

Water Management

Roma Street Parkland's water management practices are consistent with the requirements of the existing water restrictions impacting on South-East Queensland.

All of the Parkland's water features and all irrigation and watering activities are operated with recycled water. The water operations of the Parkland, including its water features, are now solely reliant on drawing water from the lake. In order for the water capacity in the lake to be sustained, the lake is filled by either natural rainfall or recycled water.

Water is dispersed throughout the Parkland using a state-of-the-art irrigation system. The following provides some detail on the irrigation system:

- A central computer controls a series of remote controllers to ensure that only the essential quantity of water is delivered to each zone. Most watering is carried out at night to ensure that there is minimal wastage from evaporation and to minimise any disturbance to park patrons.
- A Weather Station on the site provides for true automatic adjustment of irrigation operation by measuring rainfall, solar radiation, temperature, wind direction and velocity.
- Sensors measure the level of moisture in the soil at strategic locations and allows for additional fine-tuning of irrigation operation.
- The Irrigation system consists of over 3000 outlets, 18 kilometres of control wiring and more than 15 kilometres of irrigation pipes.



Following the introduction of water restrictions, the irrigation system was unable to be used as intended. As a consequence, the Parkland's lake became a key source of water for the Parkland.

Following an initial period where agricultural pumps, piping and sprinklers were used to irrigate the Parkland from the lake, a Pump House was built. This enabled water to be drawn from the lake, be filtered and sterilised and then stored in a 400kl concrete tank underneath Celebration Lawn. New irrigation pumps then pumped clean water from the tank through to the Parkland's irrigation system.



The Parkland's lake holds 11 million litres of water. The lake also acts as a retention basin and stormwater quality improvement device, catching most of the stormwater run-off from the Parkland. Staff at Roma Street Parkland are constantly exploring opportunities to improve water management practices and have continued to progressively implement a number of measures which have reduced the Parkland's reliance on water.

This reduction has been achieved through a range of measures including:

- fully adopting the requirements under the different levels of Water Restrictions
- sacrificing large amounts of the upper Parkland and a few areas in the lower Parkland
- reducing the volume of water applied to those gardens and lawns which have not been sacrificed
- changing of watering times to early morning/night to reduce evaporation
- altering work practices to utilise less water
- changing the type of plant varieties used to those less reliant on water
- exploring and trialling other water saving techniques including the introduction of soil products which assist with water retention
- irrigating using water drawn from the lake
- lowering the water level of the lake to enable greater capacity to capture any rainfall and stormwater runoff
- the implementation of other water harvesting practices which have enabled water to be recycled into the lake, which would otherwise be lost to the Parkland.

From a horticulture and water feature perspective, Roma Street Parkland is solely reliant on natural rainfall or drawing water from the lake. The minimum level of water to be maintained is dependant upon the needs of aquatic and plant life, while also taking into account public safety and the aesthetics of the lake. Once the minimum level is reached, recycled water is then delivered into the lake.

A number of longer term water management strategies are also being explored for the Parkland.