

Frequently Asked Questions

Toorourrong Reservoir works

Why are the works necessary?

Melbourne Water must upgrade Toorourrong Reservoir to bring it in line with modern Australian dam safety standards.

We are dedicated to working constructively with the community to achieve the best possible outcomes from engineering, environment, and heritage perspectives.

What will the works involve?

The purpose of this project is replace and enlarge the spillway and raise the dam wall by 2.5 metres (dam embankment raised 1.1 metres, with a wave wall of 1.4 metres) in order to comply with dam safety standards.

The works will be staged and will consist of:

- Embankment strengthening;
- Increasing the embankment height;
- Upgrading the Clearwater Channel diversion structure; and
- Replacing the existing scour gate.

What would happen if the works did not proceed?

The works must proceed for the dam to remain an operating part of Melbourne's water supply network.

Why now?

The works were delayed following the bushfires and to work through design issues including minimising the amount of bluestone and materials to be removed.

Why can't the present infrastructure be left intact?

The present infrastructure is 120-years old and assessments by dam safety experts indicate that it must be replaced to meet modern Australian dam safety and structural standards.

Why can't you leave the bluestone structures alone, or build the new structures out of the existing bluestone and granite?

Reinforced concrete is the only industry standard material available to ensure that the structure will meet the required safety standards.

Bluestone and mortar construction don't have the tensile strength required to meet dam safety standards. What this means is that bluestone and mortar materials are essentially brittle – that is, when they are placed under stress, they will snap, and break.

In contrast, reinforced concrete has the ability to bend well before breaking when under stress, and is consequently able to withstand far greater stresses than bluestone and mortar construction.

Because the dam wall relies on the strength of the spillway structure, it is essential that the spillway and dam wall are upgraded to bring the dam wall up to modern dam safety standards.

Why doesn't Melbourne Water just de-silt Toorourrong?

De-silting of Toorourrong Reservoir is not a preferred option because it won't contribute to meeting Australian dam safety standards.

I haven't heard about the project, who have you been communicating to?

There has been extensive consultation on this project, including with Whittlesea City Council, Heritage Victoria, Parks Victoria and local indigenous leaders. We have also been working with local residents and other interested stakeholders regarding the project and its potential construction impacts.

We will continue to inform and work with the community and stakeholders through regular meetings, information bulletins, site walks and web information.

How long will the construction take?

Major works are expected to be completed in the first half of 2011.

Will there need to be vegetation removal?

A small number of non-native trees (12) have been removed as part of the project in preparation for the works.

What are the construction impacts?

Impact to the surrounding community will be minimal. People may experience some increased traffic and some noise in the area.

Will there be impact on flows?

The upgrade to the Clearwater Aqueduct will not alter flow rates into the structure. The dam wall integrity would be compromised if we don't replace the current structure.

There will be no effect on the Plenty River or any of the properties downstream when the spillway is enlarged. The amount of water that flows over the spillway or is released through the scour gate will not change as a result of this upgrade. If we don't replace the spillway, the dam wall integrity would be compromised.

Does Melbourne Water have a commitment to heritage management?

Yes. Heritage management is very much part of our core business. We are committed to protecting and preserving heritage assets under our care as much as practically possible, as well as achieving a high standard of management for both Indigenous and non-Indigenous sites.

We constantly have to balance the need to upgrade vital water supply infrastructure while remaining respectful to our past. Some of our oldest assets have been removed, restored and turned into a display if they couldn't remain a functioning part of our system.

What will the works involve?

Through careful planning, we are able to retain all the bluestone from the scour structure that runs to the Plenty River. Unfortunately, this upgrade means we have to remove the bluestone and granite from the spillway structure that runs into Plenty River and outlet structure to the Clearwater Channel.

The bluestone from the structures that are required to be removed to upgrade the dam will be retained for use on-site at the Park.

Community consultation and engagement – can I have a say?

We welcome community feedback on the re-use of bluestone within the Park. If you have any questions about the project, please call our project toll free information line on 1800 027 517.

We've put a lot of thought into what to do with the bluestone and have been looking at ways to re-use it. We are forming a local advisory group to provide further ideas and advice on re-use of the bluestone.

Were other options considered from a heritage perspective?

Yes. As with all proposed Melbourne Water projects, options were explored that considered how we balance heritage and maintaining the operational nature of this site.

Options considered were:

- Do nothing:

This was not an option as the current structure does not meet current Australian dam safety standards. Retaining the existing structures without impact was not possible as it would compromise the structural integrity.

- Demolish existing Clearwater Channel and rebuild all or part thereof downstream

This was not an option as it does not accommodate the operational components of the site and could compromise dam safety. The heritage advice we received indicated that this would also result in loss of historic fabric and integrity and was undesirable from this perspective.

- Demolish existing Clearwater Channel and re-use material for other purposes

We would not be able to preserve or retain any of the structures through this approach and it is highly undesirable.

Why is the Park closed?

Toorourrong Reservoir Park is currently closed to the community and public for rehabilitation works following the Black Saturday Bushfires of 2009. Parks Victoria is leading the rehabilitation and reinstatement efforts.

When will the Park be re-open?

You will need to contact Parks Victoria about re-open dates.

If our works are still continuing when the Park is re-opened, we will need to only fence off the construction area for safety reasons.

What is the purpose of the Clearwater Aqueduct?

The Clearwater aqueduct channels water to the Yan Yean Reservoir and also supplies residents and businesses with an alternative water supply.

Will there be any impact on the Plenty River, the properties downstream and the township of Whittlesea when the spillway is widened?

The project has been carefully planned to ensure there will be no effect on the Plenty River or any of the properties downstream when the spillway is widened. The works are being undertaken to ensure this remains the case into the future.

What is 1.4-metre wave wall?

It is a 300-mm wide, 1.4-metre engineered structure, which assists in managing and accommodating a 1:10,000 year flow in a controlled manner.

What is the project cost?

The estimated cost of the project including site reinstatement is \$11.3 million.

More information

Please call our project information line 1800 027 517 or visit our website: www.melbournewater.com.au.

For more information about this project or to discuss any concerns you may have, please call David Fitzgerald on 1800 027 517 or call Melbourne Water on 131 722.

You may also wish to visit melbournewater.com.au for general information about other projects to secure a sustainable water future.

Interpreter service



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