

Travelling through Yarra Ranges' WSUD Transformation

Mr Patrick Jeschke¹, Mr Matthew Pilcher¹

¹Yarra Ranges Shire Council

Biography:

Patrick Jeschke is a Civil Engineer with background in the land development sector. He has grown his passion for IWM through exploration of WSUD and stormwater harvesting techniques with a boutique consultancy before entering the public sector. In his role as WSUD Officer with Yarra Ranges Council he is supporting the Environment and Engineering department in asset management, maintenance programming, civil design and construction delivery, as well as in strategy and guideline development within the WSUD space.

Matt Pilcher is an Environmental Scientist with a passion for managing stormwater to benefit waterways and communities. Has worked as an Environment Project Officer at Yarra Ranges Council, which involved catchment mapping, environmental restoration, WSUD planning and renewal. In this role and studies he has developed an understanding and keen interest in WSUD systems, urban catchment management and stormwater management. He is working as Project Support Officer, assisting and delivering township improvement projects.

Yarra Ranges Council has undeniably embraced the WSUD journey since its emergence about 15 years ago. In 2003 WSUD began at Yarra Ranges, by 2015 there was 100 assets, but with limited resources and funding. Step forward to 2019 and we have a successful renewal program, a dedicated Maintenance Officer, WSUD Officer, committed renewal funding and a supportive Council on WSUD projects.

Melbourne University's Little Stringybark Creek Research Project and the role of the WSUD Officer and WSUD Maintenance Officer has been a key driver in the WSUD story at Yarra Ranges. The aim of this presentation is to discuss the process, journey and the key learning's used to inform the WSUD renewal program. Case study examples will be used to provide practical tips on undertaking renewal works and working effectively with contractors.

In 2015, Council engaged a consultant to undertake a comprehensive audit on existing WSUD systems. The results found only 8% of WSUD assets were in good condition, and the 51% in poor condition required rectification through external contractors. In 2018, a condition assessment using Melbourne Water's WSUD Audit Draft Guidelines was undertaken in-house on the 124 assets now in existence. After 18 months of renewal works and a regular maintenance program 44% are now classified as good condition with only 26% in poor condition.

Recent success is the direct result of sustained effort to create functional, practical designs, ensuring appropriate construction techniques and building capacity with the WSUD Maintenance Officer and Annual Supply Contractors undertaking renewal works. There have been many learning's along the way, which we have integrated into process improvements including contractor management, standard drawings and maintenance programming.