



Waterways Local Update 2016-17

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



54.2 km
WEED CONTROL
ALONG WATERWAYS



DEVELOPING
SUSTAINABLE STORMWATER
PRACTICES



225.56 m³
SEDIMENT AND SILT
REMOVED FROM 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:

- Cardinia Creek
- Hampton Park Wetlands
- Berwick Springs Wetlands
- Eumemmerring Creek
- Troups Creek
- Dandenong 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

5.1 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.

54.2 km

Weed control

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

225.56 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.

Continued working on the Troups Creek Wetland

Works improve and increase the quality and quantity of habitat for threatened species such as Dwarf Galaxias, Australasian Bittern, Eastern Great Egret, Latham's Snipe and Royal Spoonbill.

Undertook works along Dandenong Creek from Monash Freeway to Kidds Road

Controlling weeds and revegetating along the waterway improves the health of Dandenong Creek.

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 helped fund the position of Water Sensitive Urban Design Officer

The officer will help progress Council's Integrated Water Management plan and build organisational capacity to improve liveability and enhance waterway health.

Living Rivers provided funding for strategic master planning that prioritises cost-effective stormwater harvesting projects

Identifying stormwater harvesting opportunities will save potable water and provide irrigation for Council reserves and water quality treatment.

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 Council and contributed \$140,000 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

Monitored groundwater and surface water levels

To help understand the role that groundwater is playing in Westernport.

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

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

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 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 in your area 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 along the Lynbrook Estate Wetland

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

490 referrals for land subdivisions reviewed

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

564 development applications reviewed

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

245 flood information requests reviewed

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

54 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.

39 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 the Monash Freeway upgrade, duplication of Thompsons Road, Pakenham train line upgrades and level crossing removals

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.

Investigated drainage in the Koo Wee Rup and Longwarry Flood Protection District

Helps to guide flood improvement works and provide flood protection.

Completed flood mapping on a range of joint projects with Council

Mapping updates our knowledge of flooding to better manage drains, assess flood risk and assist with 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

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
\$14,883	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$10,032	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.
\$66,000	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	What we did
Community City of Casey	Presented on the Frog Census, supported with monitoring and delivered a habitat creation workshop.
Swinburne TAFE Parks Victoria	Delivered training on the Frog Census and monitored for the Southern Toadlet at Lysterfield Lake Park.
Cardinia Catchment Landcare	Delivered a Waterbug Census monitoring session and training about macroinvertebrates and how to monitor them in local waterways.
City of Casey	Improved access and recreation opportunities by extending the path at Narre Warren North retarding basin during upgrade works.



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.