



Waterways Local Update 2016-17

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



IMPROVED
QUALITY, QUANTITY AND
FLOWS IN WATERWAYS



164.5 km
WEED CONTROL
ALONG WATERWAYS



\$188,461
IN COMMUNITY
FUNDING

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:

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

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

10.4 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.

164.5 km Weed control

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

Carried out works to control woody weeds and revegetate along the Yarra River, Warrandyte Walk

These works improve native vegetation and flow conditions along the Yarra River through Warrandyte and increase native vegetation along the popular walking path.

Began a three-year weed control and revegetation project within Long Gully, Panton Hill

The project will revegetate the habitat corridor within this significant area by reducing weeds entering nearby reserves and improving habitat for threatened plants and animals.

Carried out works to control weeds and revegetate along Diamond Creek

Working with residents, the project will improve habitat and reduce weeds along Diamond Creek, between Diamond and Bridge streets in Eltham.

Renamed the Ingrams Road Drain to Swipers Gully

We worked with the community, Council and the Department of Environment, Land, Water and Planning over many years to improve this waterway and rename the drain.

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 contributed funding for an integrated water management plan for Council's Operations Centre to treat waste and stormwater for reuse on site

This project will help protect Diamond Creek from any potential environmental impacts of the Operations Centre.

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 \$30,000 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

Worked with the Victorian Environmental Water Holder to deliver three environmental flows to the Yarra River

Why

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.

We worked with various stakeholders to create a conceptual model of Diamond Creek to understand the role that groundwater plays in the catchment

This information helps us to enhance and manage ecosystems that depend on groundwater.

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

Undertook monthly monitoring of water quality at six 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)

Why

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 one site 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 Diamond Creek and the mouth of Stony Creek

The surveys helped evaluate the benefits of new vertical-slot fishways installed in 2012 and complemented another monitoring program of fishway performance.



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

70

referrals for land subdivisions reviewed

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

81

development applications reviewed

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

21

flood information requests reviewed

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

20

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.

14

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.

Completed mapping for floods of Arthurs Creek, including its tributaries and Upper Diamond Creek

Mapping updates our knowledge of flooding to better manage drains, assess flood risk in catchments and assist planning scheme overlays.



Five 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
\$122,536	Stream Frontage Management	Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees.
\$19,514	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.
\$16,411	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

Arthurs Creek Landcare
Diamond Creek at St Andrews
Friends of Diamond Creek
Karingal Yallock Creek Group
Nerriman Wetlands Group

Nillumbik Landcare Network

Edendale Farm

Shire of Nillumbik

What we did

Supported the monitoring of water quality through Water Quality Monitoring program.

Supplied resources and data for community-led monitoring of southern toadlet sites.

Hosted a platypus picnic for pre-school children.

Held a platypus information stall and provided Trash Puppets at the Nillumbik Festival, and held a platypus information stand at Clean Up Australia Day.



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.