Waterways Local Update 2016–17

Melbourne Water's work to improve waterways and provide flood protection in the **Shire of Yarra Ranges**.

$1.891 m
LIVING RIVERS PROGRAM FOR WATERWAY HEALTH

PLATYPUS
SURVEYS, EDUCATION AND HABITAT IMPROVEMENT

416.5 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:

- Yarra River
- Monbulk Creek
- Stringybark Creek
- Steels Creek
- Woori Yallock Creek
- Hoddles Creek
- Ferny Creek
- Olinda Creek
- Little Yarra River

Image: Yarra River in Warburton

Melbourne Water
Enhancing Life and Liveability

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
108.6 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.
416.5 km Weed control	Introduced and noxious weeds can choke waterways and take over from plants that provide healthy habitats for birds and animals.
148.5 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.
Working with landowners to control Glyceria in the Yarra River catchment	Reducing dense patches of the weed improves the flow of water and reduces flooding, silt and debris build up.
Worked with Council to stabilise the bank, upgraded stormwater treatment and improve facilities of the Yarra River at Thomas Avenue in Warburton	The works to improve amenity and the health of the river grew in response to community concerns about erosion at this popular tourist location.
Undertook works to control woody weeds and revegetate along the Monbulk Creek with 2000 plants	These works complimented weed control and revegetation works that Council and the community undertook upstream.
Removed 800 metres of willows and installed 7500 plants and eight rock structures along Monbulk Creek	These works help control the creek bed, improve fish passage and support known platypus populations within the area.
Undertook works to control woody weeds and revegetate along Olinda Creek	Reducing weeds, especially blackberry and willows, and increasing native habitat will help protect the waterway and support platypus that may be in the area.
Carried out works to control willows and revegetate along the Yarra River	These works improve streamside vegetation and compliment other works in the area.
Carried out weed control in the Watts River closed catchment above Maroondah Reservoir	Ongoing control of the weed, Red Cestrum, protects the catchment and our drinking water.

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 research key stormwater runoff threats and develop stormwater management plans for priority catchment areas	Planning for and managing stormwater threats through sustainable stormwater control measures will improve waterway health, waterway and streamside habitat, water quality and amenity.
Living Rivers supported the design of five outfalls and construction of two sustainable stormwater management assets in priority catchments	These projects will protect outfalls, assist in the development of a 10-year water sensitive urban design plan for the Dandenong Ranges and help address impacts to various threatened species.
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 **$881,485** 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 to deliver three environmental flows to the Yarra River	Releasing water from upstream storages mimics flows that would naturally occur if the river wasn't dammed. This improves water quality and habitat for native wildlife.
Worked with landholders to complete whole-farm water plans and implement recommendations	Implementing water plans across farms will improve streamflow from rural properties.
With Ecology Australia, we monitored the health of fish in Stringybark and Diamond creeks	Improved knowledge of fish population, health and distribution allows us to support fish species.
Monitored the population and health of macroinvertebrates in the Woori Yallock, Steels, Pauls and Dixons creeks	Results from the monitoring will help feed into the review of Stream Flow Management Plans.
Surveyed the vegetation of Spadoni's Billabong with Council after its reconnection	The survey helps to understand the effect on vegetation after the billabong had been reconnected, which proved positive.

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 26 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 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.
Annual platypus surveys in Chum Creek, McMahons Creek, Sassafras Creek and Woori Yallock Creek	Improved knowledge of platypus population health and distribution allows us to nurture this important species.
Undertook fish surveys along Log Creek	The surveys helped evaluate the benefits of a new vertical-slot fishway installed at Dights Falls and complements another fishway monitoring program undertaken by the Arthur Rylah Institute.
Macroinvertebrate surveys in the Upper Yarra Reservoir	These surveys improve our knowledge of the condition of waterways and how they change.
Monitored sediment along Olinda Creek and Platypus Wetlands	This monitoring improves our knowledge of contaminants and guides our management of the waterways.
Continued to work with The University of Melbourne to monitor vegetation and water levels at Cockatoo Swamp in Yellingbo Nature Conservation Reserve, which provides important habitat for the critically endangered Helmeted Honeyeater and lowland Leadbeater's Possum	A monitoring program will assess changes in the condition of vegetation and water movement across the site.

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
248 referrals for land subdivisions reviewed	To ensure proposed land subdivisions meet current standards for drainage and stormwater quality.
228 development applications reviewed	To ensure that growing communities don't contribute to an increase in flood risk.
86 flood information requests reviewed	To provide flood information to property owners and people interested in purchasing or redeveloping property.
50 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.
19 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
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.

27 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
$426,951	**Stream Frontage Management**	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
$187,882	**Corridors of Green**	Councils and public land managers for projects such as weed control, fencing and creating management plans.
$226,134	**Rural Land Program**	Landholders in specific catchments for projects that reduce the amount of sediment and nutrients entering waterways from agricultural land.
$168,494	**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.

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**.

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

Who we worked with	What we did
Mount Evelyn Primary School Mount Lilydale Mercy College Environmental Education For Kids! (EEK!)	Supported teachers to participate in the pilot program *River Detectives*, with the loan of a water quality kit and training to enable them to take students to test water quality and monitor waterbugs in local waterways.
Belgrave Lake Park Butterfield Reserve Monbulk Landcare Healesville Environment Watch Inc Mount Toolebewong District Landcare Friends of Sassafras Creek	Provided support to monitor water quality through the Water Quality Monitoring program.
ECOSS Yarra Valley	Held a Frog Census stall and workshop at ECOSS Ecotopia Festival.
Southern Dandenongs Landcare	Held a platypus information stall at Belgrave Platypus Festival, and conducted a Waterbug Census monitoring session with support.
Shire of Yarra Ranges ECOSS Yarra Valley Plastic Bag Free Warburton Warburton Primary School	Hosted a platypus spotting and talks evening.
Shire of Yarra Ranges Warburton Advancement League Bendigo Bank	Lead a campaign to reduce fishing line litter in Warburton by installing fishing line bins and information.
Len Jeffrey Memorial Preschool	Delivered a platypus and frog education session.
Belgrave Platypus	Supported the platypus environmental DNA collection along Monbulk Creek.
Shire of Yarra Ranges Belgrave Platypus	Supported Clean Up Australia Day.
Department of Environment, Land, Water and Planning Landowners	Provided assistance to landowners through the Stream Frontage Management Program for fencing, off-stream stock watering, weed control and revegetation.
Port Phillip and Westernport Catchment Management Authority	Provided a grant to the Yarra4Life program that improves the quality of land, water and natural habitat in the Yarra Valley, and helps protect and enhance the survival of native species in the region.
Mount Evelyn Environmental Protection and Progress Association	Celebrated 10 years of receiving Melbourne Water Community Grants.
Shire of Yarra Ranges	Improved access and recreation opportunities by extending the path at Lilydale Lake retarding basin during upgrade works.

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