project Phase 2. The commitment by the contractor that required a Local Industry Development Plan (LIDP) included:

- local content of 85 per cent of the total value of the contracts
- 85 full time equivalent jobs
- 11 full time equivalent apprenticeships and traineeships.

Appendix H – Global Reporting Initiative

Melbourne Water is signatory to the UN Global Compact and supports the UN Sustainable Development Goals. Part of our commitment to the SDGs is an annual report on progress in how we are advancing the goals.

Melbourne Water's approach to reporting against the SGDs is through our Strategic KPIs in our *Corporate Plan* and through a formal sustainability reporting mechanism, the Global Reporting Initiative (GRI).

GRI and the UN Global Compact have established an initiative '*Business Reporting on the SDGs*' which will produce a handbook in December 2017 for SDG business reporting in the meantime. This report adopts the GRI Sustainability Standards (conforming to Core level of reporting)[2] as they are the current global standard for sustainability reporting and represent best practice. They are designed to be used by organisations to report about their impacts on the economy, the environment and/or society.

Sustainable Development and Materiality

Sustainability reporting requires an organisation to report on their significant economic, environmental and social impacts or that substantively influence the assessments and decisions of stakeholders.

In order to determine the issues that are material to Melbourne Water, engagement was undertaken to establish the relative significance of the SDGs to Melbourne Water's strategic activities and to understand our impact or influence on the UN Sustainable Development Goals. Melbourne Water stakeholders, customers, and staff contributed to an understanding of what SDGs are material to us and where opportunities for leadership lie. The following activities were undertaken to support this materiality assessment:

- external stakeholder interviews
- interviews with Melbourne Water Leadership Team and managers
- all staff survey
- mapping of Melbourne water strategies and activities against the SDGs and targets
- review of industry priorities
- review of peer reporting.

The results showed that Melbourne Water impacts across all 17 goals, albeit to differing degrees. The goals that are most material to us, SDGs 6, 11 and 15, align with the three pillars of our strategic direction. SDGs 3, 5, 7, 8, 9, 12, 13, 14 and 17 also featured as material with Melbourne Water having less direct impact on SDGs 1, 2, 4, 10 and 16.

Melbourne Water's approach to sustainable development and to supporting the SDGs is to enhance our contribution across all UN SDGs, while demonstrating leadership for SDGs 6, 11 and 15.

Given this, our GRI reporting (Core) covers most topics. In the few cases where specific disclosures are not relevant to our organisation they have been noted in the table. We have also reported on issues as they relate to the UN Global Compact Communication on Progress (see Appendix I, The UN Global Compact).

[2] Melbourne Water's 2015-16 Annual Report used G4 Guidelines this year we have moved to the GRI Standards framework

Appendix H – Global Reporting Initiative (continued)

Reporting

The *Melbourne Water Annual Report 2016-17* content was defined through a combination of extensive, business wide consultation, including with senior management and executives. Melbourne Water is also required to report under a range of regulatory instruments and our content 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 Global Reporting Initiative Standards disclosures.

Melbourne Water has not sought to have this report externally assured this year.

Our last Annual Report was published in 2015-16. 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	3, 8-44
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	71-72
GRI 102-6	Report the markets served	3, 46-51
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	58, 64-75, 161-164
GRI 102-8	Information on employees and other workers	161-164
GRI 102-9	Describe the organisation's supply chain	51, 70
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.	75
GRI 102-12	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses	170-172
GRI 102-13	Membership of associations	153
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	4-5, 6, 171-172
GRI 102-16	Values, principles, standards, and norms of behaviour	71
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	71-75
GRI 102-40	Provide a list of stakeholder groups engaged by the organisation	13, 19, 22-23, 25-26, 71-72
GRI 102-41	Percentage of total employees covered by collective bargaining agreements	163
GRI 102-42	Report the basis for identification and selection of stakeholders with whom to engage	71-75
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	119, 22-23, 25-26, 43-44, 71-72, 165

H1: General Disclosures (continued)

Indicator	Disclosure	Location
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	19, 22-23, 25-26, 43-44, 71-72, 165
GRI 102-45	Entities included in the consolidated financial statements	76-78
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	165-169
GRI 102-47	List all the material Aspects identified in the process for defining report content	165-169
GRI 102-48	Restatements of information	N/A
GRI 102-49	Significant changes from previous reporting periods in the list of material topics and topic Boundaries	N/A
GRI 102-50	Reporting period for information provided.	Front cover
GRI 102-51	Date of most recent previous report.	2015-16
GRI 102-52	Reporting cycle	Annual
GRI 102-53	Contact point for questions regarding the report	Inside Cover
GRI 102-54	Claims of reporting in accordance with the GRI Standards	166
GRI 102-55	GRI content index	166-169
GRI 102-56	External assurance	166

Appendix H – Global Reporting Initiative (continued)

H2: Economic Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		10, 16, 30, 166,
103-2	The management approach and its components		69-71, 153
103-3	Evaluation of the management approach		71-72
Material topics			
201-1	Economic Performance	Direct economic value generated and distributed	79-139
202-2	Market Presence	Proportion of senior management hired from the local community	161-164
203 -1	Indirect Economic Impacts	Infrastructure investments and services supported	8-19, 28-44
204-1	Procurement Practices	Proportion of senior management hired from the local community	161-164
205-1	Anti-corruption	Confirmed incidents of corruption and actions taken	153
206-1	Anti-competitive Behaviour	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	150

H3: Environmental Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		165
103-2	The management approach and its components		8,27-28
103-3	Evaluation of the management approach		71-72
Material topics			
301-1	Materials	Materials used by weight or volume	10-14
302-1	Energy	Energy consumption within the organisation	40, 159-160
303-1	Water	Water withdrawal by source	13-15
304-1	Biodiversity	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	35-36
305-1	Emissions	Direct (Scope 1) GHG emissions	40, 159-160
306-1	Effluents and Waste	Water discharge by quality and destination	27
307-1	Environmental Compliance	Non-compliance with environmental laws and regulations	17-18, 31, 34

H4: Social Indicators

Indicator	Disclosure		Location
Management Approach			
103-1	Explanation of the material topic and its Boundaries		52-58
103-2	The management approach and its components		55-57
103-3	Evaluation of the management approach		71-72
Material topics			
401-1	Employment	New employee hires and employee turnover	163
402-1	Labor/Management Relations	Minimum notice periods regarding operational changes	163
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	53,161
404-1	Training and Education	Average hours of training per year per employee	163
405-1	Diversity and Equal Opportunity	Diversity of governance bodies and employees	72-74 162-164
405-2	Diversity and Equal Opportunity	Ratio of basic salary and remuneration of women to men	163
406-1	Non-discrimination	Incidents of discrimination and corrective actions taken	163
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	163
408-1	Child Labor	Operations and suppliers at significant risk for incidents of child labor	51, 70-72
409-1	Forced or Compulsory Labor	Operations and suppliers at significant risk for incidents of forced or compulsory labor	51, 70-72
411-1	Rights of Indigenous Peoples	Incidents of violations involving rights of indigenous peoples	163
412	Human Rights Assessment	Employee training on human rights policies or procedures	163
413-1	Local Communities	Operations with local community engagement, impact assessments, and development programs	22-23, 43-44, 50-51
414-1	Supplier Social Assessment	New suppliers that were screened using social criteria	51, 70
415-1	Public Policy	Political contributions	153
416-2	Customer Health and Safety	Incidents of non-compliance concerning the health and safety impacts of products and services	140-144
418-1	Customer Privacy	Substantiated complaints concerning breaches of customer privacy and losses of customer data	150-151
419-1	Socioeconomic Compliance	Non-compliance with laws and regulations in the social and economic area	71

Appendix I – The UN Global Compact

The following index shows where we have reported our policies, programs and actions that align with the 10 principles of the UN Global Compact within this Annual Report.

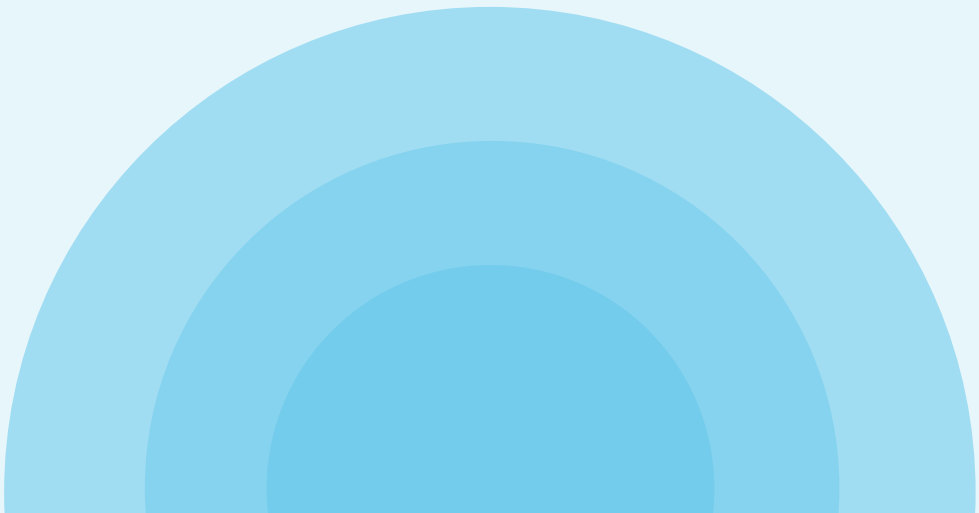
Global Compact Principles	Description	Page Reference
Human Rights		
1. Businesses should support and respect the protection of internationally proclaimed human rights	Melbourne Water's commitment to these principles is demonstrated in our commitment to building a diverse workforce and an inclusive workplace culture, underpinned by the fundamental consideration for the health, safety and wellbeing of our staff, customers and community. This commitment is implemented through the following strategies and programs, detailed within this report:	
	• Diversity Strategy and associated programs	55-56
2. Make sure that they are not complicit in human rights abuses	• Safety performance, measurement and programs	53-54
	• Our management of customers' confidential and personal information	71, 150-153
	• Our actions toward Reconciliation and Aboriginal Engagement	50-51
Labour		
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Melbourne Water's commitment to these principles is demonstrated in our commitment to building a diverse workforce and an inclusive workplace culture. Our commitment to ensuring equality and fair treatment across the business is detailed in this report through:	
	• Continued analysis of our workforce statistics to support programs	161-164
4. The elimination of all forms of forced and compulsory labour.	• Diversity Strategy and associated programs, including inclusion, gender equity, parental leave, domestic violence leave and flexible working arrangements	55-58
	• Our actions toward increasing cultural awareness	50-51
5. The effective abolition of child labour.	• The Melbourne Water Enterprise Agreement 2016 sets our terms and conditions of employment, and is a collective agreement between Melbourne Water, enterprise agreement employees and their union representatives. This agreement does not cover Senior Managers or the Waterways and Land Delivery team. The agreement was approved by the Fair Work Commission.	163
6. The elimination of discrimination in respect of employment and occupation.	• Our management of suppliers	51, 70

Global Compact Principles	Description	Page Reference
Environment		
7. Businesses should support a precautionary approach to environmental challenges. 8. Undertake initiatives to promote greater environmental responsibility. 9. Encourage the development and diffusion of environmentally friendly technologies.	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:	
	• Waterway quality programs and supporting strategies	30-34
	• Our flooding and drainage programs and supporting strategies	20-24
	• Our biodiversity program and supporting Environmental Stewardship strategy	35-37
	• Our environmental programs including energy, resource recovery and climate risk management	13, 16-18, 38-42
	• Our community engagement and education programs	19, 43-44
Anti-corruption		
10. Businesses should work against corruption in all its forms, including extortion and bribery.	We are committed to a high standard of governance, with the Melbourne Water Board having overall responsibility for corporate governance. We maintain a fraud and corruption framework, including ongoing education and awareness and avenues for reporting any allegations. We undertake detailed fraud and corruption risk assessments in line with our Enterprise Risk Management Framework, consistent with the requirements of the Victorian Government Risk Management Framework 2015. We have an extensive compliance management framework ensuring ongoing compliance with relevant laws and regulations including the *Independent Broad-Based Anti-Corruption Commission Act 2011* and the *Protected Disclosure Act 2012*. We provide assurance over our control environment through a robust assurance management program. This commitment is implemented through the following strategies and programs, detailed within this report:	
	• Our corporate governance programs and policies	71-72
	• Our risk management program and frameworks	75
	• Our compliance in accordance with Acts of Parliament	75, 150-151, 153
	• Our Code of Conduct	www.melbournewater.com.au

Appendix J – Water for Victoria

The following index shows where we have reported our policies, programs and actions that align with the priority areas of *Water for Victoria* within this Annual Report.

Priority Area		Page Reference
Climate Change	Provide services that minimised environmental impacts, mitigate climate change and put in place adaptation strategies	13, 38-42
Customer and Community Outcomes	All aspects of services delivery will be customer and community centred	4-5
	Customer satisfaction	46-48
	Engagement with community	43-44
	Water quality	14-15, 142
Water for Aboriginal cultural, spiritual and economic values	Recognise and support Aboriginal cultural values and economic inclusion in water sector	13, 32, 50-51
Resilient and liveable cities and towns	Contribute to healthy communities by supporting safe, affordable, high quality services and resilient environments	24-26
Recognising recreational values	Support the wellbeing of rural and regional communities by considering the recreational values in water management	28-34, 44
Leadership and Culture	Water corporations reflect the needs of our diverse communities	50-58, 71, 161-164
Financial Sustainability	Delivering safe and cost effective water and wastewater services in a financially sustainable way	4-5 64-70



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