# Campbellfield Creek Retarding Basin

## **Project introduction**

## December 2017

Melbourne Water is planning to undertake a safety upgrade to Campbellfield Creek retarding basin located off Sages Road, Glenroy.

These works will begin in early 2018.

### Timing of works

Works will take up to four months to complete and will take place on Monday to Friday 7am to 6pm and Saturday from 7am to 1pm. Outside of these times quiet work may take place.

## What is happening?

Aqua Metro Services will be undertaking these works on behalf of Melbourne Water. Work will be undertaken primarily on the embankment and the outlet of the retarding basin. This is a closed site.

The upgrade involves:

- · excavation of a trench along the embankment crest
- backfilling the trench with a new sand filter
- · removal of trees and vegetation along the embankment
- · installation of a filter trench around the outlet
- · erosion control and earthworks along the southern end of the retarding basin
- revegetation after construction work. This is a standard practice on all Melbourne Water retarding basin upgrade projects that require tree removal.

Once construction is complete, the grassed areas will be reinstated with topsoil and hydroseed. Hydroseed is a mixture of seed, water and mulch that produces grass growth at a much faster pace than regular seeding.

Melbourne Water is working with Moreland City Council to develop a reinstatement plan for planting trees elsewhere.

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#### **Location of works**

The Campbellfield retarding basin is located on Sages Road in Glenroy. The works will be conducted within the closed site on the retarding basin embankment, which is highlighted on the map below.

Construction crews and traffic will access the site via Sages Road. The work area will be contained to the embankment located within the closed retarding basin.

We'll continue to work with local residents to inform them of the works schedule and any associated impacts that may take place.



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Melbourne Water is owned by the Victorian Government. We manage Melbourne's water supply catchments, remove and treat most of Melbourne's sewage, and manage rivers and creeks and major drainage systems throughout the Port Phillip and Westernport region.



## Background

The Campbellfield Creek retarding basin was originally constructed in 1973 and plays a crucial role in managing stormwater in the local area.

#### What to expect

This is a closed site and there should be minimal impact to the community and residents. We anticipate our neighbours may notice:

- Large trucks and machinery working
- Worker amenities set up within the construction area
- · Some noise, dust and vibration from construction works
- Removal of trees and vegetation from the embankment
- Increased traffic through Sages Road.

### Working with the community

We're committed to reducing the impact of construction works on the local community.

We will be speaking with local residents in late 2017 and early 2018 about the upcoming works.

We'll continue to keep you updated as the project progresses.

#### Why we are doing these works

Melbourne Water have over 200 retarding basins that we regularly assess for risks and conduct maintenance and upgrade works as necessary.

Melbourne Water has been directed by the Minister for Water to ensure all of retarding basins comply with the Australian National Committee on Large Dams (ANCOLD) guidelines. The ANCOLD guidelines represent the best Australian and international engineering practice in the safe design, management and operation of dams.

Campbellfield Creek retarding basin has recently been assessed against the ANCOLD guidelines. The assessment has shown that upgrade works are necessary to ensure the retarding basin continues to reduce flood risk and operate safely for the community. The upgrade is occurring to further lower the risk profile and to ensure the risk is as low as reasonably practicable.

#### Tree removal

Under the ANCOLD guidelines trees must be removed from the whole length of the embankment to ensure its integrity and provide the best possible level of dam safety. In the past, it was common practice to have trees on retarding basin embankments. However, as understanding of dam engineering has improved it has become evident that trees significantly weaken embankments and increase the risk of failure in a high rainfall event.

We have identified that approximately 80 trees and/or vegetation will need to be removed as part of this safety upgrade. We have minimised tree removal during the planning of this project and only critically necessary trees and vegetation will be removed.

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Having trees on the embankment increases the chance that the embankment may fail in a large rain event. They do this by increasing the risk of:

- soil erosion and displacement when a tree dies its roots decompose and can open water passages through the embankment
- trees uprooting and taking part of the embankment with them
- water speeding up around tree trunks and causing accelerated embankment erosion.

We understand the emotional and environmental importance of trees to the local community and are committed to working closely with council, residents and community groups to develop an appropriate plan for reinstatement of trees elsewhere in the basin.

A reinstatement plan is a standard practice on all Melbourne Water retarding basin safety upgrades. Melbourne Water is working closely with Moreland City Council for planting of trees, in another location.

#### Contact us

If you have any questions please call Melbourne Water on 1800 571 926 or email RBupgrades@melbournewater.com.au



For an interpreter, please call the Translating and Interpreting Service Interpreter (TIS National) on 13 14 50



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## **Frequently Asked Questions**

#### What is a retarding basin?

A retarding basin is a low lying area that acts as an urban dam to temporarily store stormwater during high rainfall events. Retarding basins also control the outflow of the stormwater into the drainage system, which reduces flood risk to the local community and also protects our natural waterways.

Melbourne Water currently manages over 200 retarding basins across Greater Melbourne.

#### Why are you carrying out work on so many retarding basins?

Melbourne Water has been directed by the Minister for Water to ensure all of retarding basins comply with the Australian National Committee on Large Dams (ANCOLD) guidelines. The ANCOLD guidelines represent the best Australian and international engineering practice in the safe design, management and operation of dams.

Each retarding basin is assessed individually so each will have different upgrade requirements to ensure they are compliant with the ANCOLD guidelines and continue to operate safely.

#### Why does the Campbellfield Creek Retarding Basin need to be upgraded?

The Campbellfield Creek retarding basin currently does not comply with the ANCOLD guidelines. Assessments have shown that the upgrade is required to further lower the risk profile, to ensure the risk is as low as reasonably practicable. It is therefore extremely important the upgrade works take place as scheduled in early 2018.

#### Why does Melbourne Water need to remove vegetation as part of this project?

In the past, it was common practice to have trees on retarding basin embankments. However, as understanding of dam engineering has improved, it has become evident that trees significantly weaken embankments and increase the risk of failure in a high rainfall event.

To comply with the ANCOLD guidelines, approximately 80 trees and/or vegetation will need to be removed from the embankment.

Failure of a retarding basin would result in significant flooding to downstream properties and potential loss of life. By completing this work Melbourne Water is fulfilling its obligation to the Minister for Water and the local community.

Revegetation after construction work is standard practice on all Melbourne Water retarding basin upgrade projects. Melbourne Water is working with Moreland City Council to develop a reinstatement plan for the area.

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