



Waterways Local Update 2017-18

Melbourne Water's work to enhance waterways and build resilience to flooding in the **City of Hume**.



5779.3 m³
SEDIMENT, SILT,
LITTER AND DEBRIS
REMOVED



201
FLOOD INFORMATION
REQUESTS REVIEWED



\$292,390
IN COMMUNITY
FUNDING

Melbourne Water plays an active role in the daily lives of Melburnians. We contribute to Melbourne's famous lifestyle by protecting and enhancing over 25,000 km of rivers and creeks, and more than 479 stormwater treatment systems and wetlands in the Port Phillip and Westernport region.

The Waterways and Drainage Charge, which is paid by property owners and collected by retail water companies on our behalf, funds this work. It is an important part of ensuring a thriving natural environment.

Melbourne Water cares for many waterways. Some in your local area include:

- Emu Creek • Kismet Creek • Blind Creek
- Deep Creek • Merri Creek • Konagaderra Creek

Healthy waterways

Maintenance and new projects

We are the caretakers of waterway health in the Port Phillip and Westernport region. 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

5.9 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.

62.8 km

Weed control

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

5779.3 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.

Carried out works to control rabbits and weeds, e.g. desert ash, boxthorn, gorse and blackberry, and plant native shrubs and trees along Emu Creek and Merri Creek, adjacent to the Cooper Street grasslands

The work aims to improve vegetation along Emu Creek, provide habitat for birds and animals, prevent erosion and improve water quality.



Stormwater

Rainwater, stormwater and recycled water are valuable resources. We work closely with Council and local communities to protect our rivers, creeks and bays, provide alternative water sources and improve the stormwater that flows into local waterways by integrating stormwater into the urban landscape.

What we have done

Living Rivers provided funding to develop a Water Sensitive Urban Design (WSUD) and stormwater harvesting masterplan to meet Council's stormwater pollutant reduction targets

Living Rivers provided funding to construct a rainwater harvesting system for toilet flushing and landscape irrigation at the Broadmeadows Global Learning Centre

Living Rivers provided funding to deliver workshops to educate the community on vegetable raingardens

Learning Rivers provided funding to investigate stormwater quality during the construction of residential subdivisions, and deliver education to developers and builders

Living Rivers provided funding to create bioretention swales and bioretention basin (rain gardens) for the car parks at the new Hume Global Learning Centre in Sunbury and the Greenvale Recreation Reserve

Through the Clearwater program, we supported Council to take a whole-of-water cycle approach by providing a wide range of tools and resources, and opportunities to participate in a variety of activities

Why

The masterplan will help protect waterways with higher ecological values, educate the community on stormwater, sustainability, waterway health and WSUD, and improve stormwater management, biodiversity and climate change adaptation.

This work helps to improve stormwater quality and reduce stormwater quantity to enhance waterway and bay health, and creates community awareness of integrated water management.

Helping the community to understand rain gardens and install water tanks improves stormwater quality and reduces stormwater quantity to enhance waterway and bay health.

Investigations and education help improve water quality and waterway health in the Maribyrnong River and Yarra River catchments, and increase knowledge and awareness of the environmental impact of greenfield development.

This work helps improve stormwater quality and reduce stormwater quantity to enhance waterway and bay health.

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.



The Living Rivers program offers councils funding, expertise and guidance to build their understanding, skills and commitment to manage stormwater within an integrated water management approach. We contributed \$218,460 to projects in your area.

Find out more at melbournewater.com.au/livingrivers

Environmental water

Working with government agencies, councils, industries, landowners and the community ensures we provide the allocated water needed in rivers to maintain healthy natural ecosystems.

What we have done

Why

Worked with the Department of Environment, Land, Water and Planning, and Southern Rural Water on environmental outcomes for river systems in Integrated Water Management forums

Advocating for environmental outcomes for river systems and tributaries improves the health of waterways.

Engaged land holders through the Mitigating Catchment Impacts program to identify opportunities and undertake whole farm plans

Undertaking farm plans enables land holders to access grants to implement water savings and improve stream low flow conditions.

Undertook a fish monitoring program

The program identifies the condition and trend of native fish populations in response to environmental flow releases and the impacts of climate change.

Monitoring and research

We improve local waterways by undertaking regular and extensive monitoring, investigations and research to better understand them.

What we have done

Why

Monthly monitoring of water quality at eight 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.

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.

Planning for future development

We ensure local waterways aren't threatened by growing communities and that new developments do not increase flood risk through planning and providing advice to assist future development.

What we have done

Why

164 referrals for land subdivisions reviewed

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

27 development applications reviewed

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

201 flood information requests reviewed

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

6 applications for works near Melbourne Water assets and works such as bridges, shared pathways and jetties reviewed

Ensure waterways, and the plants and animals that live there, are protected from the potential impacts of building works.

6 stormwater connection applications reviewed

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 can build our resilience to them and 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.



16 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

Working collaboratively with community groups, volunteers, land managers and farmers allows for better management of local waterways, natural environments and regional drainage systems. It protects the environment and promotes conservation. If you'd like more information about funding opportunities, please call 131 722 or email river.health@melbournewater.com.au

Funding provided

Grant

For

\$49,663

**Stream
Frontage
Management**

Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.

\$24,267

**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

Jacksons Creek EcoNetwork
City of Hume

Held an event to involve the community in collecting platypus environmental DNA (eDNA) samples and record data for the Waterbug Census.

Jacksons Creek EcoNetwork

Ran a platypus information stall for the festival.

Friends of Emu Bottom Wetlands
Sunbury Landcare

Supported the monitoring of water quality and the Waterbug Census through our programs.

Friends of Holden Flora Reserve

City of Hume

Supported Council to enable schools to participate in the River Detectives program to build an understanding in water quality and macroinvertebrate monitoring.

Attended a grants information night to discuss Melbourne Water's Stream Frontage Management Program with landowners.

Merri Creek Management Committee

Supported the committee with Waterbug Census monitoring on Malcolm Creek.

Friends of Moonee Ponds Creek
City of Hume

Planted 170 native trees (Red Gums) and 12,500 native shrubs at Jacana Wetlands.

Melbourne, Moonee Valley, Moreland, Hume councils

Friends of Moonee Ponds Creek

Friends of Upper Moonee Ponds Creek

Kensington Association

Living Colour Studio

Swinburne & RMIT universities

Parks Victoria

Yarra Valley Water

Conservation Volunteers Australia

Greening the West/City West Water

Victorian Planning Authority

Moonee Bicycle Users Group

Friends of Merri Creek

Provided Corridors of Green Grant for works on Aitken Creek and improved Cooper Street Grassland.

Local land holders and land managers

Presented at the Weed Networkers workshop in Beveridge to discuss landowner incentives.



Our Space Your Place is an app that helps you find land managed by Melbourne Water to use for projects that benefit the wider community, 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.



Our citizen science programs harness the power of community through Waterwatch programs. They support people to collect and analyse data on platypus, frogs, waterbugs and water quality in their local river or creeks and advocate for waterways to help protect them and promote conservation.

Find out more at melbournewater.com.au/waterwatch or call 131 722.