

State Heritage Areas of South Australia



Blue Lake Pumping Station

115 Bay Road, Mount Gambier

SHR 10233 – confirmed as a State Heritage Place 24 July 1980



Blue Lake Pumping Station, April 2005

This T-shaped dolomite and limestone building was constructed in 1884 as part of a scheme to pump Mount Gambier's water supply from the Blue Lake.

Previously water had been drawn, by hand and windlass, from wells, caves and lakes. Although plentiful, this water was not always suitable for drinking. A more reliable, reticulated water source was needed to cope with the town's population growth and the development of industry.

In the early 1880s a Bill was passed in both Houses of the South Australian Parliament, voting £20,000 for the development of Mount Gambier's

water supply. During March 1882 an Hydraulic Engineer arrived in the town to make arrangements for the construction of a reservoir, waterworks and steam pumping plant.

The work commenced on the banks of the Blue Lake on 20 March 1882. Bushes, scrub and ferns were cleared in preparation for the sinking of a shaft to the water's edge.

By October of that year, an underground concrete holding tank was constructed between the Blue Lake and Leg of Mutton Lake. The plan for this reservoir was the same as one previously built at Gawler. It had a diameter of 60 feet, a depth of 16 feet, and a storage capacity of 270,000 gallons. Its concrete walls were from 18-30 inches thick and it was covered by six inches of concrete.



*Blue Lake, Mt. Gambier 1900
Photo B 16455: State Library of SA*



*Blue Lake, Mt. Gambier 1935
Photo B 20143: State Library of SA*

At the same time a large number of workmen laid 11 miles (18km) of pipe (six, four, three and two inch diameter) throughout the streets of Mount Gambier. On 17 January 1883, reticulated water was finally available to the residents, and the success of the scheme was assured. The Pumping Station, on a ledge 150 feet above the water level in the crater, was completed in October 1884 with the boilers, pumps and engines all working smoothly.

Demand grew, more pipe was laid, and in 1905 another reservoir was constructed next to the original one.

In 1955 the pumping station was converted to electricity and extra pumps provided a capacity of 490 litres per second.

The present pumping station was opened in 1972 with capacity doubled to 1230 litres per second. The current station has three primary pumps on a floating pontoon on the lake's surface, with three secondary pumps to lift the water to storage tanks.

The 1884 building still contains a control board and electrical equipment, including an impressive Venturi flowmeter about twice the size of a grandfather clock.



1884 building overlooking the Blue Lake, April 2005



Tunnel leading to the Lake surface, 2005

The Blue Lake

The crater of this extinct volcano is approximately five kilometres in circumference. The lake has a varying surface area of around 70 hectares, with a water level about 20 metres above sea level and 30 metres below the level of Mount Gambier's main street. It has a capacity of 36 000 megalitres (8 000 million gallons) and is South Australia's third largest water storage area. Only about 10% of the capacity is used each year.

Myths about the Blue Lake being bottomless have been disproved – it has an average depth of 77 metres and a maximum of 197 metres. The Lake is replenished by underground aquifers that feed in through the porous limestone.