WATER SENSITIVE SA

In-house training

Streetscale raingardens – design and practice

Overview

This course offers practitioners knowledge and skills to plan and design streetscale raingardens to ensure long-term success, including selection and placement of vegetation. It includes an afternoon session with three of Adelaide's leading WSUD practitioners who will share their learnings from Raingarden 500 pilot projects.

Learning objective

The training will assist participants to improve knowledge and skills with respect to appropriate design parameters and practices necessary to enable the delivery of successful biofiltration assets.

Audience

Engineers, landscape architects and designers and urban designers

Modules

01 - Why choose a streetscape raingarden

- How they work
- Measuring performance

02 - How they work

- Treatment processes
- Different configurations in street

Measuring performance

- Modelling assessment
- Typical configuration, sizing guide

03 - Detailed design

- Inlets, outlets, plumbing
- Soils
- Harvesting
- Construction and maintenance

04 – Vegetation selection for biodiversity, amenity and low maintenance

- National and State guidelines for raingarden plant species selection and placement
- Indigenous species that add seasonal colour and interest to raingardens, including mat forming, herbs, sedges, shrubs and trees)

05 - Selecting a site

Design considerations

Common constrains (Slopes, trip hazards, services)

06 - Design workshop

- Worked example case study. Design of bio-retention system
- Participants are encouraged to bring along their own case study to consider in small group workshop sessions

07 - Community of practice

- Site visit raingarden/biofilter in local area
- Guest presenters: Local government for example: Russell and Gilberts Street raingardens, Randolph Avenue streetscape upgrade, and Brooker Terrace raingardens (may vary depending on availability)

Presenters/trainers

Robin Allison, Director, Designflow

Ralph Williams, Senior Engineer, Designflow

Shaun Kennedy, Specialist, Vegetation Services, SA Water

Guest presenters: Local Government/Raingarden 500 project managers (variable subject to availability)



Core competencies attained

- An understanding of bio-retention system function and components.
- An understanding of vegetation for nutrient removal and aesthetics suited to SA conditions.
- An understanding of growing medium specifications.
- An understanding of inlet and outlet structures design to facilitate high function.
- An ability to design a simple bio-retention system.

Cost

Price on application