Penrith City Council Gross Pollutant Trap Auditing

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Abstract

Penrith City Council is located in Western Sydney bordering the Blue Mountains, Blacktown and Liverpool Council local government areas. The area is currently subject to significant new urban growth which is placing pressure on its waterways and natural environment.

Penrith City Council has a large number of older trash rack style Gross Pollutant Traps (GPTs) and is now starting to take ownership of more proprietary underground GPTs and other stormwater treatment measures such as wetlands and bioretention basins due to its Water Sensitive Urban Design Policy requirements and other Council led stormwater quality projects.

In order to improve the management of stormwater within the City, Council commissioned an audit of 88 of Council's Gross Pollutant Traps with the aim of identifying issues and improving the performance and condition existing devices. As part of the audit an analysis of the City's Catchments is being completed with the aim of identifying opportunities for installing future GPTs.

The project sought to provide an understanding of the City's existing primary stormwater treatment and identify where improvements can be made. . Penrith is rising to the challenge of identifying where and what all their primary treatment devices are, how they work, how they could be improved and where other primary treatment solutions should be targeted around the LGA. The results have shared lessons and replicability for all stormwater quality managers.

Table 1 Gross Pollution Trap Data

GPT Type	Number	Percentage
Trash racks	74	84%
Underground GPTs	14	16%
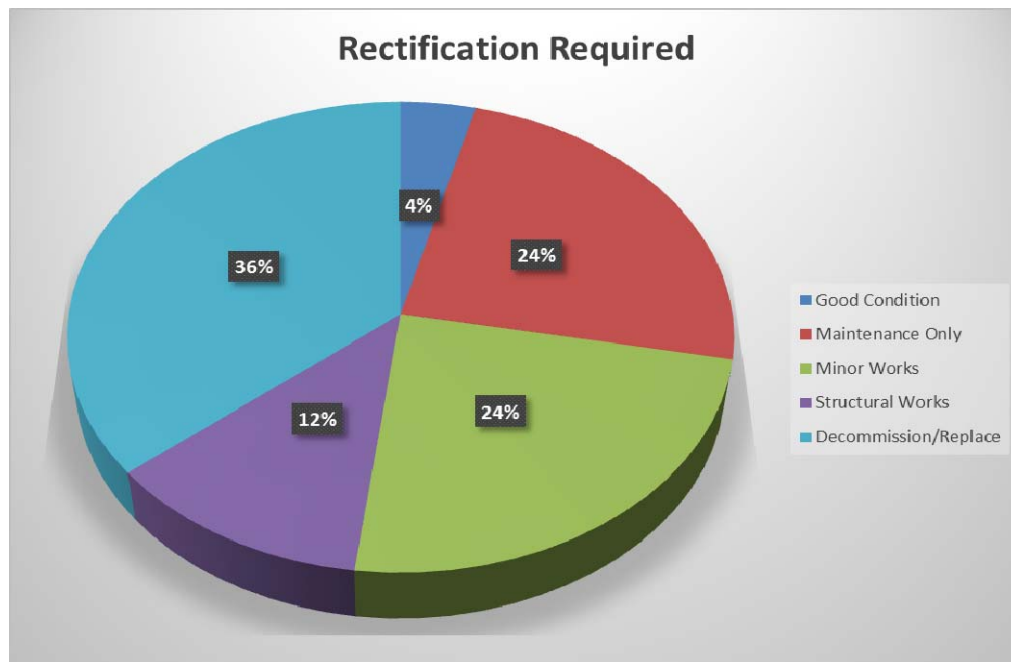
Figure 1 Gross Pollutant Trap Summary Sample

Figure 9 Custom trashrack location

Figure 10 Custom trashrack bars

Figure 12 custom trashrack sediment sump and offline storage bay