

# Waterways Local Update 2016–17

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



**78.6 km** WEED CONTROL ALONG WATERWAYS



**323** REFERRALS FOR LAND SUBDIVISION REVIEWED



**17** 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:

• Emu Creek • Kismet Creek

Merri Creek

- Blind Creek
- Konagaderra Creek
- Upper Moonee Ponds Creek

• Deep 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
<b>1.6</b> 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.
<b>78.6</b> km	Weed control	Introduced and noxious weeds can choke waterways and take over from plants that provide healthy habitats for birds and animals.
<b>144</b> m <sup>3</sup>	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.
We revegetated and maintained vege Aitken Creek near the Craigieburn Sp	· · · · · · · · · · · · · · · · · · ·	The works improve visual amenity and the health of the waterway.
We revegetated and controlled weed Harpers Creek at Holden Flora Reserv	· · · · · · · · · · · · · · · · · · ·	The project enhanced platypus habitat and improved waterways along Harpers 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 a position within Council to continue implementing and expanding the Cleaner Creeks project	The position helps to continue developing sustainable water measures and provides education and enforcement to reduce pollution from the industrialised areas.
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 **\$87,000** 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
We worked with Western Water, Southern Rural Water and the Victorian Environmental Water Holder to monitor water quality	Releasing three environmental flows allowed us to monitor water quality.
We worked with the Victorian Environmental Water Holder, Western Water and the Department of Environment, Land, Water and Planning to identify options to recover water from the Maribyrnong River	This project looks at options to recover water for the Maribyrnong River to improve the river's health, as part of the Central Region Sustainable Water Strategy.

#### 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 nine 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). We use this data to help identify pollution sources and inform the
water temperature	community about local water quality.
dissolved oxygen	
<ul> <li>salinity (conductivity)</li> </ul>	
• pH level	
<ul> <li>nutrients (nitrate, nitrite, ammonia, Kjeldahl nitrogen, soluble reactive phosphorus and total phosphorus)</li> </ul>	
<ul> <li>indicators of faecal contamination (E. coli)</li> </ul>	
<ul> <li>metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc)</li> </ul>	
Macroinvertebrate surveys in Merri Creek	These surveys improve our knowledge of the condition of waterways and how they change.
Monitored sediment at Skeleton, Jacksons and Deep creeks, the Maribyrnong River, Highlands Estate Wetland, Brodies Lakes and Shankland Wetland	This monitoring improves our knowledge of contaminants and guides our management of the waterways.



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

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323	referrals for land subdivisions reviewed	To ensure proposed land subdivisions meet current standards for drainage and stormwater quality.
72	development applications reviewed	To ensure that growing communities don't contribute to an increase in flood risk.
73	flood information requests reviewed	To provide flood information to property owners and people interested in purchasing or redeveloping property.
45	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.
13	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 planning the Outer Suburban Arterial Roads, CityLink/Tulla widening and M80 upgrade projects	Ensure proposed works will not impact the floodplain, path of overland flow, assets and waterways, and that the project is feasible, safe and possible for community use.
Worked with Council to undertake flood mapping along Railway Crescent and Widford Road drains	Mapping provides understanding of flooding and helps develop better drains, assess flood risk and assists 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.



**17 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
\$ <b>110,428</b>	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$ <b>6,373</b>	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 Holden Flora Reserve	Supported the monitoring of general water quality and the
Jacksons Creek EcoNetwork	Waterbug Census through our programs.
Friends of Emu Bottom Wetlands	
Clarkefield Landcare	
Sunbury Landcare	
City of Hume	Supported Council to enable schools to participate in the pilot program <i>River Detectives</i> , to build an understanding in water quality and waterbug monitoring with students.
Merri Creek Management Committee	We supported Merri Creek Management Committee to undertake three Waterbug Census monitoring sessions on Merri Creek in Somerton, Campbellfield and Craigieburn.
Waterwatch volunteers	Held a Waterwatch network meeting in Sunbury for volunteers in the Maribyrnong catchment.
Jacksons Creek EcoNetork	Attended the network's meeting to discuss Melbourne Water's activities and highlight new projects in the area.



**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**.