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| Waterways Local Update 2016-17 |
| Melbourne Water’s work to improve waterways and provide flood protection in the **Shire of Macedon Ranges.** |

89.8 km weed control along waterways

$738,556 in community funding

Reduced the risk of flooding

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:

* Monument Creek
* Riddells Creek
* Jacksons Creek
* Boyd Creek
* Emu Creek
* Toolern Creek
* Deep 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 |
| --- | --- |
| **0.7 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. |
| **89.8 km Weed control** | Introduced and noxious weeds can choke waterways and take over from plants that provide healthy habitats for birds and animals. |
| **Worked with private landowners and Western Water to remove willows and rehabilitate the streamside of Jacksons Creek, downstream of the Calder Freeway** | The works improve visual amenity, water flow and the health of the creek. |
| **Completed works to remove weeds threatening indigenous vegetation along Pyrites and Djerriwarrh Creeks within the Lerderderg State Park** | The works help reduce weeds invading remnant indigenous vegetation, and improve visual amenity, water flows and the health of creeks. |

## 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 |
| --- | --- |
| **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 councils on projects that assist waterway health and create sustainable stormwater management solutions in your area.

 Find out more at the [Melbourne Water website, Living Rivers funding and support page](file:///%5C%5CMac%5CHome%5CDesktop%5Cmelbournewater.com.au%5Clivingrivers) <melbournewater.com.au/livingrivers>

## Environmental water

Through our Living Rivers program, we worked with councils on projects that assist waterway health and create sustainable stormwater management solutions in your area.

| What we have done | Why |
| --- | --- |
| **Worked with the Victorian Environmental Water Holder, Southern Rural Water and Friends groups to improve Jacksons Creek** | Through planned releases of water from reservoirs, we undertook ecological studies to measure the benefits for water quality and fish, and improved the aquatic environment of Jacksons Creek. |
| **Worked with landholders to complete whole-farm water plans and implement recommendations** | Implementing water plans across farms will improve streamflow from rural properties. |
| **Worked with a range of stakeholders to monitor groundwater and surface water levels in Deep Creek and Jacksons Creek** | This work helps to understand the role groundwater plays in these drought refuge areas 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 | Why |
| --- | --- |
| **Undertook monthly monitoring of water quality at four 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

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 |
| --- | --- |
| **97 referrals for land subdivisions reviewed** | To ensure proposed land subdivisions meet current standards for drainage and stormwater quality. |
| **38 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. |
| **4 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. |
| **5 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 flood mapping of Cataract Creek at Bullengarrok and the tributary of Jacksons Creek, west of the Gisborne Golf Course** | Mapping updates our knowledge of flooding to better manage drains, assess flood risk in catchments and assist planning scheme overlays.  |

**19 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 [Melbourne Water website, Community rainfall data page](file:///%5C%5CMac%5CHome%5CDesktop%5Cmelbournewater.com.au%5Ccommunityrainreaders) <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 Melbourne Water River Health at <river.health@melbournewater.com.au>

| Funding provided | Grant | For |
| --- | --- | --- |
| **$487,739** | **Stream Frontage Management** | Private land owners and managers for works that protect or enhance riverbanks, such as weed control, fencing and planting native trees. |
| **$14,461** | **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. |
| **$68,319** | **Corridors of Green** | Councils and public land managers for projects such as weed control, fencing and creating management plans. |
| **$168,037** | **Rural Land Program** | Landholders in specific catchments for projects that reduce the amount of sediment and nutrients entering waterways from agricultural land. |

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

| Who we worked with  | What we did |
| --- | --- |
| **Newham and District Landcare****Greening of Riddell****Stanley Park Management Committee****Newham Primary School** | Provided support for monitoring water quality and the Waterbug Census through our programs. |
| **Shire of Macedon Ranges** | Conducted site visits with Council to establish a new Waterwatch group. |
| **Newham and District Landcare** | Presented on local frogs and actions the community can take to protect them, provided support for Waterbug Census monitoring of Riddells Creek and Monument Creek, and supported drought refuge monitoring of important habitat to protect the Yarra Pygmy Perch. |

**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 [Melbourne Water website, Land for community projects page](file:///%5C%5CMac%5CHome%5CDesktop%5Cmelbournewater.com.au%5Courspaceyourplace) <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 the [Melbourne Water website, Healthy Waterways Waterwatch page](file:///%5C%5CMac%5CHome%5CDesktop%5Cmelbournewater.com.au%5Cwaterwatch) <melbournewater.com.au/waterwatch> or call **131 722**.

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