

Water Supply History

Townsville was founded in 1846. It is believed that Townsville's first reticulated water supply was pumped from a bore sunk at Hubert Wells in 1889 followed by others known as Shire Wells in what is now Anderson Park. Steam pumps were used to reticulate the water to the Hermit Park area.



Hubert Wells Powerhouse 1968

In 1908 the first of three weirs, Gleeson' Weir was constructed on the Ross River, storing approximately 410 million litres of water. However water was not pumped directly from this weir until 1923, instead being released to recharge downstream aquifers. Other wells known as Lowth's Well, Aplin's Well and Power Well were also sunk on the Ross River floodplain and subsequently connected to Hubert Wells. In 1922 the Council decided to transfer from steam to electric power and consequently a powerhouse was built at the Hubert Wells site. It thus became possible to use a large number of pumping stations located on the riverbank where reasonable supplies of water could be obtained by sinking wells.

In 1923 an investigation carried out by the Department of Irrigation and Water Supply revealed that additional sources of water would eventually be necessary. In response a low weir was built at Aplin's Weir in 1928 and the Black School Weir was built in 1934. The storage capacity of the Black School Weir was increased in 1940 by the erection of a temporary galvanised iron wall, which has been erected almost every year since 1940. In 1943 a second weir was built at Aplin's, known as Aplin's No. 2 Weir. This is the concrete weir wall that exists at the present time and was one of the main sources of stored water in the Ross River.



Black Weir (1934)

During the war years, because of the large number of troops stationed at Townsville, the water supply situation became critical and a decision was made to proceed with what was known as the 'Crystal Creek Scheme'. This involved the completion of a pipeline from Crystal Creek to supply 6.5 million litres of water per day to Townsville residents. This pipeline known as the Mount Spec pipeline was later redesigned to deliver 19 million litres per day and was finally completed in December, 1955, well after the end of the war. By 1958, Paluma Dam and diversion pipeline were constructed to act as a storage to supplement the supply in Crystal Creek in times of low flow.





Construction of Mount Spec Pipeline (1958-59)



Construction of Paluma Dam 1957



Paluma Dam completed 1958

In 1965, the construction of a 600mm duplication pipeline delivering a maximum combined flow of 54.5 ML/day, the maximum yield available from the combined catchments of Paluma Dam and Crystal Creek, was approved. This pipeline was to have nearly twice the output as the existing line. The construction gangs worked six days a week and only had use of two mechanical diggers and a crane to complete the massive 76-kilometre project. Every couple of thousand feet the joins of the pipeline were pressure tested from the inside for leaks. This involved a small man called the 'inside joiner' travelling along each 30-foot pipe length lying on his back on a small trolley. The duplication of the Mount Spec pipeline was completed in 1968. A speedy construction when compared to the existing pipeline that was more than 11 years in the making.





Construction of the 2nd Mount Spec Pipeline 1967

The next major storage in Townsville was a dam located on Ross River at Five Head Creek. The proposed dam would be capable of providing significant flood protection to the downstream communities of Townsville and Thuringowa while supplying sufficient water for a 20 to 30 year period. Consequently, construction of the Ross River Dam Stage I commenced in 1970 and was completed in 1973. Following this, Douglas Water Treatment Plant was constructed on the banks of Ross River downstream from the dam. Initially consisting of 2 pressure filtration modules, its capacity has been almost tripled with the addition of two further modules using updated filtration processes. In 1974, the Council received confirmation of a grant from the Australian Government to the State Government for half the cost of Stage II of the Ross River Dam. Stage 2a construction was completed in 1982 with further enhancements to the earth embankment in 1984.





Ross River Dam during construction 1970's



Ross River Dam 1976

References

Fairweather, I. (1966). History of Townsville's Water Supply Augmentation.*

Mayson, H.R. (1973). Townsville's Water Supply. *

 $^{\ast}\,$ Reports by Townsville City Council Engineers about Townsville's water supply.