

Council: Hunter's Hill Council

Project Title: Water Sensitive Urban Design

Project Summary: Hunter's Hill Council is part of the Lower Parramatta River (LPR) catchment. Councils within the LPR were interested in providing residents and visitors to the area with a range of Water Sensitive Urban Design (WSUD) options to select from that would reduce stormwater runoff from their properties and improve the water quality of the runoff that enters the Parramatta River. To this aim, four of the seven councils in the LPR planned and constructed WSUD demonstration sites in their LGA's.

The Hunter's Hill Council demonstration site is completed and consists of:

- 3000 litre rainwater tank
- water feature
- rainsaver guttering connected to internal toilets
- diffuser diverting overflow onto garden bed
- pervious paving
- rainwater garden

Project Objectives: By providing residents and visitors to the demonstration site with simple, easy to install water-saving devices, the expectation is that they will not only be better informed of the ways and means to introduce WSUD principles onto their own properties, but also realise the ease of retrofitting some of these devices. Signage at the site also outlines the advantages of using these devices.

Other objectives were to:

- increase the number of rainwater tanks and other rain harvesting utilities installed in the LPR
- reduce the use of reticulated water at the sites and record the results ie. data gathering.
- increase the awareness of community members on water sensitive gardening and encourage commitment to a change in behaviour
- encourage the community to introduce local native plants with low water use into their own gardens
- use demonstration sites as an education and awareness raising tool

Project Outcomes:

Organisational:

The Stormwater Coordinator was responsible for coordinating the four demonstration sites across the Lower Parramatta Council. Each council was responsible for carrying out the construction of each site individually. Hunters Hill was able to implement the project with a small multi-disciplinary team that included: Council's Bushland Environment Officer and the Stormwater Coordinator, Council's Outdoor staff, as well as input from the Gladesville Community Centre staff.

Environmental benefits:

LPR Councils anticipate long-term environmental benefits will flow from the Water Sensitive Urban Design project and demonstration sites, particularly as the project focuses on awareness raising and is a practical education tool.

The nature of the positive environmental benefits anticipated to be gained include:

- an increase in the level of water conservation ethics among the community
- an increase in the understanding of the volume of stormwater runoff from private property and the downstream impacts, and an awareness that these impacts can be ameliorated at the individual residential level
- the provision of both literature and practical examples of WSUD via demonstration sites, on how to source and install WSUD features

Council intends to record the changes in reticulated water usage at the Gladesville Community Centre demonstration site via water bills before and after installation. Council will also record the number and capacity (L) of rainwater tanks installed via DA process and rainwater tank supplier records and number of inquiries.

Technical:

Hunters Hill has installed a 3000 litre corrugated iron rainwater tank on a treated pine stand (this size was chosen as it did not require development approval), behind the Gladesville Community Centre building, in a public park. Water from the rainwater tank feeds the pond that has been designed and constructed to suit the site area and dimensions of the tank. The pond is planted with macrophytes which not only help improve the water quality but also provide habitat for frogs etc. A solar panel is used to pump the water through a small fountain.

Rainsaver® Guttering has been installed on the roof of the Gladesville Community Centre. This particular system captures and contains 25 litres of rainwater per metre, which is used to flush the toilets at the Centre. One section of guttering is used to fill the rainwater tank. When this guttering reaches capacity, a diffuser device directs the overflow into the garden beds. With the exception of extreme weather/rainfall conditions, this results in zero stormwater runoff leaving the site.

The parking area around the Community Centre, the path leading to the tank, and water feature use various methods of pervious paving to infiltrate runoff, and all garden beds are planted with local native plants with low water use,.

To link with the garden at the Gladesville Community Centre, Hunters Hill Council is presently planting a rain garden at the roundabout at the intersection of the Gladesville and Manning Roads, only metres from the Community Centre, which will again be planted with low water use, local native plants.

Only minor setbacks were experienced by Hunter's Hill Council at the site. These included various adjustments to the toilets to ensure that the cisterns filled rapidly enough, plus the location of the tap on the watertank to ensure that it would not be open to vandalism.

Much time and effort was spent in providing companies with a thorough brief to provide quotes for the interpretive signage. This ensured that we received accurate quotes for the project, and good outcomes for the finished product.

Team Members:

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