Corporate Plan
2016/17 to 2020/21

Victoria State Government
Melbourne Water
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Executive Summary

Melbourne Water’s vision is Enhancing Life and Liveability and we achieve this through our world-class water services. Our services support community wellbeing, strengthen Melbourne’s reputation as a desirable place to live and enhance our natural environment.

To achieve these outcomes, we continue to evolve the way our business operates. We are focussed on delivering a customer-centric service and creating a high performing environment that inspires our employees to achieve. We embed continuous improvement in all facets of our service. Importantly, we are committed to delivering our services in a cost effective and financially sustainable environment.

Delivering World Class Services

Melbourne Water has delivered water services to the Melbourne community for over 125 years. From its origins in 1891, the planning of Melbourne’s water supply and sewerage systems have stretched far into the future, delivering services that frequently anticipated a problem before it became material. Melbourne’s pristine, closed catchments and gravity fed supply and sewerage systems remain leading innovations that continue to deliver benefits for Melbourne.

Melbourne Water continues the tradition of future-focused and innovative water services for Melbourne. In an era of decreasing rainfall paired with increasing population, environmental pressure and agricultural, industrial and recreational demands, Melbourne Water is maintaining a secure and affordable service. We actively seek and implement operational efficiencies and return price reductions and true value for consumers.

In March 2016, the first order from the Victorian desalination plant was announced. Water from the Desalination Plant is an important part of our strategy to provide a secure water supply service for Melbourne. This water will be used to bolster the water levels in Melbourne’s supply reservoirs.

The upgrade of the Western Treatment Plant at Werribee will deliver maximum value for our customers and the environment. We are using a novel delivery approach and innovative treatment technology that will minimise whole of life costs and energy consumption.

Melbourne Water is delivering many new services on behalf of the community. In 2016, we released the ‘Our Place, Your Space’ program, aimed at engaging the community with the latent recreational value of Melbourne Water’s urban land. The application (available on multiple digital platforms) promotes Melbourne Water’s assets that are available for community use across the city. These services are aimed at providing tangible benefits to the health and resilience of the community and making a strong contribution to Melbourne’s reputation as a ‘liveable city’.

As a significant energy consumer, Melbourne Water is directly addressing the challenge of mitigating our carbon emissions. We have hydroelectric generators throughout our water supply network, for which ongoing expansion is planned. In addition, we continue to capture and utilise methane gas from our sewerage systems for power generation.
Future-Focussed

Melbourne Water’s success is underpinned by long-term planning, investigation and analysis that ensures our services are appropriate, both now and in the future. Our activities over the period 2016/17 to 2020/21 are extensive; some highlights include:

> Planning for the future security of water supply across Melbourne.
> Developing integrated water management plans for Melbourne’s growth areas that reflect best practice use of the resource.
> Advancing our Low Carbon Future Plan.
> Implementing the Waterways and Drainage Investment Plan and the Port Phillip and Westernport Flood Management Strategy.
> Continuing our focus on customer service through our Customer Focus program.
> Maintaining cost effective services to our customers and financial viability.

Melbourne Water maintains nearly $15B in assets for the benefit of the community of Melbourne. To sustain this asset base and ensure it meets regulatory compliance, expected population growth, operational requirements and service standards, we will continue to invest in development and renewals. Over the 5-year period from 2016/17, Melbourne Water will invest over $2.7B in capital projects to maintain our assets.

Maintaining Financial Sustainability

The supply of our services at an affordable and equitable cost is a fundamental principle on which Melbourne Water operates. Our 2016 Price Submission showed we could deliver our services while reducing our charges; the first time this has occurred since independent price regulation began. This will see further savings on residential customers’ bills over those committed to as part of the $100 Government Water Rebate, which are now locked in for the long term.

Melbourne Water is currently waiting the final price decision from the Essential Services Commission, expected in June 2016.

<table>
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<th>2016/17 to 2020/21</th>
<th>REVENUE</th>
<th>DIRECT OPERATING EXPENDITURE</th>
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Healthy People, Healthy Places, Healthy Environment
For over 125 years, Melbourne Water and its predecessor, the Melbourne Metropolitan Board of Works, have provided essential services to the community of Melbourne – water supply, sewerage services, flood mitigation and environmental protection.

While these remain at the core of Melbourne Water’s services, continuing to ‘enhance life and liveability’ in an era of rapid change requires ongoing evolution. In 2016 Melbourne Water continued this journey, beginning with a review of our Strategic Direction. The refreshed Strategic Direction introduced three ‘pillars’ to our services – Healthy People, Healthy Places and Healthy Environment.

### Healthy People

**Strengthening the wellbeing of the community**

As Melbourne grows, the community will continue to receive safe, secure, affordable, world-class drinking water. We safely treat our sewage to protect public health and enhance environmental outcomes. Adapting our services to an increasingly variable climate, we will be proactive in ensuring all our water resources are smartly managed and supported by our protected catchments. We support Melburnians to live healthy lifestyles. As a large land and waterway manager, Melbourne Water will increase community wellbeing by improving access to natural spaces and recreational facilities. As expectations change, we will closely engage the community to ensure we provide the best services.

### Healthy Places

**Co-creating the world’s most desirable places to live**

We continue to make our region resilient to floods and manage the impacts of climate change and urban development. The urbanisation of Melbourne will increase the demand for valued public open space and natural assets facilitate community access to quality open space. As the climate changes, we will partner to deliver a water sensitive city through innovative integrated planning, creating a greener, cooler urban environment. We work with industry and agriculture on sustainable water and land management to advance economic development in our region.
Healthy Environment

Enhancing the natural environment

We continue to improve the quality of waterways and enhance biodiversity in an increasingly urbanised region. We help create a sustainable region through innovative resource recovery and reducing our emissions. We establish healthy ecosystems by managing waterways from catchment to coast. We empower people to help protect our natural assets. Through engagement and education programs, we will help build a community that values water and the environment.

Mitigating our climate change impact

Melbourne Water is using the energy in our water supply network to generate electricity. We currently host nine hydroelectric generators across our networks, which are primarily used to provide energy to run the water supply system. In 2014/15, 56,000MWh of electricity was generated.

In the last two years, the system has generated more electricity than needed to run the water supply system. The additional electricity was fed into Victoria’s energy grid, supplementing the amount of renewable energy generated within Victoria. The generated electricity resulted in over 66,000 tonnes of avoided carbon dioxide emissions – the equivalent of taking nearly 14,000 cars off the road.

Melbourne Water is continuing to invest in the development of hydroelectric generation. We currently have an additional five hydroelectric generators that are due for installation and a further eight in the planning phase. This will further increase Melbourne Water’s renewable energy generation capacity and further reduce the state’s carbon dioxide emissions.
Water Supply

The world class quality and reliability of the water supplied contributes significantly to making Melbourne a desirable place to live and supports our ‘Healthy Places’ pillar. Melbourne Water recognises the value of the resource we manage and has established significant programs to minimise the impact of water supply on the environment, supporting our ‘Healthy Environment’ pillar.

Melbourne Water’s supply network consists of several large storages, treatment facilities and transfer infrastructure (Figure 1).

Water production and storage facilities consist primarily of 11 large storages. The Victorian Desalination Plant supplements the water in these storages. During the 2016/17 to 2020/21 planning period, the focus for the storages is a program of ongoing upgrade and maintenance works to the dams to continue to meet the standards and expectations of Melbourne’s residents.

The Victorian Desalination Plant provides a rainfall independent source of water for Melbourne, significantly increasing the security of our water supply system during periods of low rainfall and mitigating the long-term impacts expected from climate change. On the 6th of March 2016, the Minister announced the first water order from the Desalination Plant. The 50GL order will be piped into Cardinia Reservoir where it will mix with water from the Thomson and Upper Yarra catchments. Additional water orders over the 2016/17 to 2020/21 period will be determined annually by the Minister.

Figure 1 – Melbourne’s water supply network

Water supply pipelines and aqueducts
• Retail water area boundary
• Water supply catchment area
• Water supply storage reservoir

Water supply storage reservoirs:
1. Greenvale
2. Toorourrong
3. Yan Yean
4. Sugarloaf
5. Maroondah
6. O’Shannassy
7. Upper Yarra
8. Thomson
9. Tarago
10. Silvan
11. Cardinia

from Victorian Desalination Plant
Water transfer is an integral part of Melbourne Water’s supply network and provides the mechanism by which water reaches our customers. Our existing transfer network is characterised by large pipes connected and operated by many thousands of mechanical and electrical assets. The pipe network contains both new and aging infrastructure, some reaching the end of its serviceable life. The planning period 2016/17 to 2020/21 will see the continuation of the program of ‘new for old’ replacements. Electrical and mechanical assets require frequent maintenance and renewal to meet customer service levels. Melbourne Water has an asset renewal, maintenance and repair program that will continue over 2016/17 to 2020/21. An important milestone was achieved in early 2016 with the turning on of the Melbourne to Geelong pipeline to provide water to Barwon Water.

Protecting public health through managing water quality remains a high priority for Melbourne Water, with Melbourne considered to have some of the highest quality drinking water in the world. Key drinking water quality challenges for Melbourne Water arise from increasing development in open catchments, demand for environmental and recreational water, security risks and the potential for more frequent environmental impacts – for instance blue-green algae blooms. Over the 2016/17 to 2020/21 planning period, Melbourne Water will continue to monitor, assess and reduce the risks from these threats.

### Capital Program

Planned capital expenditure on water supply projects over the 2016/17 to 2020/21 period totals $470M or approximately 18% of Melbourne Water’s total capital expenditure. Water supply expenditure is mostly driven by renewals of water transfer pipelines and mechanical and electrical assets, with some growth and compliance-driven projects. Significant capital projects are shown in Figure 2 and Appendix B.

### Revenue and Expenditure

For the 2016/17 to 2020/21 period, forecast revenue for water supply services is $4,854M and expenditure is $1,593M. Total expenditure is comprised of $470M in capital expenditure (Figure 3A) and $1,123M in operational expenditure (Figure 3B). Total expenditure on water supply services represents 30% of Melbourne Water’s total expenditure.

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1 Melbourne Water defines significant capital projects as those with an investment of greater than $5M over the 2016/17 to 2020/21 period.
**Figure 2 – Significant water supply capital projects over 2016/17 to 2020/21**

- **Merri Creek to MCG Water Main Renewal**
- **Maroondah Aqueduct Renewal (sections)**
- **Winneke Treatment Plant – Ultraviolet disinfection system**
- **Aqueduct renewals program**
- **St Georges Rd Water Main Renewal (section of M40)**

**Figure 3a and 3b – Capital and direct operating expenditure for water supply services 2016/17 to 2020/21**

- **Labour** $135.9M
- **External Services** $157.6M
- **Materials** $31.4M
- **Information Technology** $3.6M
- **Energy** $43.3M
- **Fees and Charges** $9.3M
- **Transport** $3.9M
- **Other** $8.4M
- **Land Tax** $56.1M
- **Victorian Desalination Plant** $673M

**Expenditure Breakdown**

- **Growth** $44.1M
- **Renewals** $310.0M
- **Strategic/Risk Mgt** $68.8M
- **Compliance** $47.1M
- **External Services** $157.6M
- **Materials** $31.4M
- **Information Technology** $3.6M
- **Energy** $43.3M
- **Fees and Charges** $9.3M
- **Transport** $3.9M
- **Other** $8.4M
- **Land Tax** $56.1M
- **Victorian Desalination Plant** $673M

Melbourne Water Corporate Plan 2016/17 to 2020/21
Melbourne Water’s sewerage services underpin the ‘Healthy People’ pillar through the fast and efficient removal of sewage from our houses and suburbs.

Melbourne Water makes significant investments in keeping our sewerage system separate from other water systems and free of overflows and leakage, a significant contribution to making Melbourne a desirable place to live and supporting our ‘Healthy Places’ pillar. The extensive treatment processes and subsequently high standard of effluent released into Port Phillip Bay provides a high degree of environmental protection and supports our ‘Healthy Environment’ pillar.

Most of Melbourne’s sewage is treated at the Western Treatment Plant in Werribee or the Eastern Treatment Plant at Bangholme. We are increasingly recovering and reusing more water, biosolids and energy from the sewage treatment process. Land surrounding our treatment plants supports Melbourne’s immense biodiversity values, providing habitat for native species of plants and animals. Melbourne Water’s sewerage networks and treatment plants are illustrated in Figure 4.

Figure 4 – Melbourne’s sewage treatment systems

Sewerage pump station:
1. Hoppers Crossing
2. Brooklyn
3. Kew
4. North Road
5. Mordialloc No. 2
6. Mordialloc No. 1
7. Mordialloc Wet Weather
8. Bondi Road
9. Eastern Treatment Plant

Sewerage system outlet
Retail Water area boundary
Sewerage transfer pipeline
Sewerage treatment plant

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The Western Treatment Plant (WTP) treats approximately 52% of Melbourne’s sewage from residential areas from the central, northern and western suburbs and more than 70% of trade waste. Over the 2016/17 to 2020/21 planning period, a significant investment program is proposed at WTP to manage receiving water quality and provide capacity for growth. The three stage capacity upgrade has been planned to deliver maximum value for our customers and the environment by using a novel delivery approach and innovative treatment technology that will minimise whole of life costs and energy consumption. Planning is underway to maximise the value of resources generated at WTP; additional biogas power station capacity is being planned, co-digestion of commercial and industrial food waste is being trialled to produce more biogas and Melbourne Water is working with leading edge technology suppliers to find new markets for biosolids, including conversion of biosolids to energy.

The Eastern Treatment Plant (ETP) treats approximately 42% of Melbourne’s sewage from the south-eastern and eastern suburbs. Over the 2016/17 to 2020/21 planning period, the focus is on the renewal of assets that are reaching the end of their design life and planning for population growth by increasing the capacity of the solids handling systems. Innovative technologies that allow us to make the most efficient use of existing assets, minimise plant life cycle costs and improve energy efficiency are being explored. Further work on odour reduction will be achieved progressively as technology becomes available.

Melbourne Water manages more than 400km of sewerage pipes, transferring waste from local networks to the waste treatment plants. Over the planning period 2016/17 to 2020/21, the focus for the sewer mains will be an ongoing program of sewer pipe renewals and mechanical and electrical asset renewals. Additionally, we will continue to explore approaches to extending the life of sewers and postponing significant capital spends – the Hobsons Bay Main Sewer Crossing is a recent example, which allowed for a $300M project to be deferred.

### Capital Program

Planned capital expenditure on sewerage projects over the five year planning period totals $1,056M, or approximately 40% of Melbourne Water’s total capital expenditure. Capital expenditure on sewerage services is mostly driven by renewals and growth. Significant capital projects are shown in Figure 5.

### Revenue and Expenditure

For the 2016/17 to 2020/21 planning period, forecast revenue for sewerage services is $2,276M and expenditure is $1,663M. Total expenditure is comprised of $1,056M in capital expenditure (Figure 6A) and $607M in direct operational expenditure (Figure 6B). Total expenditure on sewerage services represents 31% of Melbourne Water’s total expenditure.

#### 2016/17 to 2020/21

- **$1,056M**
  - Planned capital expenditure on sewerage projects
  - 40% of Melbourne Water’s total capital expenditure

- **$2,276M**
  - Forecast revenue sewerage services

- **$1,056M**
  - Capital expenditure

- **$607M**
  - Direct operating expenditure

  - 31% of Melbourne Water’s total expenditure
Figure 5 – Significant sewerage capital projects over 2016/17 to 2020/21

Figure 6 – Capital and direct operating expenditure for sewerage services for the 2016/17 to 2020/21 period
Waterways and Drainage Services

Melbourne Water’s services of flood protection and management across the waterways of Port Phillip and Westernport catchments underpin our ‘Healthy Places’ pillar.

Managing the open spaces around our waterways and other assets to provide amenity also contributes significantly to creating desirable and ‘Healthy Places’ to live. Improving habitat, flows, water quality, connectivity and physical form of our waterways supports populations of reptiles and amphibians and underpins our ‘Healthy Environment’ pillar.

Melbourne Water has responsibility for the river systems that flow into Port Phillip and Western Port Bays, which include over 8,400km of rivers and creeks, 1,500km of drains, 500 waterway treatment systems and wetlands, 300 monitoring stations and 160 urban lakes and retarding basins (Figure 7). The catchments are predominantly urbanised, connected to the city and suburbs of Melbourne.

Melbourne Water provides drainage and flood protection services and waterway protection and enhancement across Port Phillip and Western Port catchments.

Waterway protection and enhancement is focussed on:

- Managing the condition of Melbourne’s waterways and building system resilience to long-term impacts arising from climate change.
- Managing flows and access for consumption and environmental use.
- Incident response.
- Protecting environmental values of Melbourne’s waters through new developments.
- Managing stormwater to encourage reuse and protect the waterways.

Figure 7 – Waterways and drainage networks across Port Phillip and Westernport catchments
Over the 2016/17 to 2020/21 planning period, Melbourne Water’s strategy for waterway protection and enhancement is detailed in the 2015 Waterways and Drainage Investment Plan.

**Drainage and flood protection services** include:

- Enabling new development while simultaneously providing for flood safe communities.
- Managing flooding and drainage to reduce flood risks for Melbourne’s communities.
- Providing incident response capability and information.

Priorities for managing flood and stormwater risks are detailed in the Port Phillip and Westernport Flood Management strategy. Over the 2016/17 to 2020/21 planning period, this strategy has three objectives:

- The right information is available at the right time to people who need it.
- Flood risks are addressed to reduce impact and get the best social, economic and environmental outcomes.
- Land, water and emergency agencies work together to managing flooding effectively.

Melbourne Water’s assets also contain significant numbers of retarding basins, designed to slow the passage of flood waters through the catchments. Over the 2016/17 to 2020/21 period, significant investment will be made in securing these basins to provide increased spillway stability and public safety.

**Capital Program**

Planned capital expenditure on significant waterways and drainage projects (Figure 8) totals $960M, or approximately 36% of Melbourne Water’s total capital expenditure.

**Revenue and Expenditure**

For the 2016/17 to 2020/21 planning period, forecast revenue for waterways and drainage services is $1,738M and expenditure is $1,442M. Total expenditure is comprised of $960M in capital expenditure (Figure 9A) and $482M in direct operating expenditure (Figure 9B). Total expenditure on waterways and drainage represents 27% of Melbourne Water’s total expenditure.
Figure 8 – significant capital projects over 2016/17 to 2020/21 for waterways and drainage

![Project value 2016/17-2020/21 ($M)](image)

- Land development works
- Flood mitigation works
- Healthy Waterways Strategy delivery
- Retarding basin spillway upgrades
- Murrumbeena flood mitigation works

Figure 9 – Capital and direct operating expenditure for waterways and drainage services for the 2016/17 to 2020/21 period

- Growth $463M
- Renewals $126M
- Strategic/Risk Mgt $150M
- Compliance $220M
- External Services $276M
- Materials $1M
- Information Technology $2M
- Fees and Charges $3M
- Transport $1M
- Other $50M
- Land Tax $23M
Alternative Water Services

Melbourne Water’s alternative water services provide significant volumes of ‘fit for purpose’ water for non-potable uses. It supports our ‘Healthy Places’ pillar by strengthening the reliability of water supply and the ‘Healthy Environment’ pillar through efficient resource use and recovery.

Melbourne Water has made significant investment in developing alternative sources of water, primarily through stormwater harvesting and recycling treated water from sewerage networks.

Stormwater Harvesting

Stormwater harvesting is the collection, accumulation or treatment of stormwater for reuse. There are currently 38 stormwater harvesting licences issued by Melbourne Water, mainly to councils and sports clubs, representing over 2GL of water per year. Melbourne Water continues to invest in finding opportunities for stormwater harvesting opportunities through the Living Rivers program of grants, through our research programs with the Cooperative Research Centre for Water Sensitive Cities and through direct partnerships with local government.

Recycled Water

Melbourne Water produces recycled water at the Western Treatment Plant and the Eastern Treatment Plant, 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 uses.

Approximately 20GL of recycled water is used each year, a large percentage of which is used on-site at our main water treatment plants. Recycled water supplied to our customers is commonly used in:

- Irrigating pastures and public open spaces.
- Intensive agriculture and horticulture.
- Residential estates for toilet flushing and garden watering.
- Industrial processes and wash down facilities.

Revenue and Expenditure

For the 2016/17 to 2020/21 year, forecast revenue for alternative water services is $19M and expenditure is $23.5M. Total expenditure is comprised of $18.1M in direct operating expenditure (Figure 10) and $5.4M in capital expenditure on renewal projects. Total expenditure on alternative water sources represents 0.4% of Melbourne Water’s total expenditure.

There are no significant capital works programs planned for the Alternative Water Services business.

Figure 10 – Direct operating expenditure for alternative water services for the 2016/17 to 2020/21 period

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Strengthening our Business
To continue to successfully deliver our services in an era of change, we need to build on our solid organisational foundations and adapt, evolve and develop. Over the 2016/17 to 2020/21 planning period, we will continue to build our organisational capacity under our four themes of Customer Focus, Inspired People, Continuous Improvement and Financial Sustainability.
Customer Focus

Melbourne Water recognises that its success is dependent on its ability to build strong, effective relationships with customers and stakeholders.

Collaboration with industry partners, direct and deep consultation with and understanding of the community and effective communication of our goals and intent are key elements of these relationships.

Our customer and stakeholder environment is multi layered and complex. In order to better meet their diverse needs through tailored services, we have identified several customer segments:

> Water retailers such as Yarra Valley Water, South East Water, Western Water and Barwon Water.

> Government Departments including the Department of Environment, Land, Water and Planning, the Department of Treasury and Finance, the EPA and Parks Victoria.

> Local government – we are working with 38 local government agencies across the Port Phillip and Westernport catchments.

> The community.

> Developers.

> Special interest groups including industry representative bodies and NGOs.

In 2015 we established the Customer Focus Strategy, which guides and provides focus to our work in building customer relationships over the 2016/17 to 2020/21 planning period. The Customer Focus Strategy outlines three areas of focus:

Improving our performance and delivering value – through our Reputation Survey, we monitor our performance and seek insights from across our customer segments. For each of our customer segments, we continue to appoint account managers, clarify service levels and refine existing performance indicators and measures.

Building capability and knowledge – We are building internal capability to support our customer-focussed approach and ensuring that our learning and development programs focus on building the competencies and skills to develop and maintain effective relationships, communicate clearly and consistently and deliver value. We are proactively reviewing roles to ensure that we build both capability and capacity in the right positions within the organisation. We are building a culture of customer focus, with our leaders of the organisation leading from the front to drive and support the change. We will embed customer behaviours in our performance and development management processes.

Over the 2016/17 to 2020/21 planning period, Melbourne Water will continue to invest in Customer Relationship Management tools and systems to ensure that we have a consistent view of each customer across the organisation. We will also continue to review and improve our business processes so that our customer and community engagement is more effective and responsive. This will include more proactive, innovative and holistic management of engagement around our capital works program.
Customer Focus – an agile solution

Listening to our customers, there was recognition that Melbourne Water needed to simplify the way in which our customers engaged with us. A critical element to streamlining our approach was the development and implementation of an enterprise technology solution that would enable the business to capture, track, manage and monitor customer enquiries. From this thinking, our Customer Relationship Management (CRM) tool evolved.

To escalate the implementation of CRM, we adopted an 'Agile' methodology, commonly used in information technology applications to achieve fast-tracked outcomes. Agile methodology is an alternative to traditional project management that helps project teams respond to unpredictability through incremental, iterative work cadences, known as sprints.

Using the Agile methodology, we were able to successfully deliver a project that typically takes more than 9 months in under 10 weeks – from inception, through to software development, testing and installation and user training. This is recognised globally as leading practice for this platform.

"I wasn’t expecting a call back from you so quickly" – Land Development customer

CRM has significantly decreased the workload for the Land Development team. I feel like I have more time to assess applications and provide a great response – Land Development Team
Inspired People

Melbourne Water aims to be a leading employer, with diverse, smart, capable and resilient people that are reflective of the community.

Over the 2016/17 to 2020/21 planning period, Melbourne Water is working towards this outcome by investing in our people using the People and Capability Strategy to focus our efforts. The key elements of this strategy are:

**Building organisation capability** – In 2015/16 we continued our focus on developing the capability of our people and introduced the THRIVE management development program and Frontline Leaders Forum. We introduced our vocational education and training strategy and now have 14 trainees completing Certificate 3 in Conservation and Land Management and 18 apprentices working towards a Certificate 3 in Civil Construction.

In 2016/17 a focus is the development of a Centre of Excellence for Technical Skills, including a technical competency framework and the identification of career pathways and development programs that enable our people to achieve their full potential.

**Achieving a high performance culture** – In 2015 we introduced a fair and just framework to provide a process for how we recognise and reward our people when things go right and, when things go wrong, how we investigate the underlying workplace and individual circumstances so that a just and fair outcome is achieved. The framework enables improved performance and reward management aligned to our values and behaviours.

2016/17 will see us focus on implementing a fully integrated online performance, development and capability system and processes to enable improved employee engagement and productivity to drive improved customer and business outcomes.

**Developing an inclusive workplace** – Melbourne Water has made significant investments in developing an inclusive workplace. Our focus over the 2016/17 to 2020/21 planning period is embedding and extending our investment.

In 2016, we will launch our Accessibility Inclusion Plan and have set employment targets to increase the number of employees with a disability and people who identify as Aboriginal or Torres Strait Islander.

Gender diversity continues as a focus across the Melbourne Water business. In March 2016, we launched the Gender Equity Plan, with actions to address how Melbourne Water attracts and retains women and provides career and leadership opportunities. Our objective is to ensure that, regardless of gender, all employees enjoy the same opportunities, resources and rewards. The Gender Equity Plan has 17 objectives to be delivered through 2016 and 2017.

We also introduced our 100% flexible working arrangements policy to support all employees as they seek to balance the important demands on their time, both at work and at home. Our belief is that all roles within Melbourne Water can be done flexibly and that all employees should be able to access flexible working arrangements.

**Leading organisational change** – Our objective is to ensure that our people have the resilience and capacity to transition through change so that the benefits of our change programs are fully realised. We have implemented a change governance framework, a change toolkit for managers and a change leadership program for our senior leaders and in 2016/17 we will focus on embedding this into the business.

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| APPRENTICES WORKING TOWARDS A CERTIFICATE 3 IN CIVIL CONSTRUCTION | 18 |
Exploring the cultural value of water

The Wurundjeri people of the Kulin Nation in Victoria have a deep cultural, social, environmental, spiritual and economic connection to the lands and waters around Melbourne – particularly the Yarra River and its tributaries. The Wurundjeri Traditional Owners desire increased integration of Wurundjeri cultural objectives and traditional ecological knowledge in land and water management projects and Melbourne Water is keen to partner with the Wurundjeri to achieve this outcome.

Under the Victorian Environmental Watering Program, water is made available each year in the Yarra River system to improve river health. It is managed primarily by the Victorian Environmental Water Holder (VEWH) in partnership with Melbourne Water. In collaboration with the Wurundjeri people, Melbourne Water and VEWH are looking for opportunities to integrate Wurundjeri cultural objectives into the environmental watering program.

As an initial step, Melbourne Water and the VEWH in collaboration with the Wurundjeri are undertaking a cultural values mapping project for the Yarra River system. Through the project, water-dependent cultural values along the Yarra River system will be documented (Stage 1) together with associated water requirements and objectives for these values (Stage 2). The map will enhance the ability of environmental water managers to achieve outcomes for the Wurundjeri in the Yarra River system in both the short-term and the long-term.
Continuous Improvement

Safety

Safety remains a core commitment within the organisation as Melbourne Water continues to make significant progress on both the personal and technical safety fronts. We are working towards a safety culture where no injury is considered acceptable and all work tasks are undertaken without compromising health and safety standards. We continue to embrace this challenge using the Managing Director’s safety commitment – Lead, Think, Act and Care.

We have made significant advances in our safety performance in recent years, with demonstrable improvements in our performance, as measured through our Key Performance Indicator of Total Recordable Injury Frequency Rate (Figure 11).

Over the 2016/17 to 2020/21 planning period, our focus is on:

> Supporting our people in their safety journey by providing skills and knowledge.
> Embedding Melbourne Water’s Life Saving Safety Rules to clarify our expectations around minimum standards of safe work and to help our employees and contractors understand the line between safe work and risk taking behaviour.
> Integrating our Safety Management System to make it simpler, clearer and targeted.
> Improving how we embed technical safety across the asset lifecycle to demonstrate a clear understanding of our hazards through robust safety controls.
> Adoption of a new whole of life safety philosophy that will extend the safety focus of employees.

Figure 11 – Total Recordable Injury Frequency Rate
Safety and technology – a great partnership

Melbourne Water manages work across a diverse range of assets and large geographical area with many potential hazards. To protect the safety of our people, we work hard to find ways to minimise or eliminate exposure to any hazardous environments. Using innovation, technology or by simply rethinking the way we undertake a task, we are making significant advances in improving safety. A recent success in our dam inspection program resulted from the use of a remotely operated vehicle (ROV).

During an underwater inspection of the O’Shannessy Reservoir tower and pipeline in 2015, Melbourne Water used an ROV to visually record imagery inside the pipeline for asset inspection purposes. Although a diver was required to enter the water to visually assess the outside of the tower bell mouth, the need for a diver to enter the restrictive space of the pipeline was eliminated and the hazard greatly reduced.

We continue to seek ways to use new technology to reduce hazards, including:

- The use of infrared satellite imagery to remotely assess vegetation across more than 1,200 stormwater treatment assets, reducing the need to go into the field. For this, we are leveraging the innovative and award winning work initiated by our Natural Assets Team.
- Utilising drones for aerial inspections across our assets.

Digital Technologies

Melbourne Water has established the Digital Strategy as a means of engaging with and benefiting from the exponential growth in opportunities from information technology. The key aim of our Digital Strategy is to make Melbourne Water safer, faster, smarter and easier to work with.

During the 2016/17 to 2020/21 planning period emphasis will be placed on developing:

Safer people and data – To improve safety we will replace manual work permits with digital permits, which provide greater visibility and transparency of high risk activities. Melbourne Water will proactively address digital and cyber security, ensuring our approach is effective, holistic and pragmatic.

Smarter insights based on better information – We will leverage and enhance our Asset Management System with integration, automation and increased analytics and reporting. We will extend our ability to build complex data sets and interrogate and analyse data for decision making by establishing a Business Intelligence value stream. We will build the capability and skills in our people to use digital tools with confidence and derive new business insights from our data. We will deliver efficiencies in our enterprise processes by leveraging our Business Process Management platform to measure and automate common workflows.
Faster execution leveraging digital services – We will mobile-enable field workers, allowing them to perform key maintenance and management activities from mobile devices in the field. We will build upon the frameworks and methods for Agile Delivery to increase our ability to deliver digital solutions faster and more cost effectively. We will focus on alignment between IT and Operational Technology to drive efficiency in practices and deliver greater overall business value. We will continue to deliver efficiencies through the use of the ‘Cloud’ to reduce our infrastructure footprint and increase our ability to deliver digital solutions quickly and efficiently.

Easier access to using digital technology – We will simplify business processes and enhance the digital and online experience for our people through intuitive system design and mobility solutions. We will use a range of digital tools and new approaches to co-design, collaborate and work with our customers and community. We will make key customer interactions available as an online service and provide our customers with an experience that is intuitive and meets their needs.

Research

Achieving our vision of Enhancing Life and Liveability requires a long term, future – focussed approach to managing our services and assets. Many of our current strategies describe outcomes for which solution pathways are still being defined and our research program is a crucial element in closing this knowledge gap and achieving our vision. Melbourne Water’s research program extends across our service and asset base and includes:

**Water supply research** related to protecting public health – for example, determining the impacts of bushfire on water supply turbidity and the risk of waterborne pathogens from animals in the catchment areas.

**Sewerage service research** aimed at improving the effectiveness and efficiency of our current treatment process, including:

> The new, highly efficient, sewage sludge drying technology ‘dry stacking’ at the Western Treatment Plant.
> Improving the functioning of the anaerobic lagoons for better operational management and gas production.
> Improving our understanding of the effect of treated wastewater discharges on the bay ecology.

Impacting both our water supply and sewerage services is **research into asset management** which will be undertaken in collaboration with the Water Services Association of Australia.

**Waterways and drainage research** aimed at improving the environmental values of our urban waterways, including:

> The use of ‘environmental DNA’ techniques to improve identification of aquatic animals living in our rivers and creeks.
> Understanding the effectiveness of direct seeding in comparison to tube stock for revegetation of large tracts of land.
> Using new methodologies to identify key causes of waterway pollution in order to prioritise remedial activity.
> Research into managing and protecting alternative water sources, particularly shallow water bodies.

Safer  Faster  Smarter  Easier to work with
Governance

Melbourne Water’s Board has adopted a charter that defines its role and responsibilities within the framework provided by the Water Act 1989 and other applicable legislation. The Board sets policy 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 three sub-committees, each comprising at least three non-executive directors. The Board approves the charters of each committee.

- **The Audit, Risk and Finance Committee** assists the Board in fulfilling its responsibilities relating to audit, risk management, financial management and operational control practices, and compliance with relevant laws and regulations.
- **The People, Safety and Remuneration Committee** assists the Board in fulfilling its responsibilities relating to safety, human resources and remuneration.
- **The Customer and Service Delivery Committee** assists the Board in fulfilling its responsibilities relating to the delivery of customer driven services, affordable asset management and the protection of the environment and public health.

Risk

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


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:

- Ongoing management of strategic risks that may impact on the achievement of our objectives.
- Ongoing management of operational risks that may impact on the achievement of our operational objectives, including financial, asset, product quality, environmental, safety, security, information technology, and project execution risks.
- Ongoing education and development of risk capability and maintaining a risk aware culture.
- Providing ongoing assurance over our control environment through a comprehensive, risk-based audit program.
- A comprehensive insurance portfolio.

Melbourne Water maintains and tests its Emergency Risk Management Framework, which outlines security and business continuity controls including critical infrastructure and the management and response to internal and external emergencies.

Melbourne Water’s focus within the 2016/17 to 2020/21 period includes:

- The continued implementation of IRIS – our enterprise risk management software system.
- The procurement and implementation of a compliance and assurance management software system.
- Continued alignment of the business to the revised Emergency Management Act 2013.

A summary of strategic risks is at Appendix E.
Financial Sustainability

Over the last decade we have invested significantly to meet the needs of a growing city and a changing climate. This investment has delivered benefits but has also increased water bills and added to customers’ cost of living concerns.

Our financial focus for the next five years is to operate as efficiently as possible while maintaining our commitment to quality. Aligning with the Melbourne Water 2016 Price Submission and our response to the Essential Services Commission (ESC) Draft Decision, this Corporate Plan spells out our proposal to reduce wholesale water and sewage charges by 12.4% (before inflation), and then to broadly increase prices in line with inflation only.

The proposed decrease in wholesale water and sewage charges will retain Melbourne Water’s contribution to the $100 Government Water Rebate already being paid to residential customers and deliver a further reduction of around $20 per year (before inflation) to an average customer’s bill.

Melbourne Water implemented a wide-ranging consultation program in preparing the 2016 Price Submission. This program covered the service outcomes we provide, our forecast expenditure and the prices we charge.

The following provides a summary of key financial measures for the planning period 2016/17 to 2020/21. Further detail is provided in Appendix F.

Revenue

Melbourne Water’s revenue from its regulated and unregulated business is expected to total $8,887M over the 2016/17 to 2020/21 planning period. Revenue projections are based on the ESC Draft Decision on the Melbourne Water Price Review 2016.

Figure 12 – Melbourne Water revenue for 2016/17 to 2020/21

Revenue (nominal $M)

- Water
- Sewerage
- Waterways
- Drainage (Developer)
- River diversion licences
- Alternate water sources

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,830M</td>
<td>$1,703M</td>
<td>$1,724M</td>
<td>$1,778M</td>
<td>$1,882M</td>
<td>$1,860M</td>
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</tbody>
</table>
Operating Expenditure

Melbourne Water’s direct operating expenditure over the 2016/17 to 2020/21 period is expected to total $2,715M. Figure 13 shows planned operating expenditure by product to 2020/21.

Operating expenditure forecasts have been set based on identified efficiencies. These efficiencies have been built into the forecasts with the exception of expenditure categories with contractual increases above CPI, which include labour, energy, accommodation and maintenance costs.

The increase in direct operating expenditure between the 2015/16 forecast and the 2016/17 plan is $42M. Excluding the increase in Desalination Plant operating costs of $32M, the increase is $10M or 2.7%. The key drivers of the increase are labour, maintenance costs, energy charges and IT costs, with offsetting savings resulting in an increase in expenditure broadly in line with inflation. Assumed operating expenditure trends for labour, information technology and consultants are provided in Appendix F.

Figure 13 – Melbourne Water direct operating expenditure for 2016/17 to 2020/21
Capital Expenditure

Melbourne Water’s planned capital expenditure over the 2016/17 to 2020/21 period totals $2,654M. Figure 14 shows capital expenditure by product.

Summary of Financial Outcomes

A summary of financial outcomes for the period 2016/17 to 2020/21 is shown in Table 1. Key variances between the 2015/16 forecast and 2016/17 planning period are as follows:

- The decrease in water, sewage and waterways revenue is due to price reductions consistent with the ESC’s 2016 Draft Decision.
- The decrease in developer contributions and contributed assets is based on an assumed correction in land sale volumes from late 2016 through to 2018.
- The operating expenditure increases by $10M or 2.7% (excluding Desalination Plant operating costs) are mainly due to contractual increases across the operating expenditure base.
- The finance charge decrease by $3M is due to savings on finance lease costs of the Victorian Desalination Plant, offset by an increase in cost of borrowings.
- The tax expense decreases by $116M. Of this, $60M is due to the impact of a Desalination Plant tax treatment ruling by the ATO. Melbourne Water is unable to deduct tax depreciation on the Desalination Plant assets for the initial lease period and, as a result, 2015/16 tax expense forecast included the required income tax adjustments for 2012/13, 2013/14 and 2014/15. The remaining $56M decrease is due to the change in pre-tax profit.

Figure 14 – Capital expenditure by product for the period 2016/17 to 2020/21

![Capital Expenditure Graph](#)
Table 1 – Summary of financial outcomes (nominal $)

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Revenue</th>
<th>Earnings Before Interest and Tax</th>
<th>Net Profit After Tax</th>
<th>Balance Sheet</th>
<th>Cashflow</th>
<th>Ratios**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Revenue</td>
<td></td>
<td></td>
<td>Total Assets</td>
<td>Net Cash provided from Operating Activities</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>2015/16 Q2 Forecast</td>
<td>$1,829.6</td>
<td>$943.4</td>
<td>$103.0</td>
<td>$14,423.9</td>
<td>$444.7</td>
<td>6.6%</td>
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<tr>
<td>2015/16 Plan</td>
<td>$1,719.8</td>
<td>$836.3</td>
<td>$95.7</td>
<td>$14,396.1</td>
<td>$406.5</td>
<td>5.8%</td>
</tr>
<tr>
<td>2016/17 Plan</td>
<td>$1,703.2</td>
<td>$752.1</td>
<td>$30.8</td>
<td>$14,497.5</td>
<td>$349.2</td>
<td>5.2%</td>
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<tr>
<td>2017/18 Plan</td>
<td>$1,723.8</td>
<td>$782.8</td>
<td>$48.4</td>
<td>$14,643.3</td>
<td>$422.0</td>
<td>5.4%</td>
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<tr>
<td>2018/19 Plan</td>
<td>$1,778.4</td>
<td>$780.9</td>
<td>$45.3</td>
<td>$14,743.0</td>
<td>$443.4</td>
<td>5.3%</td>
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<tr>
<td>2019/20 Plan</td>
<td>$1,821.5</td>
<td>$785.0</td>
<td>$48.8</td>
<td>$14,810.1</td>
<td>$470.5</td>
<td>5.3%</td>
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<td>2020/21 Plan</td>
<td>$1,860.1</td>
<td>$784.1</td>
<td>$51.2</td>
<td>$14,844.5</td>
<td>$493.9</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Direct Expenditure</th>
<th>Total Indirect Expenditure</th>
<th>Total Finance Charges</th>
<th>Net Cash used in Investing Activities</th>
<th>Free Cashflow</th>
<th>Net Cash used in Financing Activities</th>
<th>Gearing Ratio (Debt to assets)</th>
<th>Internal Financing Ratio</th>
<th>Current Ratio</th>
<th>EBITDA Margin</th>
<th>Cash to Government (Tax, Dividend, FAL &amp; LGRE)</th>
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<tbody>
<tr>
<td>2015/16</td>
<td>$482.5</td>
<td>$403.7</td>
<td>$678.6</td>
<td>$407.4</td>
<td>$7.6</td>
<td>(78.3)</td>
<td>56.0%</td>
<td>102.6%</td>
<td>0.06</td>
<td>73.6%</td>
<td>260.2</td>
</tr>
<tr>
<td>2016/17</td>
<td>$483.4</td>
<td>$426.4</td>
<td>$701.8</td>
<td>$479.9</td>
<td>(104.2)</td>
<td>73.4</td>
<td>57.3%</td>
<td>76.3%</td>
<td>0.13</td>
<td>71.9%</td>
<td>148.8</td>
</tr>
<tr>
<td>2017/18</td>
<td>$524.7</td>
<td>$462.6</td>
<td>$675.6</td>
<td>(492.2)</td>
<td>(158.0)</td>
<td>142.9</td>
<td>56.7%</td>
<td>68.8%</td>
<td>0.06</td>
<td>69.2%</td>
<td>185.3</td>
</tr>
<tr>
<td>2018/19</td>
<td>$514.4</td>
<td>$426.6</td>
<td>$681.2</td>
<td>(550.0)</td>
<td>(148.7)</td>
<td>128.0</td>
<td>57.0%</td>
<td>73.9%</td>
<td>0.06</td>
<td>70.2%</td>
<td>128.3</td>
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<tr>
<td>2019/20</td>
<td>$540.3</td>
<td>$457.2</td>
<td>$683.8</td>
<td>(531.9)</td>
<td>(102.5)</td>
<td>88.5</td>
<td>57.2%</td>
<td>81.2%</td>
<td>0.07</td>
<td>69.6%</td>
<td>135.2</td>
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<tr>
<td>2020/21</td>
<td>$556.9</td>
<td>$479.6</td>
<td>$683.0</td>
<td>(517.7)</td>
<td>(57.3)</td>
<td>47.2</td>
<td>57.3%</td>
<td>89.1%</td>
<td>0.08</td>
<td>69.4%</td>
<td>140.3</td>
</tr>
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</table>

* Desalination Plant tax treatment ruling effects are included in future year tax adjustments. 2015/16 tax expense forecast is also reflective of the tax adjustments for 2012/13, 2013/14 and 2014/15 years.

** Ratios calculated in accordance to Ministerial Reporting Directions 01.
All tables subject to rounding.