

Waterbodies & bio-retention asset management - a growing concern

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This paper outlines Moreton Bay Regional Council's waterbody and bio-retention asset management journey as it seeks to move from a reactive to a proactive maintenance regime that achieves the desired goals of social, environmental and economic sustainability.

Moreton Bay Regional Council functionally groups together the vegetated stormwater assets of Lakes, Ponds, Constructed Wetlands; Sediment Basins (Waterbodies) and Bio-Retention Systems for Asset Management purposes. Council operates over 230 Lakes and Ponds; 56 Constructed wetlands and 27 Sediment Basins in addition to over 460 bio-retention systems covering an estimated 200,000 m².

Many of these assets have been vested in Council from developments as they have been prescribed as WSUD & stormwater quality treatment infrastructure in Council's Planning Scheme. Increasingly, Council is also constructing these assets as a key element of their overall Total Water Cycle Management Plan.

Council has identified significant maintenance issues with vegetated stormwater assets, which are contributing to them collectively failing to deliver the environmental, aesthetic and economic values, for which they have been designed.

The root cause of these issues has been a fundamental lack of understanding of their function and purpose throughout Council which has led to an underinvestment in maintenance. Consequently, Council has experienced early failures of high profile assets resulting in poor water quality outcomes, reputational damage and high rectification costs.

In response, Council has developed a strategic framework for Waterbody and Bio-Retention Systems Management. Working within this framework Council has:

- Established a **comprehensive inventory** of Council's Waterbody and Bio-Retention Systems;
- Established a **framework for prioritising** all Waterbody and Bio-Retention Systems in the region;
- **Quantified rectification and maintenance costs** for Council's entire inventory of Waterbody and Bio-Retention Systems;
- **Identified roles and responsibilities** within Council for their management; and
- Proposed a **business case** for effective Waterbody and Bio-Retention Systems management.