

Stormwater

Community Assets – At the Core of Your Neighbourhood

What are the community assets?

The City of Willoughby boasts a large range of services which contribute to our quality of life. Most of these services rely on a pool of assets with a combined replacement value of more than \$760M.

Assets in Willoughby include all buildings, footpaths, roads, stormwater infrastructure, parks, bushland, sportsgrounds and playgrounds. Without these assets Council could not provide its present array of services. These assets are located on Council-owned land as well as land under Council's care and control.

Asset Management has been identified as a federal priority for local government across Australia, as all councils begin to face the issue of aging infrastructure.

Strategic management of these assets, guided by an asset management policy and plans, will ensure the needs of communities are being determined and met, and funding sources for asset renewal are secured for the future.

Managing our assets

Much of the city's infrastructure was built in the first half of the 20th century and an intense period of construction of community buildings took place in the 1970s and again in the 1990s. Many of these assets are already due for replacement, and Council has been undertaking a continual replacement and upgrade program to meet the needs of a growing city. Planning has now begun for the large number of these assets that will be due for replacement around the same time, particularly over the next two decades.

Willoughby City Council has collected the vast majority of data required to produce its Asset Management Plans. They can be accessed from Council's website. These 20 year strategic plans provide scenario-based expenditure projections for nine classes of assets.

The next step for Willoughby is to ascertain the community's priorities and determine the acceptable condition, capacity, functionality, location and quantity of our assets.

Have Your Say

Willoughby Council is seeking feedback from the community to determine the acceptable level of service provision.

We need to know how you use community assets, whether they meet your expectations and how we should prioritise future works so we can develop strategies for their management.

Consultation will seek your opinions about community assets in terms of physical condition and appearance, capacity, fitness for purpose and whether there are enough of them in the right places.

Visit www.haveyoursaywilloughby.com.au to be involved in the online forum and to receive project updates. Council will also hold community workshops, public meetings and information stalls through 2013.



Stormwater

Replacement value: \$101.3M

- 162 km stormwater conduits (pipes, culverts, open channels)
- 4,815 stormwater pits (various types)
- 9 gross pollutant traps
- 4 detention basins

The stormwater network exists to facilitate the drainage of stormwater and minimise localised flooding.

More recently, Council has extended its responsibility to managing re-use of stormwater. Four detention basins have been installed to minimise the risk of flooding downstream properties.

The stormwater pipes for which Council is responsible vary greatly in size depending on their location in the stormwater catchments. Generally in the upper reaches of the catchment the conduit sizes are smaller, typically with diameters of about 375mm. Diameters increase in the lower reaches.

More than 90 per cent of stormwater pipes are concrete. The remainder are materials such as vitreous clay, masonry and sandstone. New pipes installed are generally rubber ring-jointed concrete pipes with diameters of no less than 375mm to minimise the risk of blockages and to facilitate cleaning.

Physical condition

The average age of stormwater pipes is more than 70 years. New concrete pipes can have estimated lives of up to 100 years. Older concrete pipes may not last this long due to different standards, manufacturing techniques or installation methods. Environmental conditions such as proximity to salt water and acid sulfate soils, may also affect durability.

Average condition of stormwater conduits:



Stormwater assets are rated on a scale of zero to five, where zero means the asset is in brand new or excellent condition and five means the asset is at the end of its life and no longer able to provide service.

Operations and maintenance

The stormwater drainage system often goes un-noticed by the community, as the majority of the stormwater network is underground. Since 2005, Willoughby Council has been undertaking video inspections of its conduits to investigate their condition to allow for programming of future works.

So far, approximately 52 per cent of the network has been inspected. In the coming years, the focus will shift from inspecting pipes that have not previously been inspected, to re-inspecting pipes in order to increase confidence in the expected lives and degradation patterns of these assets.

\$3.8M of stormwater work was carried out during the 2011/12 financial year, including:

- Video inspection of pipes
- Pipe cleaning + blockage removal
- Pipe and pit repair
- Pipe relining (low-cost option to extend asset life)

Planning for the future

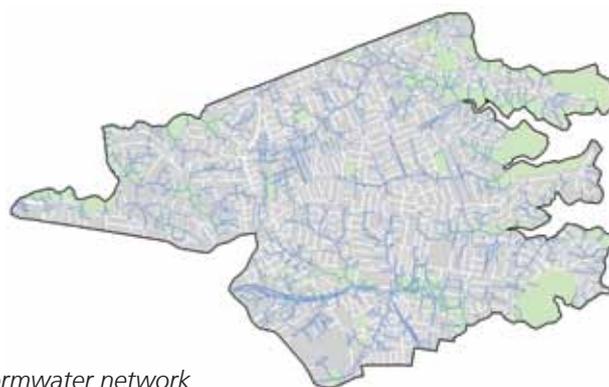
Increasing population and urban development generally result in more rainwater becoming stormwater run-off and making its way overland to the stormwater network. A number of policies have been implemented over the past decade to help counteract this and minimise impact on the stormwater network.

The best management approach to plan for future demands and local flooding involves a multi-level approach:

1. Encourage on-site detention systems and rainwater tanks to reduce the impact of overland flows on the stormwater system.
2. Encourage more soft landscaping areas within properties.
3. Develop a floodplain risk management process to determine ways to manage the risk of flooding.

Additional strategies such as large scale stormwater reuse and natural area management will further reduce catchment overland flows and their effects.

Council is currently investigating strategies to maximise the reuse and recycling of stormwater at several sites and will continue to do so where possible. The largest project of its kind is the engineering award winning dual use stormwater detention (flood mitigation) and reuse tank that has been constructed at The Concourse.



City of Willoughby

