



Our Space, Your Place

**How Melbourne Water manages land and waterways
for community use**

October 2020

Enhancing life and liveability

Melbourne Water has a mission to enhance the life and liveability of all Melburnians. We aim to strengthen the wellbeing of our communities; help create the world's most desirable places to live and enhance the natural environment. We've committed to supporting healthy people, with healthy places and a healthy environment.

At the heart of this are our core services - providing clean water for homes, gardens and businesses; keeping our city clean and people healthy with effective sewage services; overseeing the way that drainage is managed to reduce the impacts of flooding on people and the environment; and caring for our waterways, creeks and the natural ecosystems which rely on them.

These four services ensure that:

- Reliable, affordable, fit for purpose water is available now and into the future (Supply of Water).
- We can safely treat and sustainably manage sewage waste resources (Sewerage Management)
- Communities are resilient to flooding and impacts on waterways are minimised (Drainage Management)
- The environment in and around waterways is healthy (Waterway Management).

Community benefits - getting more from our services

In addition to these services, however, Melbourne Water works to add **multiple community benefits** to everything we do in creative and collaborative ways. As we go about our work, we look to include actions that can further enhance life and liveability in Melbourne such as:

- Providing cooler, greener, more amenable spaces
- Enhancing community connection and access to nature
- Creating opportunities for community recreation and enjoyment.

These added benefits can be as modest as adding a bench to a waterway to provide a place to sit and connect with nature, or as imaginative as working with communities to turn an outdated sewage asset into a much needed recreational meeting place, which cools the landscape on hot days from stormwater harvested in raingardens.

Many of these benefits are provided by the way we manage the land and waterways that Melbourne Water owns and manages. We work in partnership with local communities, water retailers and local government to make sure that we deliver what Victorian communities want and need and will use.

Our space, your place ...

Melbourne's population is growing; we reached five million people in Melbourne in 2018 (11 years earlier than predicted). If we continue our current growth rate, we will welcome another three million by 2043.

To house these new communities, planning experts expect to see 'densification' on our suburbs, meaning more subdivisions and multiple storey buildings and consequently less backyards.

We know that communities need access to open space and nature for health and wellbeing. They are critical for child development, community connection, recreation and physical and mental wellbeing. **Nature is a necessary human habitat.**

With the combined impact of a changing climate that is forecast to deliver more heatwaves we know there is a growing need to invest in urban cooling through the planting of trees. We know that urban cooling can significantly contribute to reducing heat related deaths during heatwaves.

As the second biggest landowner in Victoria - owning nine percent of open space within the urban boundary - and managing 25,000km of waterway corridor land, Melbourne Water has committed to play its part in ensuring that future communities have places to meet, recharge, play and connect with nature.

In the same way that we once forecast the need to protect catchments to secure healthy water supplies for growing populations, we're now putting in place strategies, practical guidelines and projects to make the most of our open space for community health and wellbeing. We're also exploring how we can work in partnership with others to deliver shade and cooling along the waterways and open spaces we manage on your behalf.

Here are just a few case studies of work we have done over the last few years to provide healthy places and a healthy environment for communities to enjoy.

Don't hesitate to contact us if you have ideas to help turn our land into active community spaces for everyone to enjoy.

For more information visit yoursay.melbournewater.com.au/our-space-your-place.

Urban Cooling

Creating shady, cooler open space for communities and wildlife to enjoy

Our cities are getting hotter

The combined effects of our changing climate and the urban heat island effect are driving temperatures in our cities up. Heatwaves are getting hotter and more frequent, affecting the liveability of our region.

Over the next few decades, the number of extreme hot days in all Australian cities is predicted to increase significantly, impacting people's health, mortality rates, biodiversity, energy demand, and our State and national economies.

Cities are built with concrete, stone and asphalt paved roads. These hard materials create 'heat islands' – areas of significantly hotter temperature than surrounding suburban and rural areas – which generate a range of problems for those living and working within them. Native animals also live in our trees and open space, and with reduced rainfall and the removal of tree habitat, risk to them also increases.

"...built up areas have a greater capacity to absorb, hold and emit the sun's heat compared to rural areas. The absorption of energy can increase day and night time temperatures in cities by several degrees."

City Cooling – Mitigation of the Urban Heat Island Effect, E2Designlab 2019

Planting more trees provides shade, helping to cool our cities

A growing body of evidence is showing that we can lower local temperatures by planting extra trees to create more shade. Standing under a tree in the shade can feel 10 degrees cooler than standing in the sun.

As the owner of over 33,000 hectares of land across the Port Phillip and Westernport catchment area, Melbourne Water has a role to play in making Melbourne more resilient to heatwaves. We're planting trees across the region as part of our Urban Cooling Program, to help lower temperatures on hot days. We've created 24 hectares of shade by planting trees – almost the same size as 10 MCGs.



Helping to reduce temperatures

Two pilot projects, at Jacana Wetlands in Melbourne's north and Edithvale Wetlands in the city's south-east, are helping to lower local temperatures. These sites were selected because they are close to homes, used for recreation, community education and active transport and were identified as being hot and dry in summer.

We've partnered with the local councils the City of Hume and the City of Kingston and Friends of Groups, planting hundreds of native trees at both locations along paths to create shade, making it cooler and improving biodiversity. Additional tree shade in these areas is expected to reduce the temperature by up to four degrees on hot days.

Planning for a hotter drier future

Making the city cooler with more trees and shrubs requires a consistent water supply to ensure Melbourne's trees can withstand hotter temperatures, heat waves and drought. During heat waves, watering makes it feel cooler and supports tree health.

Irrigated grass is also about 15 degrees cooler than dry grass and surrounding pavement and can bring night time temperatures down by one degree per hour.

Our Urban Cooling Program is working to understand long-term water demand and availability given the competing demands for water. The program also aims to ensure non-potable supply sources are planned and secured to create a greener, cooler Melbourne – critically during periods of low rainfall.

Water sensitive urban design and integrated water management principles will be vital to making our parks and gardens resilient to rising temperatures, heat waves and drought. These approaches use planning and urban design to remove pollution and chemicals from stormwater.

Simple stormwater systems can be used to water trees, sometimes doubling their growth rate, while reducing impacts to rivers. We see a strong opportunity to make urban trees more resilient to Victoria's changing climate by aligning the need to manage excess stormwater runoff and protect waterways, with our plans to supply water to new and existing green spaces.

"The combination of tree canopy and natural turfs in urban parks results in 5-10 degree cooler radiant temperatures and 1-2 degree air temperature reductions in urban parks."

Guide to Urban Cooling Strategies, Low Carbon Living CRC, July 2017

Delivering social and environmental benefits

We're working to enhance life and liveability and making sure Victoria continues to thrive while adapting to challenges like climate change, urbanisation and the changing economy.

Over the past five years, we've established 850km of vegetation along waterways. We expect to continue to demonstrate leadership in this space, with the Victorian Government setting the direction for region-wide cooling and greening through the *Plan Melbourne* and *Water for Victoria* strategies.

Our Urban Cooling Program is helping to create a city more resilient to urban heat and climate change by:

- increasing community access to nature and open space
- improving health and wellbeing
- creating cleaner air and cool spaces for animals and people.

Creating community spaces

Helping Victorians connect with nature more often through our capital works projects

Including community health and wellbeing within our projects

Our vision is to enhance the life and liveability of all Melburnians.

To deliver our vision, we're continuing to invest in delivering our business' three core Strategic Directions pillars – *Healthy People*, *Healthy Places* and *Healthy Environment*. All three of these pillars can be supported by our annual works program when we understand the positive relationship between community access to open space, and health and wellbeing.

In our Corporate Plan, we've committed to measuring how Melbourne Water activities are contributing to improving community access to and use of our land and waterways and enabling people to connect to nature.

Helping to make the community healthy

As part of our *Healthy People* pillar, we've focused on achieving community health and wellbeing outcomes through our capital works program.

As part of delivering our core services of providing drinking water and managing our sewers, drains and waterways, we believe that Melbourne Water's capital works projects should enhance or improve the natural and recreation outcomes at the sites at which we work. We're partnering with councils, community groups and other stakeholders to deliver projects, which actively focus on people and the local community.

Targeting community benefits

In 2017 we introduced the key performance indicator of delivering community benefits as part of 80 percent of Melbourne Water's eligible capital works projects over the next four years.

When planning work, we engage with the local community to identify what it needs and how we can best deliver it. Projects include building a playground for children to enjoy, planting trees and shrubs to provide shade and helping cool the local area on hot days, and providing walking and cycling paths for recreation and exercise.

- **At Finn's Reserve in Templestowe**, we worked with City of Manningham and Canoe Victoria to build a canoe ramp as part of restoration works along the Yarra riverbank. We provided additional funding and expertise to make the bank stable and safe. This allowed community members including school groups to access the river more safely and easier when going canoeing. It also reduced the environmental impact on the riverbank.
- In another example, following major flooding around **Murrumbeena and East Malvern in Melbourne's south-east**, we replaced a stormwater drain and lowered

the railway embankment. By lowering the embankment, we created a space for community to ride their bikes and walk their dogs along Bute Street in Murrumbena.

Talking to the community at the start of projects is key to the success of these capital works. Planning early and considering community needs and feedback allows us to achieve outcomes focused on the local community and those people who will use the space.

Our 'community benefits' target reflects Melbourne Water's fundamental business shift to go beyond the delivery of our core services and focus on people and the community through the projects we deliver.

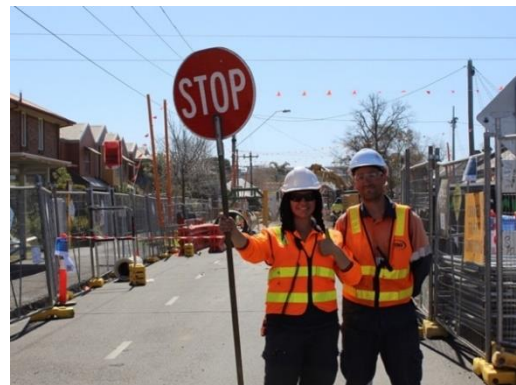
Giving something back as we maintain Melbourne's pipes and drains

As part of our works to upgrade an almost 100-year-old water main from Merri Creek in North Fitzroy to the MCG, we built a new playground at Edinburgh Gardens and upgraded the barbecues. This was our way of giving back to the local community for their patience during the works, and encouraging people to get outdoors for recreation and play.

We worked with the City of Yarra to identify what the community needed and how we could best deliver it.

Community feedback about the park

"Melbourne Water was digging up the streets to replace the water main along the route I take to get my kids to violin practice in North Fitzroy. The traffic was busy, making it tough to get there. The works also made it challenging to access Edinburgh Gardens, where I take my son to play while my daughters have their lesson. When the project finished and the traffic returned to normal, we found Melbourne Water had replaced the old playground at Edinburgh Gardens with a fantastic new one to thank the community for their patience. The new playground is an example of how Melbourne Water is enhancing life and liveability and delivering the cherry on top of a project, leaving a lasting community legacy."



Tommie Conway – community member and Melbourne Water team leader

Delivering social and environmental benefits

The community benefits KPI for our capital works allows us to embed a community focus in Melbourne Water's projects. This is delivering ongoing benefits for local communities and the environment including:

- providing access to open space for recreation, exercise and to connect with nature
- cleaning and cooling air
- helping to improve the health and wellbeing of Victorians across our catchment, and beyond.

Getting social: Our Healthy Waterways Strategy

We collaborated with the community to co-design our Healthy Waterways Strategy

Waterways are vital to the health of our environment and community

Melbourne is known for its iconic waterways, winding from its regions to the city. Its waterways are vital to the health of Victoria's natural environment, biodiversity and its economy.

As our city deals with the prospects of a changing climate, increasing urbanisation and rapid population growth, Melbourne Water recognises that it can't meet the challenges of caring for our waterways alone.

Waterways provide places to escape the busy urban landscape, to ride bikes and walk, to meet with friends and family, to exercise and connect with nature. They provide shady spaces on hot days, and space to swim, fish and get out on a boat.

The *Healthy Waterways Strategy* offers a collaborative approach to managing Melbourne's rivers, estuaries and wetlands in the Port Phillip and Western Port region for the next 50 years.

Research shows that connecting with waterways and nature is vital to community health and wellbeing. Our role is to manage our waterways and provide people with access to the catchment's celebrated rivers and creeks – supporting the environmental, social, economic and cultural values Victorians and visitors treasure.

"...exposure to nature and urban green spaces deliver a range of human wellbeing benefits including increased activity and reduced real or perceived stress which can contribute to improved mental and physical health outcomes."

The Clean Air And Urban Landscapes Hub, Urban Greening

Creating a community-focused strategy

To develop the Healthy Waterway Strategy we collaborated with more than 220 organisations across Melbourne harnessing the knowledge, experience, passion and commitment of not only our staff but also community groups, nature groups, industry, individuals, local government and state agencies.

We worked with these organisations to co-design the *Healthy Waterways Strategy* so we can both protect the environment and enhance what our community values most about our waterways. Our co-design approach to building the strategy went beyond traditional

consultation and empowered community members and other stakeholders to be involved in the strategy's creation and design.

For each catchment we worked with locals to set a vision for each catchment and then worked out how we could all contribute to improving waterways in each area.

Social, health and wellbeing benefits of water

Key to the success of the *Healthy Waterways Strategy* is the strong sense of ownership that involved community members feel towards it, arising from its co-designed approach. We listened to what the community told us about what was important to them and why they go to our rivers and creeks.

People use our rivers and creeks for different activities including exercise, picnicking, listening to music, boating, swimming and fishing.

Local communities are connected to their parks and waterways, know the area's history and are passionate about creating strong community and environmental benefits for locals and visitors.

Community feedback on our world leading co-design approach

"A critical thing was Melbourne Water put community into the process at the same level as everyone else. Whether it was local government, state instrumentalities, academics or community, we were all in together. There were no pecking orders; it was a democratic process."

"Waterways are incredibly complicated; every place is different. Community involvement will help get the details right because most of the people who are interested have intense knowledge of a relatively small geographic area or a specific interest that they know more about than anyone else in the world."

Tony Smith is an active member of the Friends of Moonee Ponds Creek and Friends of Maribyrnong Valley who participated in Melbourne Water's *Healthy Waterways Strategy* collaboration workshops.



Community passion and commitment

The Darebin Creek Management Committee are an example of a passionate community group that has transformed their local reserve from a rubbish tip to a beautiful inner-city park with ponds, trees and a place for people to enjoy a barbecue and relax. The Committee raises the

profile of the Darebin Creek through an environmental education program. More than 3,000 students a year visit the park with staff working with local schools to promote sustainable practices, plant native gardens and increase litter awareness.

Through our River Health Incentive Program, we've given the Darebin Creek Management Committee more than \$130,000 of funding over 10 years for weed control and revegetation along the Darebin Creek. The group's work has produced fantastic outcomes, including better creek health and a restored outdoor space.



Improving the park



Ponds and trees for people to enjoy

Social and environmental benefits

Three social values are included in the strategy – **community connection, recreation and amenity**. These social values represent the importance of waterways in our everyday lives and in health and wellbeing.

Actions to care for our waterways feature in the strategy and range from tree planting to managing litter.

By including social values in the *Healthy Waterways Strategy* and co-designing the strategy directly with those communities and stakeholders who use and improve our catchment's waterways, we are able to tailor the care for the unique protection of waterways.

Healthy waterways are good for people and the environment. Our collaborative approach is helping Melbourne Water deliver social and environmental benefits valued by our communities including:

- encouraging exercise, health and wellbeing
- providing opportunities for people to connect with nature
- making it safer and easier for people to access and use our waterways
- improving biodiversity in our waterways
- reducing environmental impact.

Through working with local community groups to create a long-term strategy for managing our waterways, we are better able to understand, and deliver, the environmental and social benefits of our waterways.

URBAN DESIGN

We're taking an integrated approach to delivering projects to improve community spaces

Creating community spaces for everyone to enjoy

We're shifting our approach to delivering our core services of providing clean drinking water and managing our sewers, drains and waterways. By using urban design principles, we're delivering community outcomes, which consider the wider area around our works, and others who use the space.

Historically, Melbourne Water has considered a project, service or asset largely in isolation to the broader community space around our lands. Now, we're shifting our approach to view sites more holistically, working to understand the wider area and how we can use urban design to provide better, integrated community outcomes.

Urban design principles involve:

- enhancing the environment and community
- connecting people physically and socially
- providing diverse options and experiences, and
- making spaces sustainable, enduring and resilient.

"Urban design is concerned with the arrangement, appearance and function of our suburbs, towns and cities. It is both a process and an outcome of creating localities in which people live, engage with each other, and the physical place around them."

Creating Places for People: An Urban Design Protocol for Australian Cities, Infrastructure Australia, 2011

Working together to plan for our growing city

An urban design approach brings landscape and cultural spaces together. We're applying this approach at the project planning and consultation phase to ensure we understand what local communities around each site need, and how Melbourne Water can deliver our business requirements while improving the liveability of community places nearby and connected to sites.

Bringing together heritage and education through an urban design approach

We're relocating the Western Treatment Plant administration building in Werribee to Cocoroc, an historic township at the eastern end of the plant. The building is used by thousands of school children and community groups that attend education programs each year. Using an

urban design approach, we're bringing together expertise from across our business to develop a vision for the new Cocoroc education and heritage precinct.

Our urban design, engineering and education teams have imagined the possible place we could create by drawing on the history of the site while considering the operational constraints of the area such as heavy vehicle access. To date, the urban design process conducted during project planning has included workshops, assessing the site's key heritage assets and historical designs, reviewing school and community visitation data and traffic studies to understand where in the site staff and visitors are going. It has led to us restoring an important historical site, Cocoroc, and including it in our education program.



Water tank at Cocoroc

Delivering social and environmental benefits

"Well-designed urban places can only be achieved by adopting an integrated approach where multi-disciplinary teams work collaboratively at all stages of a project, from design through to procurement, implementation, operation and maintenance."

Creating Places for People: An Urban Design Protocol for Australian Cities, Infrastructure Australia, 2011

Introducing an urban design approach to managing our assets and delivering our core services is allowing us to achieve better community and environmental outcomes that consider the surrounding area. Through this new process and way of thinking, we're helping to enhance the life and liveability of our communities by:

- increasing community access to nature, open spaces and information on the cultural history of our lands
- addressing surrounding community needs and issues
- strengthened planning processes, which adopt a holistic approach to managing our assets and core services, and involve and engage communities
- reducing environmental impacts.

Greening the Pipeline

We're transforming a decommissioned sewerage pipe reserve into a popular community park

Maximising unused space to create community benefits

We own and manage Melbourne's major drainage and sewerage infrastructure. Due to technological advancements, sometimes these assets are no longer needed, providing us with an opportunity to create great community spaces. This is the case in Melbourne's west, where our decommissioned Main Outfall Sewer runs along the Federation Trail from Werribee to Brooklyn.

The booming western suburbs needs more options for open space and community places for people to visit and enjoy. It is also important that these spaces are green with shade from trees and shrubs, helping to reduce the temperature on hot days.

We are transforming a 27-kilometre heritage-listed sewer reserve into a vibrant community space that helps to keep the local area cool through our Greening the Pipeline initiative.

Working with stakeholders, the community and our partners

We are working with the local community and stakeholders to repurpose a 19th-century decommissioned and unused sewer into a modern and vibrant community space. Our project partners, Wyndham City Council, City West Water and VicRoads with support from Greening the West are making this a collaborative approach to delivering community benefits.

Our vision is to create open space that will connect communities, improve walking and cycling paths, manage water sustainably and create a space for people to meet, play and relax.

Giving Melbourne's west its own New York City High Line

The Main Outfall Sewer was built in the 1890s to manage Melbourne's sewerage and improve the health of Melbourne. For nearly 100 years it transferred the majority of Melbourne's sewerage for treatment before it was decommissioned in 1993.

Greening the Pipeline was inspired by the High Line Project in New York City, which transformed a disused train line into a park running above the city and completely revitalised the area as a popular destination for locals and tourists.

"...working with nature can potentially address multiple goals simultaneously. For example, the provision of green space in cities can cool the surrounding city, reduce pollutants, provide a sense of wellbeing, create inclusive spaces and encourage physical activity."

The Clean Air And Urban Landscapes Hub, Urban Greening



Creating the Pilot Park at Williams Landing

To demonstrate the potential success of repurposing a decommissioned sewer, we worked with our project partners to create a 100-metre section of the pipeline into a community park.

We received a grant from the Victorian Government and asked the local community what they wanted to create a space that they would use. The park at Williams Landing includes exercise equipment, seats, space to play sports and games, and walking and cycling connections to the Federation Trail. This modern space is also sustainable as it treats and reuses stormwater from the surrounding homes to irrigate the newly landscaped areas and also includes solar lighting features.

Williams Landing was chosen as our demonstration site because it is close to houses and there was a need for additional parks for this growing community. The irrigation of trees and grass is also helping to make the local area cooler and shady. Visitor numbers at the park have increased by 105 percent since it opened in 2017 with hundreds of people using the park each week.

What's in a name? We refer to the park informally as "Pilot Park" in reference to the RAAF Williams air force base in nearby Point Cook, which is the birthplace of the Royal Australia Air Force and is the oldest continually operating military airfield in the world

Delivering social and environmental benefits

Projects like Greening the Pipeline which repurpose our disused assets into community spaces provide a number of community and environmental benefits including:

- improving health and wellbeing
- managing water sustainably
- creating vibrant open spaces

- connecting communities
- enhancing walking and cycling
- celebrating heritage

The community is enjoying the pilot park

I like this park very much, it's easy for me to get to and use. It has nice exercise stations and breaks up the sewer line. I love the Australian plants.

Anonymous – feedback from the pilot park visitation survey

Repurposing areas like these in a way that benefits the community is awesome and long overdue. Don't let this be a once off thing.

Google map review of the Pilot Park



Protecting our open space for Melbourne's growing population

We're working with the Victorian Government to increase community open space

As our state's population booms, our communities need access to more open space

Melbourne's population is expanding rapidly with the city hitting five million people in 2018 – 11 years earlier than predicted. If this growth rate continues, we will welcome another three million people by 2043.

To house our new and growing communities, planning experts predict 'densification' of our middle suburbs and subdivisions on undeveloped land on the city's outskirts.

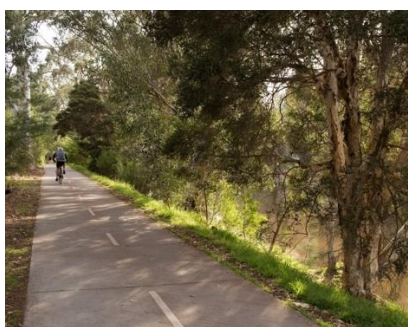
We know that communities need access to open space and nature for health and wellbeing. It is critical for child development, community connection, recreation and physical and mental wellbeing. As a significant land owner and infrastructure provider, we have an opportunity to work with government and other stakeholders to increase access to open space for communities to enjoy.

"...environmental protection and sustainability are closely connected to human health benefits."

Beyond Blue



Transforming our pipe tracks and retarding basins into community parks



Connecting people to our waterways



Creating public open space

Maximising the use of our open space

Melbourne Water is the second largest landowner in Victoria – owning nine percent of open space within the urban boundary and managing 25,000km of waterways. We are committed to

playing our part in ensuring that future communities have places to meet, recharge, play and connection with nature and open space.

We are putting in place strategies, practical guidelines and projects to make the most of our open space for community health and wellbeing.

We are doing this by working with the Victorian Government and other stakeholders to take a coordinated approach to ensuring we have enough community open space to meet demand. As a trusted partner of the Victorian Government, we provide advice and work together to achieve agreed community outcomes and benefits.

Working with the Victorian Government to influence positive community outcomes

Melbourne's known as one of the most liveable cities in the world because of its extensive parks and open space. This doesn't happen by chance.

As part of our planning and the implementation of our capital works projects, we have an opportunity to collaborate with State and local governments and together strategically deliver Melbourne's open space needs into the future.

We are working with the Department of Environment, Land, Water and Planning (DELWP) as it develops its Metropolitan Open Space Strategy which will ensure that as our population grows, governments including agencies such as Melbourne Water protect, optimise and grow the provide enough open space in the right places to meet our growing communities' needs. The strategy is addressing population growth and densification through a need for increased and better quality open space, including a healthy environment and urban cooling outcomes with trees and shade.

We have found opportunities for Melbourne Water to provide input into DELWP's approach and align our capital works, maintenance and community outcomes with government's priorities. This includes government's strategies and objectives for regional towns and the City of Melbourne's Forest Strategy.

Community and environmental benefits

Working with Victorian Government agencies enables a holistic approach to planning to deliver multiple benefits including:

- providing more open space
- creating quality open space that is in the right place such as next to rivers and creeks creating better community space which is connected to nature
- making our rivers healthy and clean for the community to enjoy
- optimising the benefits derived from our pipe tracks, retarding basins and constructed waterways to so the community can safely use our land for open space
- using storm water for irrigation, reducing the reliance on valuable drinking water supplies
- better alignment with other agencies projects
- coordinated and collaborative approach to ensuring we have enough open space to meet community demand.

Our Space, Your Place

Providing community access to our open space

Growing need for open space

As Melbourne's population continues to grow, public open space to use for events, projects and other activities, is under pressure from urban development.

Communities need spaces to exercise, relax, play and connect with neighbours and nature because of the known health and wellbeing benefits. We have an opportunity to work with the community and other stakeholders to provide the community with access to our land to enjoy.

"... access to green space was an important predictor of mental health status and vitality, regardless of socio-economic status, age and sex."

Opening up our land for the community to use

We are one of the biggest landowners in the State, some of these spaces may be available for community to use without impacting on our ability to deliver our core business services – providing clean drinking water and managing our sewers, drains and waterways. We own over 33,000 hectares of land which is the same as around 60,000 footy ovals. Our Space, Your Place is a portal on Melbourne Waters website, changing the way communities and local groups connect with us and use our spaces. We developed the portal so the community can easily lead activations that meet local community needs.

Sharing ideas and connecting with communities online

We created an online portal, with an easy to use map, which shows the community Melbourne Water's land and the scale and types of projects which are possible in each area. The map has four categories which provide an indication of the types of community activities that may be permitted. This allows us to protect our assets while opening up the land for the community to use without impacting on our core business services.

Working with council to deliver community events

In one example, we worked with Moreland City Council to help activate the Coburg North Linear Reserve, a Melbourne Water owned drain. Two local artists came up with the idea of a project called Parktopia, to be designed and performed by students from Pascoe Vale North Primary School. Parktopia asked the students to imagine their ideal park and consider the spaces existing history and heritage. The students created a performance celebrating the history of the creek that is now piped underground and created temporary artwork to visualise their vision for the park. The event included a Wurundjeri Welcome to Country and Smoking Ceremony. As a result of this project, Moreland City Council is developing a Master Plan for the park using the ideas generated by the students, including installing drinking taps and seats. This project showed that opening up our space for one off community events can be as

beneficial as long-term projects. Pop-up events are an engaging way for community to use our sites and connect with nature in creative and innovative ways.



Local children performing at the opening ceremony of Parktopia and celebrating the importance of our waterways for homes for native plants and animals.

Bringing students on a journey of discovery

“It has been a fantastic opportunity to work with the local students to uncover their ideas and inspiration for the park..... as they turn this once underutilised reserve into a flourishing living play space.”

Local artist and creator of Parktopia, Vanessa Chapple.

Social and environmental benefits

The social and environmental benefits of Our Space, You Place include:

- increasing and beautifying Melbourne’s public open space network
- providing opportunities for people to connect with nature
- making it safer and easier for people to access our open space
- creating a sense of community and opportunities for local celebrations
- working with council and other stakeholders to provide community open space

Reimagining Your Creek

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We're transforming stormwater channels and drains into spaces for the community to enjoy

Restoring concrete drains and pipes to their natural form

In Australia, we have traditionally taken a public health approach to managing stormwater, protecting people from water-borne disease by using waterways such as rivers and creeks as drains to carry flood water away from houses.

Health and public safety will always remain our priority, however our focus has meant that stormwater channels which were once natural rivers and creeks have been significantly altered over time into concrete and pipes. Waterway management and drainage approaches are changing with current thinking recognising the environmental and social benefits of natural rivers and creeks compared to concrete drains. We need to manage the environmental and social needs of waterways with the drainage services they provide.

There are significant community benefits and waterway health improvements from restoring previously engineered stormwater channels to more natural creeks. Evidence has demonstrated a positive relationship between providing access to green open space and the physical health and wellbeing of communities.

"When a drain becomes a living stream it doesn't just provide a new kind of open space but adds a new dimension to enjoying, and moving through, your suburb."

Myers Z, conversation.com.au

Creating community open space and connecting people to nature

As our population continues to grow and the city becomes denser with housing, we have an important role to play to create opportunities for our communities to access local areas with trees and public open space for respite, recreation and exercise. Waterway management in urban areas is often focussed on reducing floods and environmental health with less emphasis on how people will interact with and enjoy the space.

Our Reimagining Your Creek program is demonstrating how connections to water and open space benefits our relationships with nature and each other.

Reimagining Your Creek seeks to transform concrete channels, often in land that has limited environmental or amenity value, into places for the community to enjoy – improving wellbeing and supporting healthy waterways. The program creates stronger community ties and increases interactions between neighbourhoods by using waterways to build opportunities for the community to interact and connect with each other.

Collaborating with community and stakeholders to create and improve open space for people to enjoy

We are collaborating with local councils, community and Friends of Groups – the people who will most likely use the open space – to understand their needs so we can include this in the design. We are also empowering communities to shape and influence what the open space will look like during the planning and development stages. By working together, we can identify liveability outcomes which are needed in the community such as walking and cycling paths along creeks, space for people to walk their dogs, trees for shade and bridges and boardwalks to connect the community.

“Victoria’s water sector must adapt if it is to continue to provide reliable services under an increasingly challenging climate.”

Victoria’s Pilot Water Sector Climate Change Adaptation Action Plan, Department of Environment, Land, Water, and Planning

As part of our pilot program, we are transforming creeks at locations across Melbourne at Stoney Creek near Sunshine Hospital, Tarralla Creek in Croydon, Arnolds Creek in Melton, Blind Creek in Boronia, and Moonee Ponds Creek in Westmeadows. These suburbs have some of Melbourne’s fastest growing populations and are coupled with lower-socio economic demographics.

Reimagining Arnolds Creek in Melton

Arnolds Creek is one of many waterways Melbourne Water owns and operates, a tributary of the Werribee river in Melbourne’s west. Arnolds Creek is a concrete channel that runs along either side of a grassy reserve.



The restoration of Arnolds Creek will provide walking paths, boardwalks and bridges that connect the community and improve pedestrian and cycling paths with other transport options. Transforming the concrete drain into an urban forest will create a place for people to become immersed in nature along the creek – creating additional shade and improving the waterway health. The vegetation will also improve biodiversity and provide urban cooling outcomes by creating more shade for the Melton West community to enjoy on hot days. Reimagining Arnolds Creek shows how Melbourne Water’s

enhancing the liveability of the Melton West community.

Concept image of a transformed Arnolds Creek

Delivering social and environmental benefits

A liveable city does not just meet the basic social, environment and economic needs of its people – it also takes into account what the community values and wants when it comes to amenity, wellbeing and a sense of place.

Reimagining Your Creek transforms concrete spaces into community open spaces and restores rivers. This is contributing to Melbourne's liveability by:

- creating public open space for people to enjoy
- transforming infrastructure with little or no amenity into liveable spaces
- providing shade helping to reduce temperatures on hot days.
- improving biodiversity and waterway health

Western Treatment Plant

We're delivering visitation opportunities to Melbourne's western suburbs

The gem of the west

The Western Treatment Plant at Werribee in Melbourne's west is a 10,500-hectare site which sustainably treats half of all of Melbourne's sewerage. It is leading the world in environmentally sensitive sewerage treatment, is an internationally recognised birdwatching and wildlife haven and an environmentally sustainable farm.

- **Listed as a Ramsar wetland since 1982, meaning that it is internationally important and a holiday destination for rare birds from around the world!**
- **Benchmarked on a world wide scale, the WTP is amongst the lowest cost treatment plants, and is also renowned for its environmental sustainability.**
- **Energy sufficient, generating all its electricity from biogas captured during sewage treatment**

It is energy sufficient using biogas or methane captured during the sewage treatment process to provide renewable energy. The plant is also a net energy exporter to the grid – helping to power homes.

The Western Treatment Plant is in Australia's fastest growing suburb. Wyndham now has more than 250,000 residents – its population growth matches the city of Geelong. With the land we have available, we have the opportunity to provide open space, recreation and amenity for hundreds of thousands – if not millions – of people.

The Western Treatment Plant Future Land Use Plan (FLUP) was completed in 2016, in consultation with stakeholders and community representatives from across the region. The FLUP outlines how we will develop WTP land will look in the future, which includes exploring opportunities to increase the number of people to visit, learn and enjoy its open space and panoramic views.



RAMSAR wetlands



Internationally recognised birdwatching site

Empowering communities at the Western Treatment Plant

Educating communities about water and sewerage is part of Melbourne Water's core business.

As part of our responsibilities under the Water Act 1989 Melbourne Water has a function to educate the public about any aspect of water supply, sewage, waterway and drainage management. This includes making available to schools in our area information about all aspects of sustainable water resource management.

By increasing visitation to the Western Treatment Plant we can also help empower communities to understand the challenges we have with water management in a drier future.

Given our unique role in sourcing and supplying water, and managing sewerage, drainage and waterways for more than 5 million people, we have a critical role to play in preparing people for a smarter water future.

Around 10,000 people currently visit the plant each year as part of school education programs, community groups, birdwatching and open days.

...by immersing primary, secondary and tertiary students in nature it builds awareness, real life skills and practical examples for curriculum

Parks Victoria

Our plan to maximise the community value of the site

The Western Treatment Plant has the potential to be one of the most sustainable resource recovery tourism and education sites in the world. We are increasing the number of people visiting the plant in four key areas – ecotourism, education, heritage and recreation. This means we can increase local awareness of the water cycle, promote environmentally sustainable practices and help bring more people to the west supporting local businesses and communities.

We have already improved the birdwatching experience at Lake Borrie by installing signage, maps, carparking and road safety signage. Birdwatching is a popular attraction with around 2,000 people having birdwatching permits to the WTP. We also recently installed toilets on Paradise Road at the plant, central to three key birdwatching paths. Previously there were no toilets at the site. These facilities are key to promoting tourism and increasing the number of visitors to the site.

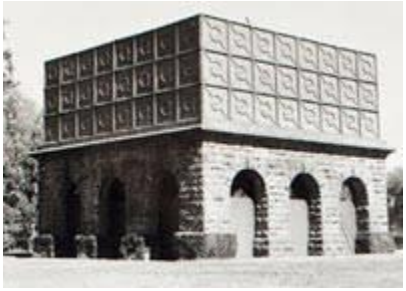


We are now partnering with eco-tourism specialists to offer nature-based tours of the site. This involves making the plant 'visitor-ready' – installing toilets, building bird hides, and improving access roads and parking to make it safer for people to travel around the site and enjoy it.



Sharing the Western Treatment Plant's history and heritage

Cororoc was the original township of the Western Treatment Plant's resident workforce. Today, the town still contains some heritage buildings and landscape features including a football oval, sports pavilion, swimming pool and change rooms, Mechanics Hall and the Eastern Hill Water Tank. Of course the land also has significant cultural importance to Traditional Owners and has done for thousands of years before European settlement. We aim to partner with Traditional Owners as we develop the cultural heritage experience on site. As part of sharing the plant's full heritage, we are including the history and culture of Cororoc and its lands, in education materials.



Cocoroc water tower and Pavilion at the WTP



The site has important indigenous and European cultural heritage values, including places of Indigenous spiritual significance and the historic sewage farm workers township site of Cocoroc.

Western Treatment Plant Your Say Portal, Melbourne Water's website

Delivering social and environmental benefits

Expanding tourism opportunities at the Western Treatment Plant will deliver community and environmental benefits including:

- Open space for recreation
- Increased access to a world-class treatment site which is part of an internationally significant wetland
- a unique eco-tourism experience in Melbourne's booming western suburbs
- educating students, the community and tourists about the site's rich heritage, the urban water cycle and the environmental significance of the plant
- increased opportunities for connection to nature
- increased awareness about our world-class sustainable waste treatment facility.

Community feedback on the birdwatching upgrades

I went birding at the Western Treatment Plant on my own for the first time in a while and I was thrilled at the improved signage and upgraded gate locks which made it very easy to open and close the gates even though I was on my own. Keep up the great work."

Anonymous – regular birdwatcher

Yarra River recreational paddling plan

We're making it safer and easier for people to go paddling on the Yarra River

Improving access to our waterways

Melbourne's iconic Yarra River is one of our most well-known waterways, winding its way from the Yarra Ranges through the city. Recreational paddling provides an opportunity to connect to nature, relax or exercise – helping to improve our health and wellbeing.

Currently, there are limited opportunities for people to safely access the water and experience the river from a kayak, canoe or rowing boat.

People use the Yarra every day to paddle on the river for exercise, recreation or to connect to nature.

We can increase the number and diversity of people accessing the Yarra River and reduce impacts to the banks and surrounding environment by working with councils, stakeholders and the community to build ramps that make it safer and easier to explore the Yarra River.

“There is strong stakeholder and community support for a new approach to protecting and improving the Yarra River and its environs.”

Community Views, Protecting the Yarra River (Birrarung), feedback from the community on the Yarra River Protection Ministerial Advisory Committee's discussion paper

Making it safer and easier to paddle on the Yarra

We are partnering with councils, Parks Victoria and recreation group Paddle Victoria to identify locations along the Yarra River for new or upgraded boat launching ramps. We are working with our partners to provide infrastructure so people can access the river safely and develop consistent signage and wayfinding so the community knows the location of paddling ramps and any dangers or interesting sites that they can explore while out on the water.

Working with councils and stakeholders to deliver community benefits

We are responsible for managing Melbourne's waterways and undertake maintenance works to keep our rivers and creeks clean and healthy. As the waterway manager, we are collaborating with communities to ensure that the work we do on our rivers and creeks has multiple benefits including connecting people to nature.

When we do works on our waterways such as protecting the river banks from erosion, there is an opportunity for us to consider incorporating designs which enable safe access so people of diverse abilities can enjoy recreational paddling. Building a dedicated access point also protects

the environmental values of the river banks by reducing the number places where people informally enter the water which damages river's banks and habitat.

By collaborating with councils and Paddle Victoria, we are identifying priority areas for ramps to be installed and upgraded. We are continuing to work with our partners to determine the future construction, ownership and maintenance of these ramps as part of the Yarra Strategic Plan.

Paddling at Finns Reserve in Templestowe

We are making it safer and easier for people to access the Yarra River at Finns Reserve with new environmentally sensitive stairs installed so people can carry their boats down to the water.

The works finished in April 2018 and involved the material use of rock and a handrail to allow safe canoe access into the Yarra River. The project has involved collaboration and support from Manningham City Council, Paddling Victoria and Melbourne Canoe Club



Delivering social and environmental benefits

By working with councils and stakeholders to make it safer and easier to access our rivers, we are improving environmental outcomes and delivering community benefits including:

- providing opportunities for people to connect to nature
- encouraging exercise for health and wellbeing
- encouraging a diverse range of people to use and access our river and creeks
- making it safer and easier to access the water
- responding to the massive demand for water recreation
- reducing environmental impacts, particularly streambank erosion

Community feedback

"Paddling is a great way for a variety of people to get active, stay healthy and connect to Melbourne's natural environment. Every paddler becomes an advocate for the protection of our waterways and Paddling Victoria looks forward to working with Melbourne Water to connecting people to waterways such as the Yarra River."

CEO Paddling Victoria, Mark Heggie