



Waterways Local Update 2016-17

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



446 m³
SEDIMENT AND SILT
REMOVED FROM WATERWAYS



ASSISTED
WITH LEVEL CROSSING
REMOVALS



18.3 km
WEED CONTROL
ALONG WATERWAYS

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:

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

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

1.7 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.

18.3 km Weed control

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

446 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.

Undertook works to control weedy grasses, revegetate with 1000 plants, and repaired pipes at Winton Wetlands, a site of biodiversity significance

This work allows for threatened vegetation to regrow and improve water flow across connecting wetlands.

Undertook works to control woody weeds at Dandenong Creek, focusing on blackberry and desert ash

Removing these weeds relieves stresses that can affect native plants and animals in the area. Works were done to compliment significant revegetation works undertaken by Council.

Completed works to improve the habitat for the threatened Dwarf Galaxias fish

To improve and increase the quality and quantity of habitat for the *Dwarf Galaxias*.

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.



Through our Living Rivers program, we worked with councils on 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

Worked with Council, Southern Rural Water, the Port Phillip and Westernport Catchment Management Authority and various friends groups to develop the Dandenong Creek Environmental Flow study

Why

The study identifies the flow requirements to help support vegetation, fish, frogs and platypus now and into the future.

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 seven 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)

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.

Undertook fortnightly blue-green algae monitoring at three sites along Rowville Lakes during the summer period.

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.

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

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

117 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.

66 flood information requests reviewed

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

27 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.

9 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

Worked with stakeholders to review plans and hydraulic reports to assist with level crossing removals on the Belgrave line

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.

Replaced underground drain with a larger, more practical boxed drain in Wantirna

Works help protect town houses from flooding above floor level.

Worked with Council on flood mapping models

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

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

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
\$17,136	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$13,750	Corridors of Green	Councils and public land managers for projects such as weed control, fencing and creating management plans.

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

Who we worked with

First Friends of Dandenong Creek
Swinburne TAFE - Conservation and Land Management students

Swinburne TAFE

First Friends of Dandenong Creek

City of Knox

What we did

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

Supported students to attend a Waterbug Census monitoring session at Sassafraz Creek.

Worked together to establish Frog Census monitoring sites for the Enhancing Our Dandenong Creek and Port Phillip and Westernport Catchment Management Authority Living Links projects.

Supplied resources for the Gardens for Wildlife scheme, hosted a platypus information session and collected environmental DNA samples.



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.

