



Waterways Local Update 2017-18

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



WORKED
CLOSELY WITH
COMMUNITY



1466.1 m³
SEDIMENT, SILT, LITTER
AND DEBRIS REMOVED



MONITORED
WATER QUALITY
IN 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:

- Edithvale Wetland
- Patterson River
- Patterson Lakes
- Mordialloc 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

0.8 km

Weed control

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

1466.1 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 weeds, e.g. thistle and spiny rush, and plant native shrubs and trees in the Wannarkladdin Wetlands, a site of biodiversity significance

The work aims to improve vegetation and flora within the brackish wetland areas of Wannarkladdin Wetlands, provide habitat for birds and improve the historical link between Edithvale and Seaford Wetlands.

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

Why

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.

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.

Living Rivers provided funding to undertake a water sensitive cities index evaluation

Better understanding across the region of best practice stormwater management helps to improve the health of waterways.



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 \$10,000 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

Worked with a range of stakeholders and partners to monitor groundwater and surface water levels in Edithvale Wetland

Why

Monitoring helps understand the role that groundwater plays in the wetland ecosystems.

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.

Monitoring and research

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

What we have done

Monthly monitoring of water quality at three 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.

Weekly monitoring at five 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.

Fortnightly blue-green algae monitoring at three sites in your area during the summer period

We monitor for blue-green algae because it can be a health risk to people and animals. If blue-green algae is detected, we follow state government guidance, erect warning signs, inform the public and continue to monitor the water until it clears.

Monitored sediment at Edithvale South Wetland, Mordialloc Creek and the Southern Road Retarding Basin

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

210 referrals for land subdivisions reviewed

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

146 development applications reviewed

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

289 flood information requests reviewed

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

9 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.

13 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.

Worked closely with Council to join Council's and Melbourne Water's flood maps in preparation for a joint planning amendment in 2019

Revising flood information will provide up-to-date information to support planning applications and appropriate development.

Worked with the Elster Creek Working Group (Bayside, Glen Eira, Port Phillip and Kingston councils and community groups) to manage flooding in Elster Creek

Working collaboratively to manage flooding in Elster Creek helps build resilience to flooding.

Worked with Council to investigate flood mitigation on properties in Seaford

Investigating ways to reduce flood risk will assist properties in the southern part of Centre Swamp Drain affected by repeat flooding due to the area's topography, to build resilience to flooding.



Nine 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
\$10,043	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.
\$44,000	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

Friends of Edithvale-Seaford Wetlands Department of Environment, Land, Water and Planning	Participated in the Save The Frogs Day and Summer By the Sea events at the Edithvale-Seaford Wetlands Centre and celebrated World Wetlands Day.
Garden World Nursery	Conducted two frog pond workshops.
Friends of Braeside Park	Provided support to monitor water quality through our Waterwatch program.
Mordialloc College, St Louis Aspendale	Supported teachers to participate in the River Detectives program, with the loan of a water quality kit and training to enable them to take students to test water quality in Mordialloc Creek.
Good Start Kindergarten Chelsea Heights	Engaged students to discover the importance of wetlands at the Edithvale-Seaford Wetland Education Centre.
First Lego League team Rockwell Automation	Engaged students to assist them with their submission for the Lego League competition, with the theme of solving urban water cycle problems.
Edithvale Family and Children's Centre	Inducted educators and provided access to the Edithvale-Seaford Wetland Education Centre to enable them to run education activities with their groups.
Friends of Edithvale-Seaford Wetlands City of Kingston	Worked together to plant 4000 native shrubs for bird habitat and 200 native trees along Edithvale-Seaford Wetlands paths to create shade for walkers and joggers.
Elster Creek Working Group (City of Port Philip, Bayside City Council, City of Glen Eira, City of Kingston and Melbourne Water) Glen Eira, Bayside and Kingston community groups	Formed the Elster Creek Working Group to manage flooding in the Elster Creek Catchment area, and consulted community and council representatives on flood management.
City of Kingston Friends of Edithvale Seaford Wetlands	Continued to work with the Friends of Edithvale Seaford Wetlands to enable them to operate the Edithvale-Seaford Wetland Education Centre every second Sunday afternoon to support learning about the wetlands and local biodiversity. Melbourne Water opened the Centre on alternate Sundays.



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.