

essentialfacts

Melbourne's water supply system

Melbourne's piped water supply commenced operation in 1857, with the completion of Yan Yean Reservoir, adjacent to the Plenty River. In 1891, the newly-formed Melbourne and Metropolitan Board of Works became responsible for Melbourne's water supply system. This included Yan Yean Reservoir (supplemented by the Toorourrong Scheme), the first stage of the Maroondah Scheme and six metropolitan service reservoirs.



Melbourne's water supply was progressively augmented with diversions from upland tributaries of the Yarra River. The Maroondah Scheme was extended with a pipeline diversion from Coranderrk Creek (1908). A diversion weir on the O'Shannassy River was completed in 1914 and replaced by the O'Shannassy Reservoir in 1928. Maroondah Dam was completed in 1927, replacing a diversion weir upstream of the site. The diversion of water from the Upper Yarra River commenced in 1939 with a weir upstream of the present dam and an aqueduct and pipeline to the O'Shannassy Aqueduct.

Silvan Reservoir was completed in 1932 to regulate the increased flows in the O'Shannassy Aqueduct from the Upper Yarra River and Coranderrk Creek diversions.

When the Upper Yarra Dam was completed in 1957, the total storage capacity of Melbourne's system was tripled to nearly 300,000 million litres. While the Upper Yarra Project was being built, a 1.7 metre diameter pipeline from a basin near Starvation Creek to Silvan Reservoir was completed in 1953. A duplicate pipeline of the same diameter was completed in 1964.

In response to the severe drought of 1967-68, the diversion of Starvation, McMahons, Armstrong and Cement Creeks commenced between 1968 and 1971.

To meet growing demand in the western suburbs, particularly during Summer, a reservoir at Greenvale, with a capacity of 27,000 million litres, was completed in 1971.

Following the 1967-68 drought, construction plans for Cardinia Reservoir were advanced by four years. Work started in 1969 and Cardinia Reservoir filled to its 287,000 million litre capacity in 1977, bringing Melbourne's total storage capacity to 610,000 million litres.

To improve transfer capacity between Upper Yarra and Silvan reservoirs, and to enable water harvested from the Thomson River to be transferred to Cardinia Reservoir, the 2.1 metre diameter Yarra Valley Conduit and Silvan-Cardinia main were built in 1975.

essentialfacts

In 1969 work commenced on diverting part of the flow of the Thomson River in Gippsland, under the Great Divide and into the Upper Yarra River catchment. The final stage of the Thomson project concluded in May 1983 with an extension of the Thomson-Yarra Tunnel and completion of the dam wall. Thomson Reservoir has a storage of 1,068,000 million litres that is available for Melbourne's water supply system.

The Sugarloaf Reservoir Project, including a major pumping station and water treatment plant, was completed in 1981, increasing Melbourne's total storage capacity by 95,000 million litres. Sugarloaf uses water pumped from the Yarra River at Yering Gorge and water transferred from Maroondah Reservoir via the Maroondah aqueduct. This reservoir is important in meeting peak Summer demand in the northern parts of Melbourne.

In 1991, the Melbourne and Metropolitan Board of Works was merged with a number of smaller urban water authorities to form Melbourne Water.

Infrastructure

The water supply system operated and managed by Melbourne Water comprises:

- catchments covering more than 157,000 hectares.
- nine major storage reservoirs with a capacity of 1,773,000 million litres.
- 64 service reservoirs that provide short-term storage and allow for a constant supply during peak demand periods.
- about 1300 kilometres of distribution mains and aqueducts.
- 18 water pumping stations, used to pump water from low lying areas to higher areas.
- five water filtration plants.
- 49 water treatment (disinfection) plants.

essentialfacts

MELBOURNE'S WATER SUPPLY RESERVOIRS

RESERVOIR	CAPACITY (at Full Supply)
Thomson	1,068,000
Upper Yarra	200,000
O'Shannassy	3,000
Maroondah	22,000
Sugarloaf	96,000
Yan Yean	30,000
Greenvale	27,000
Silvan	40,000
Cardinia	287,000
TOTAL	1,773,000

Melbourne Water's role

Melbourne Water manages the storage reservoirs and is responsible for the harvesting, treatment and transfer of water to the three Melbourne retail water companies - City West Water, South East Water and Yarra Valley Water. We also supply water to Western Water.

Melbourne Water's supply responsibilities are defined by Bulk Water Supply Agreements with each of the retail water companies. The objective is to provide a reliable supply of safe, high quality drinking water that consistently meets National Health and Medical Research Council requirements.



Further information

If you would like more information on any other aspect of Melbourne Water's role in managing our water resources, please contact us on 131 722 or visit melbournewater.com.au