

Designing streetscape biofiltration raingardens

Date:	Thursday 30 May 2024
Registration:	9:15am
Time:	9:30 am-4:30pm
Venue:	Club Marion, Hills View East Function Room, 262 Sturt Road, Marion (<u>Google map link</u>)

This course offers practitioners knowledge and skills to plan and design streetscale biofiltration raingardens to ensure long-term success, including selection and placement of vegetation. It includes biofiltration raingardens site visits in the Cities of Marion and Mitcham.

Program

	Торіс	
9:15am	Registration – tea and coffee on arrival	
9:30am	Welcome and introduction	Belinda Dohring
9:35am	Course overview	Dale Browne
9:40am	What are raingardens?	
	How biofiltration systems work including the physical, chemical and biological processes for stormwater treatment	
	Expected performance for pollutant removal, hydraulics and hydrological outcomes.	
	Fundamentals of design such as conceptual modelling via MUSIC; key components; sizing; conveyance and hydraulics; material specifications; plant selection; and cost effective asset maintenance.	
10:50am	Coffee break and board bus for site visits	
11:05am	 Raingarden site visits & guest speakers City of Mitcham: Rachel Murchland, Principal Project Manager Aldershot Street, Clarence Gardens Neville Avenue, Clarence Gardens City of Marion: Glynn Ricketts, Water Resources Coordinator & Estelle 	
	 O'Donohue, Coordinator Survey & Design Tonsley MAB Alawoona Avenue, Mitchell Park Sturt Road, Oaklands Park 	
12:45am	Lunch	
1:30pm	Construction and establishment considerations including risks at key stages that can impact functionality and successful vegetation growth, sediment management and erosion control. Monitoring performance after construction to ensure correct function and over the life of the asset.	

For more information, contact:



	Integrating local site conditions such as adjacent landscaping, traffic controls, pedestrian routes and parking spaces. Case studies and examples of biofiltration raingardens	Estelle O'Donohue
2:50pm	Afternoon tea break	
3:10pm	Design exercise to practice applying design fundamentals, incorporating components for construction and ensuring the ongoing performance is maintained for the life of the asset.	
4:30pm	Close	

Training goal/purpose

To enable the design of streetscape biofiltration raingardens to meet multiple objectives including pollutant removal, ecological function, safety, cost effective asset management, and integration within streetscapes.

Target audience

Local government, consulting design engineers and landscape architects with the aim to develop new skills to ensure streetscape biofiltration raingarden designs achieve the required water quality treatment outcomes and integrate well with public spaces/streetscapes.

Learning objective

An understanding of:

- biofiltration raingarden functional components, including vegetation
- filter medium specifications
- inlet and outlet structures
- opportunities for biofiltration raingardens to provide amenity
- landscape value and streetscape design integration
- designing for cost-effective maintenance.

Core competencies attained

An understanding of:

- fundamentals of a biofiltration raingarden, design considerations and construction aspects that affect performance expectations
- key components of the biofiltration raingarden system and placement within the streetscape
- functionality of vegetation and biofilter medium to improve water quality and manage urban stormwater
- the relationship between design, routine maintenance and cost-effective asset management.



What to bring

Clothing suitable for outdoor site inspections including enclosed shoes, sun protection and hi-vis attire.

Location of training

Venue:

Club Marion Hills View East Function Room 262 Sturt Road, Marion

Link to Google map

Your trainer



Dr Dale Browne, Senior Associate Environmental Engineer, E2Designlab

Dale is an Environmental Engineer with over 15 years professional experience in water sensitive urban design and integrated water cycle management. He has practical experience in the project management, design, delivery and maintenance of water sensitive urban design interventions including wetlands, rain gardens and stormwater harvesting locally and internationally.

Dale has helped shape policy and industry guidance for stormwater management and water sensitive urban design throughout Australia. He has led or been involved in numerous guidelines and training events for industry on the planning, design, modelling and maintenance of WSUD assets including raingardens.

Dale has specialist experience in WSUD modelling including translation of research, development of tools and models, model application as well as guidelines and training.