

# A water sensitive city

We are committed to using water efficiently, reducing the impacts of flooding and collecting, cleaning and recycling water.

## Why it matters

Our water resources, and the health of Port Phillip Bay, are under increasing pressure from climate change, a growing population, increasing development and aging infrastructure.

We're already one of the councils in greater Melbourne most vulnerable to water impacts, with low-lying land bounded by Port Phillip Bay, Albert Park, Yarra River and Elster Creek. These vulnerabilities will only become more intense. Water must be at the forefront as we design places and assets that function now and for the future.

As a water sensitive city, we face these challenges by working holistically with the urban water cycle – mains water, stormwater, wastewater and groundwater. We aim to protect the environment and improve water security by investing in various alternative sources. By creating multifunctional public spaces, we can manage water in the landscape, mitigating flood risk while creating better parks for people.

Creating a water sensitive city requires collaboration – with Melbourne Water, South East Water and the community. We all benefit from this collaboration, building a cooler Port Phillip, less impacted by flooding, with beautiful open spaces.

## How we're going

- We continue to invest in water sensitive urban design infrastructure. We've built over 200 raingardens, including an additional 15 new raingardens and the Alma Park stormwater harvesting scheme, since 2018.
- We met our interim target for total nitrogen removal from stormwater and are on track to exceed our 2027/28 target.
- We developed the Fishermans Bend Water Sensitive City Strategy with the Victorian Government, City of Melbourne, South East Water and Melbourne Water. It aims to reduce the impact of flooding, clean stormwater before it enters the bay and provide a climate-resilient water supply for the community.

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- We invested in building the Alma Park Stormwater harvesting Scheme which can provide 16 Megalitres per year of clean stormwater for irrigation of the gardens. It also removes 78 kg/yr nitrogen, 13 kg/yr of phosphorus and 8772 kg/year of total suspended solids.

## Key partners

- The Community
- Victorian Government
- Melbourne Water
- South East Water
- Research organisations
- Neighbouring local governments.

## Targets

Council indicators					
Indicator	Baseline 2016/17	Target 2021/22	Progress 2021/22	Target 2028	Contributing Projects (see initiatives table below)
Council's mains water use for irrigation  Note: A new indicator in 2023 version of Strategy*	169 ML/y	NA	149 ML/y (12% reduction)	97 ML/y (43% reduction)	1-Investigations and trials 3- Stormwater harvesting 5-Fishermans Bend 6-Recycled water 7-Infrastructure improvements
(Indicator measured to support achievement of mains water use for irrigation target)	238 ML/y	257 ML/y	216 ML/y		1-Investigations and trials 3- Stormwater harvesting 5-Fishermans Bend 6-Recycled water

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Council's potable water use					7-Infrastructure improvements
Total Nitrogen (TN)	15,009 kg/y	13,544 kg/y (10% reduction)	13,563 kg/y (10% reduction)	12,669 kg/y (16% reduction)	1-Investigations and trials 2- Planning and Development 3- Stormwater harvesting 5-Fishermans Bend 7-Infrastructure improvements 8- Water Sensitive Urban Design (WSUD) 9- Permeability improvements
Total Suspended Solids (TSS)	717,035 kg/y	601,505 kg/y (16% reduction)	627,395 kg/y (13% reduction)	590,125 kg/y (18% reduction)	1-Investigations and trials 3- Stormwater harvesting 5-Fishermans Bend 7-Infrastructure improvements 8- Water Sensitive Urban Design (WSUD) 9- Permeability improvements
Total Phosphorus (TP)	1,880 kg/y	1,656 kg/y (12% reduction)	1,699 kg/y (10% reduction)	1,599 kg/y (15% reduction)	1-Investigations and trials 3- Stormwater harvesting 5-Fishermans Bend 7-Infrastructure improvements 8- Water Sensitive Urban Design (WSUD) 9- Permeability improvements

Community indicator					
Indicator	Baseline 2016/17	Target 2021/22	Progress 2021/22	2028 Aspiration	Contributing Projects (see initiatives table below)
Community potable water use	178 L/p/day	155 L/p/day	182 L/p/day	150 L/p/day	1-Investigations and trials 2- Planning and Development 4- Community Water Use 5-Fishermans Bend 9- Permeability improvements

**[Breakout box] \* A new indicator**

This review identified changes in how we measure our progress on our water use and the targets we set for pollutant reduction. Although we are on track to meet our target to reduce potable water use, we are changing this measure to focus on increasing the proportion of alternative water sources we use. We want a green and cool city as the climate warms up. Stormwater harvesting is a way to future-proof our parks and gardens and make sure they remain useable for sporting events and places of respite for residents during hot and dry weather.

## Initiatives

	Initiative	What's involved
1	Investigations and trials	<ul style="list-style-type: none"> <li>Investigate existing, new and emerging technologies and approaches to help Council use water more efficiently, including efficient and effective irrigation.</li> </ul>
2	Planning and development	<ul style="list-style-type: none"> <li>Define onsite stormwater detention requirements based on the work undertaken in 2021/22. This work should include clear technical guidance and assessment criteria for development applications.</li> </ul>

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3	Stormwater harvesting	<ul style="list-style-type: none"> <li>Continue to investigate stormwater harvesting opportunities with a positive benefit-cost analysis and implement where opportunities are feasible</li> </ul>
4	Community water use	<ul style="list-style-type: none"> <li>Support the Victorian Government's Target 150 campaign through our existing community engagement and communication programs.</li> </ul>
5	Fishermans Bend	<ul style="list-style-type: none"> <li>Work with others to establish and document the governance structure of smart rainwater tanks.</li> <li>Continue developing blue-green infrastructure and flood-resilient solutions for precincts with internal and external stakeholders.</li> </ul>
6	Recycled water	<ul style="list-style-type: none"> <li>South East Water's has proposed a recycled water plant in Fishermans Bend. Council will investigate, and deliver, where feasible, the infrastructure required to irrigate using recycled water.</li> </ul>
7	Infrastructure improvements	<ul style="list-style-type: none"> <li>Develop a long-term strategic asset plan to manage stormwater infrastructure, including new or proposed assets, and renew and maintain existing assets.</li> </ul>
8	Water Sensitive Urban Design (WSUD)	<ul style="list-style-type: none"> <li>Continue delivering and maintaining water-sensitive urban design projects designed to capture pollutants before running into waterways and the bay.</li> <li>Audit and inspections of WSUD assets to ensure they function as intended.</li> </ul>
9	Permeability improvements	<ul style="list-style-type: none"> <li>Develop methods and tools to quantify permeability easily</li> <li>Use mapping and analysis to understand potential future changes in permeability across the municipality.</li> <li>Implementing permeability initiatives such as de-paving, increasing green space and building green infrastructure.</li> </ul>