



## Proactively Maintaining and Renewing Casey's WSUD Assets

**Daniel Fokkens<sup>1</sup>, Nausheen Obaid<sup>1</sup>**

<sup>1</sup>City of Casey, Narre Warren, Australia

The City of Casey has made significant progress in its journey towards becoming a Water Sensitive City.

Casey's adopted Integrated Water Management (IWM) Plan (2015) aims to improve and protect Cities waterway health and improve stormwater management practices. The plan documented Council's 75 WSUD assets including stormwater harvesting facilities valued at over \$16 million (in 2015 dollars) and its role in improving waterway health, protecting habitat health and delivering amenity benefits. It was found that the combination of Council and Melbourne Water owned water quality (WSUD) assets achieves best practice urban stormwater management for the entire municipality.

The challenge for Casey was to ensure all Council WSUD assets were performing effectively and delivering the desired stormwater pollutant reduction. Council prepared a business case to identify best asset management solution for Councils WSUD assets. It was clear that a critical point in time had been reached and if the low level of maintenance continued then premature failure and substantial renewal costs would be incurred to replace failed assets before the asset design lifespan was reached. Implementation of a pro-active maintenance program and renewal of already underperforming assets will significantly defer Councils replacement cost and ensure asset performance.

To ensure that Best Practice is maintained, the Integrated Water Management Plan included the following targets:

- By 2025, all Council WSUD assets are maintained
- By 2025, all Council's WSUD assets requiring renewal are renewed

The IWM plan outlined the ongoing annual budget required for WSUD asset maintenance and rectification. Council has established a prioritisation matrix based on asset location, condition and age for identifying assets going onto annual maintenance and renewal program.

At Present Council owns approximately 125 WSUD assets. Council has now achieved its target for maintaining all WSUD assets. As of 2016/17 all of Council's WSUD assets are routinely inspected and are maintained by Council's Road Maintenance crew using the adopted maintenance budget.

In 2017 the City of Casey successfully completed its first WSUD assets renewal works which included the renewal of 15 assets. An ongoing program of asset condition audits has since been developed

which informs the scope of works required for asset renewal, which predicts that we will achieve our renewal target by 2023.

The proactive asset maintenance and renewal works allowed Council to increase its understanding on:

- asset condition, function and performance
- site specific design and construction challenges
- issues leading to premature failure
- how to improve quality of future assets