

Frequently Asked Questions

Mount Evelyn Water Treatment Plant

Melbourne Water is planning the construction of a new water treatment plant in Mount Evelyn.

To prepare us for the future and provide greater protection against storm events, Melbourne Water is planning to build a new back-up water treatment plant in Mount Evelyn. The new treatment plant will ensure that drinking water remains accessible and safe in the event of both planned or unplanned shutdowns of the Silvan Reservoir and Water Treatment Plant.

Location and scale of the plant

How big will the Mount Evelyn Water Treatment Plant be?

The Mount Evelyn Water Treatment Plant will consist of a 35.7 metres long x 6.53 metres wide main building. The building's height will range between 5.75 metres to 7.1 metres due to the building's sloped roof.

It will include a road turning circle for delivery vehicles, within a fenced compound.

There will also be four smaller fenced sheds located up the hill and an access road along Tramway Track (parallel to Kuyura Road), with an entrance on Tramway Road.

Why has Melbourne Water chosen this land?

This site was chosen as the best possible location to ensure the quality and safety of Melbourne's water supply if the Silvan Treatment Plant experiences an outage.

At the site's proposed location, Melbourne Water has three underground water mains that provides more than 50 per cent of Melbourne's population with quality drinking water.

It is also the last meeting point for these water mains before they branch off and go their separate ways to service multiple parts of Melbourne.



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This location will enable us to provide the most resilience to the Silvan Reservoir Water Treatment Plant and water supply network.

The land was also selected as its relatively flat, mostly cleared land and close to existing roads.

This land is owned by Melbourne Water. It is zoned **PUZ1 (Public Use Zone – Service & Utility)**.

This location was selected as the preferred location due to its ability to contain the treatment plant's site footprint, minimise land and community impacts and incorporate the extensive range of technical constraints and safety requirements to make the treatment plant operational.

Did Melbourne Water explore other sites for the Water Treatment Plant?

Yes, as part of Melbourne Water's due diligence planning process several locations were assessed to determine which location would be the most suitable for the new water treatment plant.

Melbourne Water and our design experts based their assessment on the following criteria:

- The location is able to effectively treat Melbourne's water supply safely, quickly and reliably and is able to distribute the treated water supply to Greater Melbourne effectively.
- The location provides the best value investment and water quality outcome for all Victorians.
- The location incorporates the highest levels of safety for the community and the plant's staff.
- The location is close to existing roads and the land is mostly cleared, requiring less tree and vegetation removal to build the water treatment plant.

Other criteria in the assessment included ecology, cultural heritage and soil quality outcomes.

Why weren't the other sites selected?

Melbourne Water considered and investigated other locations for the site, but these locations were not selected due to:

- The significantly higher levels of tree and vegetation removal required at those sites to build the plant and the access roads to the plant.



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- The locations further downstream would require multiple water treatment facilities to sanitise each of the three water mains, increasing the project's footprint, operations and construction requirements.
- The locations further downstream are also located too close to customer taps, significantly heightening the risks of contamination in Melbourne's water supply.
- Some of the locations explored are not owned by Melbourne Water. The process of land acquisition and planning rezoning is extensive and can take several years before construction even begins. This would cause additional delays in providing the Greater Melbourne community with an ongoing supply of safe, secure drinking water.

Environmental impacts

Why are trees being removed?

Melbourne Water recognises that every tree has significant ecological and community value and we have worked hard to minimise tree removal required for the new treatment plant.

At every stage of the design process, we have worked closely with our engineers and arborists (tree experts) to assess every single tree in the proposed site with the goal of preserving as many trees as possible.

Under our updated planning and design documentation, we anticipate approximately 90 trees will be removed by the project. This is a reduction from the 151 trees proposed to be removed in the project's earlier designs.

Some tree removal is required due to the site constraints such as location of underground water mains, extent of construction footprint and to align with power-line relocation regulations. You can find specific information about these impacted trees as part of our planning permit application.

As part of the project, we will work to avoid and minimise tree removal as much as possible. In line with the [Victorian Government's Biodiversity Offset scheme](#), we will procure vegetation removal offsets for the vegetation loss and where appropriate work with local community groups to facilitate additional planting in the local area and enhance biodiversity.

How is this going to impact local wildlife?

Our ecology experts from Jacobs have undertaken an Ecological Impact Assessment as part of the project's planning and development.

Recommendations from these assessments are included in our construction and environmental plans. Some of the key aspects include:



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- **Fauna spotter and catcher** – we will appoint an experienced and authorised fauna spotter/catcher who will conduct a pre-clearance survey immediately before the time of vegetation clearing. This will minimise any impact to native fauna including birds and arboreal mammals. They will also undertake activities to safely rehome any fauna that is found onsite. If necessary they will also be present to observe the vegetation removal process.
- **Powerful Owls** – we understand these endangered owls are of extreme importance to the Mount Evelyn area. We have conducted a Powerful Owl assessment to ensure they are heavily considered as part of our construction and environmental plans. This includes:
 - Checking periods undertaken in May, June and/or July to detect the presence of nesting owls.
 - Ongoing monitoring undertaken throughout nesting season.
 - Detailed plans for actions to be undertaken if nesting owls are found within 100 metres of the construction site. This includes construction considerations such as limiting noise, period of works and vibration activities.
- **Native vegetation** – any vegetation that has not been approved for removal will be clearly secured, fenced and signed as 'no-go zones' throughout the duration of works. Melbourne Water staff will also be onsite to oversee and manage our contractors during the vegetation removal process.

Melbourne Water will work closely with local community environmental groups, including Mount Evelyn Environment Protection and Progress Association (MEEPPA) and Yarra Ranges Council to ensure local knowledge is incorporated into management of onsite works.

The operations of the Water Treatment Plant

Will the water treatment plant always be operational?

Yes the plant will operate continuously, however the day-to-day noise levels are expected to be low.

The Mount Evelyn Water Treatment Plant will operate as a backup plant and will not be replacing the Silvan Treatment Plant as Melbourne's main water supply treatment facility.



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When the facility is operating as a back-up plant, the only sources of noise anticipated from the building are from the plant's air conditioning units and generators. These units have the power draw and noise levels equivalent to two residential homes.

The Mount Evelyn Water Treatment Plant will only ramp up to maximum operation in the event that the Silvan Treatment Plant experiences an outage.

Outside of these times, the Mount Evelyn Water Treatment Plant will operate at a low, continuous level. This is to ensure the plant is able to immediately begin treating water if the Silvan Treatment Plant experiences an outage.

Will the Water Treatment Plant be noisy?

The facility will not be typically noisy and will operate within EPA regulations.

When the site is operating as a back-up plant, the only sources of noise anticipated from the building are from the plant's air conditioning units and generators. These units have the power draw and noise levels equivalent to two residential homes.

The Treatment Plant equipment is also housed within the building and emergency generators have acoustic enclosures, further minimising operational noise to surrounding residents.

Other sounds that may be present on site will include:

- Operational and maintenance staff
- Operational deliveries
- Building security and routine testing of the plant's generators, alarms and safety showers.

Will chemicals be stored on site?

Yes, chemicals will be stored on site to disinfect the water in the transfer pipelines however these chemicals are stored in accordance with Australian Standards and Regulations.

The main chemical that is stored on site is a disinfectant known as sodium hypochlorite. This is a non-combustible liquid and is commonly used around the world to disinfect water. It will be stored and used in accordance with Australian Standards and Regulations.

In order to add the correct amount of disinfectant to the water, we will have equipment analysers on site to test the treated water. These analysers require carbon dioxide to assist in accurate measurements. Carbon dioxide (CO₂) is a



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non-hazardous, naturally occurring gas and can be found in natural sources including rivers, lakes, hot springs and even carbonated beverages.

As the treatment plant will be critical infrastructure for the disinfection of Melbourne's drinking water, we will have backup diesel generators onsite in the case of mains supply outages. The generators will be located in a fire-rated weatherproof acoustic enclosure to protect against fire risk.

How much sodium hypochlorite will be stored site?

There will be three 24 kilolitre storage tanks within the main plant building. Each storage tank is approximately the same size as a large round water household tank.

What will be the frequency of chemical deliveries to the plant?

During routine operation of the plant a chemical delivery could be expected once per week. If the plant is operating in back-up plant mode, a chemical delivery could be expected once per day.

What is the delivery truck type and size that is delivering materials to the plant?

Deliveries are made by prime mover with a tanker trailers. The total length of the prime mover and tanker trailer can be up to 19 metres long and 3.8m high.

How much diesel will be stored onsite?

The quantity of diesel will be 1600 litres in total, with two emergency generators each with 800 litres storage. The total quantity of diesel is approximately the same volume as a small household rain tank.

What are the external lighting requirements?

As this is a back-up treatment plant, external lighting that is permanently on is not required.

If there was an issue at the plant requiring operator attendance at night, external lighting would be turned on to enable safe access to the site.

In addition, security lighting will be provided. This will be external motion activated security lighting to common areas of the site.

All external lighting will be designed in accordance with the Powerful Owl Risk Assessment. This includes ensuring external lighting will provide appropriate



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light levels with minimum environmental impact or disturbance, avoiding lighting with significant throw onto adjacent vegetation and neighbours.

Fire safety and community safety

Is the new Water Treatment Plant a fire safety risk?

In the event of a bushfire, there will not be an increased risk to safety in the area.

The safety of the community, our staff and the treatment plant is of the highest priority in the design and operation of the treatment plant.

The treatment plant has been designed in accordance with Australian Standards and Regulations.

As part of the design process, we have undertaken a Bushfire Risk Assessment for the treatment plant. The findings incorporated into our design include:

- Building constructed to BAL-FZ (flame zone), which is the highest rating applied to building design and construction
- Building has minimum distance of 10 metres to classified vegetation
- No public access into the fenced site area and vehicle access on the private access road is restricted to Melbourne Water approved vehicles.
- The generators are provided with an acoustic enclosure that is rated for 2 hours of exposure to fire.

Melbourne Water will also prepare an operations specific bushfire plan for the site to ensure bushfire hazards are managed.

We will also work with Country Fire Authority and Fire Rescue Victoria to develop the Site Emergency Response Plan which will detail actions to be taken in response to fires on site or bushfires in the vicinity.

Will it be accessible to the public?

The treatment plant will not be accessible to the public. All buildings and the access road turning circle will be fenced to ensure public safety.

There will be an access gate near Tramway Road on the new plant access road to ensure only Melbourne Water vehicles drive on the plant access road.

However, the remaining grassed areas of the site will be available for pedestrian access consistent with current usage. To ensure safe access past the treatment plant we will build an access path on the northern eastern side of the plant (near the YMCA camp).

Project updates and timelines

When will works begin?

We expect works to begin in mid to late 2023, contingent on planning approval being received.

How long will construction take?

Construction of the treatment plant will take approximately 18 months. There will also be additional works including tree removal and site establishment, which will take approximately two months to complete.

Commissioning and completion works at the end of construction will take approximately five months.

What's happening right now on the project?

The project has submitted its planning application for approval from the Yarra Ranges Council. You can find the application [here](#).

The application outlines the water treatment plant's proposed design and the technical reports that were undertaken to inform the design.

Council is assessing the application and will provide a determination on the outcome in the coming months.

Project planning process and community engagement

What's the project's planning process?

Consistent with the *Planning and Environment Act 1987*, Melbourne Water has submitted a planning application to Yarra Ranges Council for approval, prior to commencing construction of the new water treatment plant.



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For more information on the planning permit process please visit DEWLP: [Planning permits](#) or the [Yarra Ranges Council website](#).

Who have you been working with on this project?

We have been working with a variety of local community groups and stakeholders as part of this project. We have a dedicated communications and engagement team that regularly engages with the community and local organisations in Mount Evelyn. This includes:

- Yarra Ranges Council
- Yarra Ranges Council Ridgeway Project
- Mount Evelyn Environment Protection and Progress Association (MEEPPA)
- YMCA Camp
- Department of Environment, Land, Water and Planning
- Department of Sports & Recreation Victoria
- CFA
- Olinda Creek Bicycle Nature Trail
- AusNet
- Yarra Valley Water
- South East Water
- Telstra.

How have you incorporated community and stakeholder feedback into the project's designs?

Community and stakeholder feedback has been integral to Melbourne Water developing a design that provides the best long-term outcome for the local community and Greater Melbourne.

We have incorporated the following elements in our design, based on stakeholder feedback and our understanding of community values:

- A reduction in the number of trees required to be removed by the project (151 trees to 90 trees).
- Incorporating local knowledge and insights in the management of flora and fauna at the site, including management of the powerful owls during construction.
- Reducing the site footprint to be as contained as possible, whilst meeting key operational and safety requirements.
- Formalised safe pedestrian access past the plant by construction of a walking track.

Whilst we are nearing the project's final design for the plant, we are still continuing to explore opportunities to refine our design to minimise the plant's operations and footprint.

How can I find out more about the project?

For any questions you may have about the project, you can get in touch with a member of the project team via:

- [Our website](#)
- Emailing the project team at MountEvelynWTP@melbournewater.com.au
- Calling our project information line on **1800 931 169**
- Our community information pop-ups.

When are you holding the next community information sessions?

We are looking to hold our next round of community information sessions in the first half of 2023. The community will have the opportunity to have a chat with our team about the project and ask any questions they have.

When the dates for these sessions are finalised, we will notify the community.

We can also hold briefings about the project with local community groups. If you would like to organise a community briefing, please contact us at MountEvelynWTP@melbournewater.com.au.

How can we stay up to date with any new information about the project?

The best way to stay up to date with the project is by joining our email list.

We also distribute community bulletins to local properties for key project updates. All of our bulletins are posted online and you can find the most recent bulletins [here](#).

You can also call our project information line on 1800 931 169 and a member of our project team will be available to answer your question.

Keep up to date with what's happening

For more information about this project or our other activities please call or visit www.melbournewater.com/building-and-works/projects/mount-evelyn-water-treatment-plant



Interpreter

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



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