

Waterways Local Update 2016-17

Melbourne Water's work to improve waterways and provide flood protection in the **City of Melbourne**.



FOUR
VOLUNTEERS PROVIDED
US WITH RAINFALL DATA



MONITORED
SEDIMENT AND SILT
IN WATERWAYS



\$45,000
IN COMMUNITY
FUNDING

Melbourne Water makes a vital contribution to the famous Melbourne lifestyle by underpinning human health, enhancing community well-being, supporting economic growth and balancing the natural and man-made environment.

Together with our partners, we look after 8,400 km of rivers and creeks, 428 wetland treatment systems and more than 1,400 km of regional drainage systems in the Port Phillip and Westernport region. This work is funded by the Waterways and Drainage Charge, which is paid by property owners and collected by retail water companies on our behalf.

Melbourne Water cares for many waterways. Some in your local area include:

- · Yarra River
- · Maribyrnong River
- · Moonee Ponds Creek



Healthy waterways

Maintenance and new projects

Each year we create and maintain healthy waterways by removing litter, debris and excess sediment. We remove and spray weeds, cut grass and plant native trees and shrubs.

What we have done		Why
0.1 km	Revegetation	We plant native trees and shrubs along waterways to provide habitat for birds and animals. Revegetating waterways and replacing weeds with native plants prevents erosion and improves water quality.
2.5 km	Weed control	Introduced and noxious weeds can choke waterways and take over from plants that provide healthy habitats for birds and animals.
14.4 m ³	Sediment, silt, litter, debris removal	Silt, sediment, litter and debris is removed for drainage and flood protection, and to prevent pollution building up in our waterways and wetlands. An excess of these can impact the habitat for platypus, fish and other animals, as well as native plants.

Stormwater

We work closely with Council and local communities to better manage stormwater to protect the environment, provide alternative water sources and improve the stormwater that flows into local waterways.

What we have done	Why
Through the Clearwater program, we supported Council to take a whole-of-water approach by providing a wide range of tools and resources, and opportunities to participate in a variety of activities	This work helps to improve skills, increase knowledge and foster better networks across councils to change the way we manage water for healthy, connected communities.
Living Rivers supported the design and implementation of sustainable stormwater management systems in the Green Your Laneways program	The project will help transform the city's laneways into more attractive green spaces by using stormwater to water trees and plants, reducing the amount of stormwater entering our waterways.



Through our Living Rivers program, we worked with Council and contributed \$45,000 to projects that assist waterway health and create sustainable stormwater management solutions in your area.

Find out more at melbournewater.com.au/livingrivers

Environmental water

We work with government agencies, councils, industries, landowners and the community to provide the allocated water needed in rivers to maintain healthy natural ecosystems.

What we have done

Why

Worked with the Victorian Environmental Water Holder to deliver three environmental flows to the Yarra River

Releasing water from upstream storages mimics flows that would naturally occur if the river wasn't dammed. This improves water quality and habitat for native wildlife.

Monitoring and research

We regularly undertake extensive monitoring, investigations and research to help us better understand how we can improve local waterways.

What we have done

Why

Undertook monthly monitoring of water quality at two sites within your area. These tests measure:

- · water temperature
- dissolved oxygen
- salinity (conductivity)
- pH level
- · nutrients (nitrate, nitrite, ammonia, Kjeldahl nitrogen, soluble reactive phosphorus and total phosphorus)
- indicators of faecal contamination (E. coli)
- metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc)

Our water quality monitoring program is designed to assess broadscale, long-term trends in water quality (typically over 8 -10 years). We use this data to help identify pollution sources and inform the community about local water quality.

Monitored sediment at Moonee Ponds and Chinaman creeks, and the Yarra River estuary

We monitored sediment to improve our knowledge of contaminants and help guide our management of waterways.



Planning for future development

We plan for future development to ensure growing communities do not threaten local waterways. We provide advice and assist new developments to ensure they do not increase flood risk.

What we have done		Why
85	referrals for land subdivisions reviewed	To ensure proposed land subdivisions meet current standards for drainage and stormwater quality.
100	development applications reviewed	To ensure that growing communities don't contribute to an increase in flood risk.
97	flood information requests reviewed	To provide flood information to property owners and people interested in purchasing or redeveloping property.
20	applications for works near Melbourne Water assets and works such as bridges, shared pathways and jetties reviewed	To ensure waterways, and the plants and animals that live there, are protected from the potential impacts of building works.
1	stormwater connection application reviewed	To ensure waterways and the plants and animals that live there, are protected from the potential impacts of construction works.

Flood protection

While floods are natural and we can't stop them all from occurring, we aim to minimise the damage they cause to people, places and communities.

We manage the regional drainage system and work with Council, the Victorian State Emergency Service, the Bureau of Meteorology, property owners and developers to make sure flood information is up to date. We provide flood warning services, prepare flood response plans, and identify and construct new flood protection projects in areas with the greatest need.

What we have done	Why	
Worked with stakeholders to review plans and hydraulic reports to assist with the Arden/McCauly and Fishermans Bend urban re-development planning, Melbourne Metro Rail, West Gate Tunnel, Swan Bridge Widening and CityLink/Tulla Widening projects	Ensure proposed works will not impact the floodplain, path of overland flow, assets and waterways, and that the project is feasible, safe and possible for community use.	
Continued collecting hydrological data	Data is used to analyse flood warning during emergency situations, as well as for such things as development referrals and projects to reduce the risk of flood.	



Four volunteers in your area provide us with rainfall data by recording information from a rain gauge in their backyard. These figures and the data from our automated gauges provides us with valuable rainfall information.

Find out more at melbournewater.com.au/communityrainreaders

Working with the community

The involvement of community groups, volunteers, land managers and farmers supports our management of local waterways and regional drainage systems. If you'd like more information about funding opportunities, please call 131 722 or email river.health@melbournewater.com.au

We also worked with the local community on several events and initiatives throughout the year.

Who we worked with	What we did
Friends of Royal Park	Provided support to monitor water quality through the Water Quality Monitoring program, in partnership with Merri Creek Management Committee.
Friends of Westgate Park	
City of Melbourne	Supported Melbourne Knowledge Week with citizen science presentations on frogs, platypus, water quality and waterbugs.



Our Space Your Space is an app that helps you find land managed by Melbourne Water that you can use for community projects, such as community gardens. We encourage communities to apply to use the land.

Find out more at

melbournewater.com.au/ourspaceyourplace or call 131 722.



Waterwatch is a citizen science program that encourages communities to monitor platypus, frogs, waterbugs and water quality in their local river or creeks. We empower our volunteers to collect data, protect the waterways environment and share their knowledge.

Find out more at melbournewater.com.au/waterwatch or call 131 722.