

Waterways Local Update 2016–17

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



\$537,600 LIVING RIVERS PROGRAM FOR WATERWAY HEALTH



79.2 km WEED CONTROL ALONG WATERWAYS



IMPROVED SUSTAINABLE STORMWATER MANAGEMENT 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:

- Maribyrnong River
- Jones Creek
 Taylors Creek
- Jacksons Creek
 Ko
- Kororoit Creek



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
6.7 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.
79.2 km	Weed control	Introduced and noxious weeds can choke waterways and take over from plants that provide healthy habitats for birds and animals.
24.8 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.
Planted 1200 indigenous plants, ren weeds, installed illegal vehicle barri other works for plantings by school community along Kororoit Creek	ers and completed	The works improve visual amenity, habitat and the health of the creek.
Carried out weed control and reveg along Taylors Creek, Old Calder Hig Crescent		The works improve a 1.3km section of the creek.
Revegetated with over 1000 plants Roberts Road to Fullerton Road	along Steele Creek,	The works amenity along Steele 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 provided funding to review the 2013 Brimbank Sustainable Water Management Strategy	Reviewing the strategy will enable Council to incorporate best practice integrated water management approaches.
Living Rivers contributed funding to construct swales and rain gardens	These works will treat stormwater and reduce runoff to protect our waterways from the impacts of stormwater.
Living Rivers supported the design of a stormwater treatment and harvesting system on public and school sportsgrounds	The system will help Council refine stormwater harvesting on Delahey Reserve, and raise awareness and improve community understanding of stormwater pollution, flow paths and impacts to waterways.
Living Rivers provided funding for the water sensitive urban design of stormwater harvesting for Sunvale Community Park	Two rain gardens and a bioretention system will help treat stormwater runoff and protect our waterways.
Living Rivers provided funding to analyse and prioritise stormwater catchments in the Council area	The work helps Council develop a strategic approach to manage waterway health initiatives to improve stormwater quality and waterway health.
Living Rivers contributed funding to develop maintenance manuals for Council's stormwater harvesting schemes	The manuals will provide a holistic approach to reduce the amount of stormwater entering waterways, and collecting and treating stormwater for irrigation of sports fields and other reserves.
Living Rivers helped fund the upgrade of stormwater harvesting on the Keilor Public Golf Course	Collecting and treating stormwater to irrigate the golf course will protect waterways by reducing the amount of stormwater entering them.
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 **\$537,600** 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, Keilor landholders, Southern Rural Water and Friends groups to improve the Maribyrnong River	Through planned release of water from reservoirs, we improved the flow of the Maribyrnong River.

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 five sites within your area. These tests measure:	Our water quality monitoring program is designed to assess broad- scale, long-term trends in water quality (typically over 8 - 10 years)
water temperature	We use this data to help identify pollution sources and inform the community about local water quality.
dissolved oxygen	
 salinity (conductivity) 	
• pH level	
 nutrients (nitrate, nitrite, ammonia, Kjeldahl nitrogen, soluble reactive phosphorus and total phosphorus) 	
• indicators of faecal contamination (<i>E. coli</i>)	
 metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc) 	
Undertook weekly monitoring at two sites to better understand recreational health risks during the summer period	We use this data to identify any pollution sources and provide information to the community.
Undertook fish surveys in the Maribyrnong River	The surveys helped evaluate the benefits of new vertical-slot

and at the mouth of Taylors Creek

The surveys helped evaluate the benefits of new vertical-slot fishways installed in 2012 at Dights Falls and complemented another monitoring program of fishway performance being undertaken by the Arthur Rylah Institute.



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

referrals for land subdivisions reviewed	To ensure proposed land subdivisions meet current standards for drainage and stormwater quality.
development applications reviewed	To ensure that growing communities don't contribute to an increase in flood risk.
flood information requests reviewed	To provide flood information to property owners and people interested in purchasing or redeveloping property.
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.
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 information requests reviewed applications for works near Melbourne Water assets and works such as bridges, shared pathways and jetties reviewed stormwater connection

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 on the M80 and V/line Ballarat line upgrades	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.



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

Funding provided	Grant	For
\$ 5,168	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$ 44,447	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.

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

Who we worked with	What we did
Friends of Organ Pipes National Park	Provided support for monitoring water quality and the Waterbug Census, as well as training on Waterbug Census monitoring in local waterways.
St Peter Chanel Primary School	Supported teachers to participate in the pilot program <i>River</i> <i>Detectives</i> , with the loan of a water quality kit and training to enable them to take students to test water quality and monitor waterbugs in Kororoit Creek.
Overnewton Anglican Community College	Supported teachers to participate in the pilot program <i>River</i> <i>Detectives</i> , with the loan of a water quality kit and training to enable them to take students to test water quality and monitor waterbugs in the Maribrynong River.
Penleigh and Essendon Grammar School	Supported school Frog Census monitoring and habitat restoration for Growling Grass Frogs on school grounds.
Friends of Kororoit Creek	Provided a Waterbug Census session to monitor macroinvertebrates in Kororoit Creek in Sunshine West.
AMES Australia Conservation Volunteers Australia	Worked with newly arrived migrants and refugee volunteers to gain new skills and connections to the local environment by revegetating along Kororoit Creek.



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**.