

Case Study

Rain Gardens

Urban Stormwater Integrated Management Project - Hill Street Rain Gardens
Project Manager: Marrickville Council

The Hill Street Rain Gardens best practice water sensitive urban design in Marrickville is a collaboratively designed bioretention system designed to improve stormwater quality and provide an attractive natural feature in the streetscape. The rain gardens use 'Enviromedia', an engineered growing media, to filter stormwater and remove pollutants, including suspended solids, nutrients, heavy metals and pathogens.

Most bioretention systems use a sandy loam soil for the filter material. With the support of NSW Department of Environment and Climate Change (DECC) and the Centre for Resource and Organic Enterprises (CORE), Marrickville Council decided to experiment with the innovative Enviromedia.

The project was driven by the local community through their Illawarra Road Subcatchment Community Water Vision 2050 that was created through extensive collaboration. The vision aims for a Cooks River that is "clean and safe for recreation, fishing and swimming". The investigation, design, planting and ongoing maintenance of the rain gardens has been in partnership with local people.

Council was also impressed by the Enviromedia's demonstrated performance in pollutant removal and that it is a recycled product. This is in line with Marrickville Council's stated commitment to ecologically sustainable development.

The two rain gardens were completed in November 2007 and are now operational. They were planted out by over 30 local community volunteers, many of whom regularly contact Council about the gardens' performance and condition and have volunteered to help with their maintenance.

The project is the first of its kind for Council and one of only a few in inner south-west Sydney. Internally, the project has allowed Council to build its own capacity to successfully undertake water sensitive urban design (WSUD). The rain gardens have also developed community interest in local environmental issues and WSUD. They are also being promoted to other councils through the Cooks River Foreshore Working Group, Cooks River Sustainability Initiative and the WSUD in the Sydney Region project.

