



Waterways Local Update 2017-18

Melbourne Water's work to enhance waterways and build resilience to flooding in the **City of Knox**.



131
LAND SUBDIVISION
REFERRALS REVIEWED



17.6 km
WEED CONTROL
ALONG WATERWAYS



9
VOLUNTEERS PROVIDED
RAINFALL DATA

Melbourne Water plays an active role in the daily lives of Melburnians. We contribute to Melbourne's famous lifestyle by protecting and enhancing over 25,000 km of rivers and creeks, and more than 479 stormwater treatment systems and wetlands in the Port Phillip and Westernport region.

The Waterways and Drainage Charge, which is paid by property owners and collected by retail water companies on our behalf, funds this work. It is an important part of ensuring a thriving natural environment.

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

- Ferny Creek
- Dandenong Creek
- Dobsons Creek
- Monbulk Creek
- Liverpool Road Retarding Basin
- Dandenong Valley Wetland

Healthy waterways

Maintenance and new projects

We are the caretakers of waterway health in the Port Phillip and Westernport region. 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

1.4 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.

17.6 km Weed control

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

105.3 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.

Carried out works to control weeds along the Upper Dobsons Creek, allowing native plants to regenerate

The work aims to improve habitat for birds and animals, prevent erosion and improve water quality within our waterways.

Carried out works to control weeds, e.g. desert ash, remove woody weeds and plant native grasses, shrubs and trees along Dandenong Creek

The work aims to provide habitat for frogs, birds and animals, prevent erosion and improve water quality in our waterways.

Stormwater

Rainwater, stormwater and recycled water are valuable resources. We work closely with Council and local communities to protect our rivers, creeks and bays, provide alternative water sources and improve the stormwater that flows into local waterways by integrating stormwater into the urban landscape.

What we have done

Why

Through the Clearwater program, we supported Council to take a whole-of-water cycle 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

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

What we have done

Why

Worked with the Department of Environment, Land, Water and Planning, and Southern Rural Water on environmental outcomes for river systems in Integrated Water Management forums

Advocating for environmental outcomes for river systems and tributaries improves the health of waterways.

Monitoring and research

We improve local waterways by undertaking regular and extensive monitoring, investigations and research to better understand them.

What we have done

Monthly monitoring of water quality at five 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)

Fortnightly blue-green algae monitoring at one site in your area during the summer period

Monitored sediment at Dandenong Creek in the Liverpool Road Retarding Basin, Corhanwarrabul Creek and Dandenong Valley treatment wetlands

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.

This monitoring improves our knowledge of contaminants and guides our management of the waterways.



Planning for future development

We ensure local waterways aren't threatened by growing communities and that new developments do not increase flood risk through planning and providing advice to assist future development.

What we have done

Why

131 referrals for land subdivisions reviewed

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

49 development applications reviewed

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

106 flood information requests reviewed

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

4 applications for works near Melbourne Water assets and works such as bridges, shared pathways and jetties reviewed

Ensure waterways, and the plants and animals that live there, are protected from the potential impacts of building works.

8 stormwater connection applications reviewed

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 can build our resilience to them and 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.



Nine 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

Working collaboratively with community groups, volunteers, land managers and farmers allows for better management of local waterways, natural environments and regional drainage systems. It protects the environment and promotes conservation. If you'd like more information about funding opportunities, please call 131 722 or email river.health@melbournewater.com.au

Funding provided	Grant	For
\$9,810	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$44,000	Corridors of Green	

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

Who we worked with	What we did
Field Naturalists Club of Victoria - Junior Field Nats	Conducted a frog and wetlands talk, and monitored Dandenong Valley Wetlands.
City of Knox	Conducted Frog Census school workshops on World Water Day.
First Friends of Dandenong Creek	
Swinburne TAFE	Provided support to monitor water quality through our Waterwatch program.
Heritage College	Supported teachers to participate in the River Detectives program, with the loan of a water quality kit and training to enable them to take students to test water quality in Dobsons Creek.
Friends of Old Joes Creek	Supported the Friends of Old Joes Creek Open Day with a stall to inform the community about citizen science programs and waterway management works.
Maroondah and Knox councils	Developed a concept for Blind Creek through a co-design approach to create a vision for the site, as part of the Re-imagining Your Creek Program to naturalise five kilometres of creeks across Melbourne that have been piped or channelled.
Friends of Blind Creek	
Re-imagining Your Creek Advisory Group	
Community	
State government and agencies	



Our Space Your Place is an app that helps you find land managed by Melbourne Water to use for projects that benefit the wider community, 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.



Our citizen science programs harness the power of community through Waterwatch programs. They support people to collect and analyse data on platypus, frogs, waterbugs and water quality in their local river or creeks and advocate for waterways to help protect them and promote conservation.

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