



Waterways Local Update 2018-19

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



\$132,231
IN COMMUNITY
FUNDING



RELEASED WATER
FOR THE ENVIRONMENT



REVEGETATED
& CONTROLLED WEEDS
ALONG WATERWAYS

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:

- Arthurs Creek
- Diamond Creek
- Plenty River
- Yarra River
- Watsons Creek
- Watery Gully 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

25 sites Grass cutting

We cut grass along waterways and pipe tracks to manage flood and fire risks, protect assets and maintain areas for community use. The grass cutting program assists in managing stormwater quality and quantity, and maintaining healthy waterways.

53 sites Weed control

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

152 m³ Sediment, silt, litter, debris removal

Silt, sediment, litter and debris removal improves drainage and flood protection and reduces 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.

Controlled weeds and revegetated along Dry Creek, an important habitat for frogs and birds, including the critically endangered Swift Parrot

Improving the condition of streamside vegetation and amenity by removing weeds such as hawthorn and blackberry, and replacing them with locally indigenous plants supports frogs and birds. These works also complement the Rivers to Ranges partnership program.

Undertook works to improve vegetation condition and native animal habitat, with weed control and revegetating along Five Mile Creek, and weed control along Sugarloaf Reservoir

Removing invasive weeds such as blackberry, selectively controlling the overabundant native species Kunzea, and planting native grasses, shrubs and trees helps provide habitat for birds, frogs and animals, prevent erosion and improve water quality in waterways.

Stormwater

Rainwater and stormwater 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.



The Clearwater program supports Council and water-sector organisations with sustainable water management and development. It offers knowledge-sharing, skills-development and network-building through a range of public and specialist training, guided tours and networking events. Find out more at www.clearwatervic.com.au or call 131 722.



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. Find out more at melbournewater.com.au/livingrivers

Environmental water

We work with government agencies, councils, water authorities, landowners and the community to ensure that water that has been set aside for the environment is provided to rivers and wetlands, to keep environments healthy for plants and animals.

What we have done

Worked with Southern Rural Water and the Department of Environment, Land, Water & Planning to monitor groundwater and surface water levels in Plenty Gorge

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

Worked with the Victorian Environmental Water Holder to undertake a fish monitoring program

Worked with the Victorian Environmental Water Holder to release environmental water flows to the Yarra River

Why

Investigated the role that groundwater plays in Plenty Gorge providing drought refuge habitat to support our native plants and animals.

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

Monitoring native fish in Plenty River helps to understand how water released into the environment is helping to improve native fish populations in these waterways.

Releasing water from upstream reservoirs (Upper Yarra and Maroondah reservoirs) mimics flows that would naturally be there if the river wasn't dammed, helping to improve water quality and provide habitat for native wildlife.



Monitoring and research

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

What we have done

Developed a Monitoring Evaluations, Reporting and Improvement (MERI) framework for the Healthy Waterways Strategy

Why

The framework outlines plans for monitoring key values and the environmental conditions that support them, as well as how we report on progress against objectives so we can evaluate in the middle and end of the strategy.

Monthly monitoring of water quality at five 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.

Planning for future development

As Melbourne grows to support our increasing population, we work with developers, councils, agencies and communities to ensure that new developments do not increase flooding risks or damage the environment.

What we have done

Why

24 referrals for land subdivisions reviewed

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

24 development applications reviewed

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

52 flood information requests reviewed

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

4 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.

2 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

Continued collecting hydrological data

Why

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.



One volunteer 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

\$97,564

**Stream
Frontage
Management**

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

\$19,313

**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.

\$15,354

**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

Environment groups

Interest groups

Traditional Owners

Council

Worked with more than 220 organisations across greater Melbourne to co-design the new Healthy Waterways Strategy, which provides the framework for protecting and enhancing the waterways of our region. The strategy prioritises improvements to waterway condition, recreation, community connection and amenity, including provision for 1888 kilometres of new vegetation canopy and improving access to 179 kilometres of waterways.

Diamond Creek at St Andrews

Friends of Diamond Creek

Karingal Yallock Creek

Provided support to monitor water quality through our Waterwatch program.

Community

Council

Hosted a platypus information stall in collaboration with the Melbourne Water community-based Litter Action Program engagement day and community bike ride.

Teacher Environment Network

Council

Gave a platypus presentation and provided teaching resources for ongoing education, and presented the Litter Action Program with the opportunity for local schools to get involved.

Hurstbridge Children's Centre

Hurstbridge Preschool

Kids in Nature Network

Edendale Farm

Community

Held platypus picnics and education sessions for kindergarten and preschool students.

Hurstbridge Wattle Festival

Community

Hosted an information stall at the festival, celebrating the heritage, environment and community of Hurtsbridge.

Catholic Ladies College, Eltham

Supported teachers to participate in the River Detectives program by providing training and resources to enable them to connect students with their local waterways.

Landholders

Bend of Islands Conservation Association (BICA)

Christmas Hills Landcare

Council

Delivered a monitoring and habitat assessment workshop on the Southern Toadlet for landholders.

Community

Tangaroa Blue Foundation

Sustainability Victoria

Council

Established the Litter Action Program in collaboration with the community aimed at stopping key litter items at the source, with regular litter audits around Diamond Creek.

Diamond Creek Netball Association

Diamond Creek Netball Association

Council

Held an engagement day at Diamond Creek Netball Association to raise awareness of litter in waterways and threats to platypus.



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/community-and-education/use-our-land/land-community-projects 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.