



Victorian Desalination Project

Water quality and distribution

Millions of people around the world and across Australia drink and use desalinated water as part of their general water supplies. The Victorian Desalination Plant is capable of supplying up to 150 billion litres of water each year to Melbourne, Geelong and areas in South Gippsland and Western Port.

The taste of Melbourne's water has always been highly regarded. Our protected catchments provide some of the best water in the world.

Water from the Victorian Desalination Plant is also some of the best in the world. The water quality standards were developed by the water authorities to complement the high quality of water that Melbourne consumers receive. The Department of Health was also consulted regarding water quality requirements.

As well as the specifications to ensure desalinated water meets Melbourne's needs, the water also meets the requirements of the Australian Drinking Water Guidelines, Victorian Safe Drinking Water Act and World Health Organisation guidelines.

The water quality parameters were put into the contract between the State and AquaSure.

How is desalinated water created?

The desalination process substantially removes salts and minerals from seawater. The salt and minerals from seawater are removed by two passes through reverse osmosis membranes at the plant site.

The desalinated water is then remineralised so it is more like our catchment supplies. Fluoride is also added as required by state health legislation.

Water from the desalination plant meets all of the relevant standards at the plant so it is not necessary for it to be blended with catchment water to achieve water quality requirements.

Water quality is continuously monitored by DSE, water authorities and AquaSure. It is measured before it leaves the plant site and at delivery points along the plant's transfer pipeline.

What are the water specifications?

Water is made up of a large number of elements and every water supply has different levels of these elements. Melbourne receives water from a range of catchment sources.

Also, some areas can receive different water supplies on different days depending on how the system is operated. Some areas receive supplies that are a blend of various sources. This means drinking water specifications can vary, although all the sources must meet stringent health requirements.

Details of the specifications for desalinated water can be found online at www.water.vic.gov.au/desalination, located in the Project Deed Project Scope and Performance Requirements Appendix 6 Desalinated Water Quality Specifications.



What areas will get desalinated water?

Water from the Victorian Desalination Plant can enter the network through Cardinia Reservoir and from offtakes on the plant's transfer pipeline if required, given water quality requirements will be met at the plant site.

In Cardinia Reservoir it mixes with catchment supplies and water can be transferred through Silvan Reservoir to the broader network, depending on how storages are managed.

The desalination pipeline is two-way, so areas in South Gippsland and Western Port can also access Melbourne supply system water from Cardinia Reservoir, to use if and when required.

Customers will receive water at their homes and businesses through the existing water network.

The amount of desalinated water in the network depends on the amount produced during plant commissioning and the amount ordered by the government each year.

For information on water in your area contact your water retailer.

Water retail areas that could receive some desalinated water during the operation of the desalination plant, depending on system management and local requirements, include:

- South East Water 131694
- Yarra Valley Water 131721
- City West Water 132642
- South Gippsland Water 5682 0444
- Westernport Water 1300 720 711

Note: during plant commissioning the direct delivery offtakes to South East Water, Westernport Water and South Gippsland Water will be closed.



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