



Waterways Local Update 2016-17

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



137.4km
WEED CONTROL
ALONG WATERWAYS



539
REFERRALS FOR LAND
SUBDIVISION REVIEWED



20
VOLUNTEERS PROVIDED
US WITH RAINFALL DATA

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:

- Werribee River
- Lollypop Creek
- Little River
- Cherry Creek
- Skeleton Creek
- Laverton Creek
- Kororoit Creek
- Davis Creek
- Dry 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

5.9 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.

137.4 km

Weed control

Introduced and noxious weeds can choke waterways and take over from plants that provide healthy habitats for birds and animals.

104.6 m³

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.

Began works to manage weeds and revegetate with 3500 plants along the Werribee River estuary

This work over three years will improve streamside vegetation along a widely used five-kilometre stretch of the Werribee River estuary.

Working with Council to widen the vegetation corridor along the Werribee River, within the Werribee township

Planting indigenous vegetation along the streamside of the river currently being mowed will improve and enhance the river.

Began works to control woody weeds and revegetate with 6000 plants along three frontages of Little River, upstream of Kirks Bridge Road

These works along the waterway where stock is excluded will improve Little River.

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

Living Rivers supported training within Council to build understanding of sustainable stormwater management and modelling

The training will improve Council's ability to assess designs of new assets and maintain sustainable stormwater management assets, to ensure they continue to protect our waterways.

Living Rivers contributed funding to investigate litter sources and interventions in the Bulban drain catchment

The investigation will help Council develop a strategic stormwater management plan to reduce litter and improve stormwater quality.

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.

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

Worked with the Victorian Environmental Water Holder to deliver six environmental flows to the Werribee River and its tributaries

Worked with the Department of Environment, Land, Water and Planning, Western Water and Southern Rural Water to advocate for the Werribee River and its tributaries

Worked with Ecology Australia and the Department of Environment, Land, Water and Planning to monitor fish in the Werribee River

Determined the water flow required to prevent outbreaks of blue-green algae and aquatic weeds in the lower Werribee River

Why

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.

Advocating for environmental outcomes improves the health of our waterways.

Monitoring fish and their response to environmental flows helps us understand the health of fish.

Determining the water flow improves our knowledge of blue-green algae and aquatic weeds to help guide our management of waterways.



Through our **Living Rivers** program, we worked with Council and contributed \$10,900 to projects that assist waterway health and create sustainable stormwater management solutions in your area.

Find out more at melbournewater.com.au/livingrivers



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

Undertook monthly monitoring of water quality at four 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)

Undertook fortnightly blue-green algae monitoring at the Werribee Weir during the summer period

Annual platypus surveys in the middle Werribee River

Monitored sediment along the Werribee River, Werribee River estuary and Little River estuary

Why

Our water quality monitoring program is designed to assess broad-scale, 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.

We monitor for blue-green algae because it can be a health risk to people and animals. If blue-green algae is detected, we follow state government guidance, erect warning signs, inform the public and continue to monitor the water until it clears.

Improved knowledge of platypus population health and distribution allows us to nurture this important species.

Monitoring sediment improves our knowledge of contaminants and helps 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

539 referrals for land subdivisions reviewed

To ensure proposed land subdivisions meet current standards for drainage and stormwater quality.

106 development applications reviewed

To ensure that growing communities don't contribute to an increase in flood risk.

139 flood information requests reviewed

To provide flood information to property owners and people interested in purchasing or redeveloping property.

70 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.

27 stormwater connection applications 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

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.

Worked with stakeholders to review plans and hydraulic reports to assist with planning for the Outer Suburban Arterial Roads project

Ensure proposed works will not impact the floodplain, path of over-land flow, assets and waterways, and that the project is feasible, safe and possible for community use.

Completed mapping for floods around the Brooklyn main drain and tributaries of the Western Treatment Plant drainage catchment

Mapping updates our knowledge of flooding to better manage drains, assess flood risk in catchments and assist planning scheme overlays.



20 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

Funding provided	Grant	For
\$1,815	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$51,650	Community Grants	Volunteer and community groups for works that protect or enhance riverbanks on public land, raise awareness, and provide training and education to protect local waterways.
\$4,446	Corridors of Green	Councils and public land managers for projects such as weed control, fencing and creating management plans.





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.

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

Who we worked with

What we did

Werribee River Association

Supported the monitoring of water quality through our Water Quality Monitoring program.

Skeleton Creek Monitoring Group

Carranballac College (Jamieson Way)

Supported teachers to participate in the pilot program *River Detectives*, with the loan of a water quality kit and training to enable them to take students to test water quality and monitor waterbugs.

Carranballac College (Boardwalk campus)

City of Wyndham

Hosted a Growling Grass Frog habitat walk and frog friendly gardening workshop for local residents.

Friends of Skeleton Creek

Truganina South Primary School

Conducted platypus and frog census habitat walks and worked together on a mural highlighting waterways at the new Greening the Pipeline Parkland.

Wyndham Community Education Centre

Werribee River Association

City of Wyndham

Environmental Education Victoria

Hosted a teacher professional development session at Point Cook wetlands, and demonstrated waterbug sampling and how to use the Frog Census app.

Community

Created the Williams Landing Community Parkland as part of the Greening the Pipeline project to connect communities and provide a space to meet, play and relax.

City of Wyndham

City West Water

Greening the West

VicRoads

Werribee River Association

Conducted environmental DNA sampling for platypus and hosted a sampling session as part of the City of Wyndham's Green Living series.

Pinkerton Landcare

City of Wyndham



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.