Rain gardens buffer Melbourne's waterways

Joint venture work by Monash University and company Ecological Engineering has developed ingeniously simple 'rain gardens' that filter stormwater before it is collected for re-use, thereby preventing chemically tainted urban run-off from polluting Melbourne's Port Phillip Bay and local streams.

Averaging around five square metres in size, these gardens are biofilters through which rain run-off is channelled, 'cleaning' stormwater as it passes through a bed of sandy loam soil filled with reeds and other water-friendly plants. The run-off is then collected for irrigation or safely piped back into the stormwater drain network.

The rain gardens mean cleaner water will trickle into Melbourne's bay – free of pollutants such as nitrogen and heavy metals.

The Director of Monash's Institute of Sustainable Water Resources, Dr Tim Fletcher, said dirty stormwater was the most significant threat to the health of Port Phillip Bay.

'The government's environment strategy is to protect the Bay from nitrogen, and to reduce pollutants in the Yarra River, because their sustainability depends on that,' he said.

As a result of support and work by Melbourne Water and other organisations, the rain gardens are already operating in new residential developments at Docklands and other inner urban areas such as Richmond.

The new native rain gardens are aesthetic collection and filtration points for stormwater. Tony Wong/FAWB

Contact:
Dr Tim Fletcher, 0407 517 662,
media@adm.monash.edu.au