

Doncaster Hill Water Plan

Fact Sheet



Doncaster Hill is the first Activities Area in Melbourne to introduce an innovative project to make recycled water available for future residents, while ensuring Council's stormwater management objectives are met. Manningham City Council is working with Yarra Valley Water and Melbourne Water to provide residents of new apartments in Doncaster Hill to access Class A recycled water for garden, toilet and laundry use.

A number of innovative options have also been developed, allowing customised integrated water solutions that take advantage of recycled water and reduce the impact of stormwater on the environment. The project is the first time a third pipe system supplying recycled water has been introduced into an established urban setting.

Manningham Planning Approvals

Developers are required to address a range of sustainability and engineering issues prior to receiving planning approval for development proposals. A Sustainability Management Plan (SMP) needs to be approved for new developments and developers also need to meet best practice objectives for stormwater management.

The installation of a third pipe for recycled water is a mandated Yarra Valley Water requirement. In addition, a number of model solutions have been developed which provide a range of design responses, each of which have the potential to enhance the marketability of a development. Model solutions include:

- Rainwater to hot water service
- Landscape treatment of site runoff
- Green roofs.

Developers and project architects are encouraged to speak with Council staff to discuss options for on-site detention requirements prior to lodging a development application. By installing a third pipe and adopting one of the suggested model solutions, developers can expect to satisfy the approval requirements of Council and Yarra Valley Water.

Benefits of the Doncaster Hill Integrated Water Management Approach *Environment*

A water study completed in 2010 for Doncaster Hill identified significant savings including up to:

- 64 per cent reduction in potable (drinking) water
- 53 per cent reduction in wastewater export
- 42 per cent reduction in stormwater runoff
- 54 per cent reduction in greenhouse gas emissions.

Residents

- New residents will have unrestricted access to the water supply. Water delivered through a third pipe will be a guaranteed source of water.
- The recycled water will be charged at the lowest block tariff of drinking water, providing a cost effective water source.
- Doncaster Hill will remain an attractive place to live. Having a constant recycled water supply will ensure that Doncaster Hill retains vegetation to provide shade and amenity for residents.

Developers

- Provide certainty around approvals requirements. To clearly understand what is required from an approvals perspective developers can include the third pipe into building design, avoid costly retrofits, and plan appropriate stormwater management strategies.

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- Promote water management aspects of buildings as an environmental benefit. Information provided by Council and Yarra Valley Water promotes the clear environmental advantages of using a recycled water supply.
- Compliance options can be customised to suit specific site constraints.

Shared investment in infrastructure

Yarra Valley Water's provision of recycled water to Doncaster Hill reduces the costs and health and management risks associated with providing building by building water treatment solutions, both in the design and building operation.

- Management of roof water and stormwater runoff in approved, low risk, 'fit for purpose' applications can reduce drainage compliance costs and increase marketability.
- The use of recommended model solutions can reduce the costs associated with development of water management aspects of Council's SMP process.

Suitability of Water

The Doncaster Hill Integrated Water Management approach makes reference to the following different types of water:

Rainwater

Rainwater collected from roofs is a high quality source of water suitable for most purposes subject to a few simple management actions being implemented. Comprehensive guidance can be found in the publication "*Rainwater Use in Urban Communities. Guidelines for Non-drinking Applications in Multi-residential, Commercial and Community Facilities*", State Government, Department of Human Services, December 2007.

Stormwater

Stormwater (defined as water that resulted from surface runoff or runoff from elevated areas where significant human activity occurs), is suitable for a number of external, non-potable uses. Clever, integrated design responses can be adapted to allow stormwater to passively irrigate landscape areas or encourage infiltration, greatly reducing the need to use potable water in landscape areas.

Class A Recycled Water: The Facts

Class A Recycled Water is the highest quality of recycled water; achieved after a treatment process combined with pathogen removal. The use of Class A recycled water is supported by the Department of Health, who have classified Class A recycled water as safe for use as irrigation for food crops and a range of internal uses. Uses include residential garden watering, toilet flushing, irrigation of parks and sportsgrounds.

Source: Yarra Valley Water, www.yvw.com.au

Yarra Valley Water's investment in future infrastructure will ensure that a safe and reliable supplementary water source is available for Doncaster Hill residents.

For more information on Doncaster Hill water initiatives, visit www.yvw.com.au