



All the things we learnt - Dandenong Council Stormwater Quality Audit

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Biography:

Hugh graduated from RMIT University in Environmental Engineering and previously worked in state government at Melbourne Water for two years and local government at Hobsons Bay City Council for four years. He has worked on the design of multiple stormwater treatment projects since joining Optimal Stormwater six years ago and has been involved in the design, construction and O&M of multiple stormwater harvesting systems.

Dandenong Council has 32 Gross Pollutant Traps, 2 WSUD assets and 1 stormwater harvesting system and is now starting to receive more proprietary underground GPTs due to DA led conditions and stormwater harvesting systems through Council led stormwater quality projects. Council aims to promote, protect and preserve their rivers through these structural protection measures, so it is vitally important to understand how they are working, and how they can be improved.

Through the audit of 32 GPTs and 2 WSUD Assets, Dandenong Council now have a complete understanding of all their stormwater quality assets thanks to Melbourne Water's Living Rivers grants. This paper draws lessons for consideration by those involved in the design, construction and especially the O&M of stormwater treatment devices. Devices commented on includes CleansAlls, CDS Units, Humegards, Ecosols and Wetlands which will all be presented on.

Lessons learned from the Stormwater Quality Audit were feed back into Councils Planning, Maintenance and Works sections within Council in regards to future devices, and also into the DA section for the approval and acceptance of future devices. Lessons learned fed back into maintenance specifications and maintenance frequencies for each device as well as a rolling plan of rectification and enhancement works.

Priorities for the City of Dandenong included getting the correct cleaning frequencies and correct cleaning techniques for their existing GPTs, making it both safer, reliable and more affordable to clean out Councils water quality assets. Other priorities included upgrading high priority GPTs to make their operation, management and reporting easier.

The results are a complete analysis of Dandenong Council's stormwater quality infrastructure with GIS files, reports, Data Sheets and Rectification and Prioritisation lists. It lead to capacity building within Dandenong Council's staff, massive improvements in efficiency of many devices with better environmental outcomes for the same maintenance expense.

The lessons learnt from Dandenong Councils Stormwater Quality Audit are very good lessons to share with other Councils and stormwater quality practitioners in what and what not to do, what is successful, what is not successful, what technology works well, what technology does not work so



well, what techniques and approaches are successful and those which are not. This Stormwater Quality Audit contains excellent lessons that all stormwater quality managers and practitioners are recommended to know and understand.