



Interactive display at Civinex attracted interest from a wide group of industries

CIVINEX 2010 A RESOUNDING SUCCESS



Civinex is one the countries leading civil & infrastructure expo

Bioaction exhibited at the recent CIVINEX - Australia's Annual Construction and Public Works Expo



held at Western Sydney International Dragway at Eastern Creek.

Bioaction received a resounding response from the visitors, many of who were looking for new and innovative ideas and environmental solutions.

The company launched many new products such as FiltaBoom and FiltaPod as well as new innovations in mini wetlands modules and bioretention pits.

The dynamic and working displays drew a lot of attention particularly when there was such a strong visual reference to how the products could be used.

Bioaction saw a high proportion of the 4500 visitors from as far away as Perth. The majority of the regional councils were well represented. "It was a delight to see so many council staff who were genuinely interested in what we had to offer" said Alan Paddison (Bioaction Sales & Marketing Manager)

A lot of interest was shown in the new FiltaBoom which is used for silt and nutrient retention. This was seen as real alternative to traditional silt curtains and hay bales - comments like "it's about time there was something available that really worked"

The FiltaPod prototype was shown at the show and it too drew a lot of interest as a real solution to a common environmental problem. FiltaPods are used to float wetland plants on natural and constructed retention ponds or wetlands. They promote the root system to hang in the water which dramatically increase the reactivity with nitrogen, phosphorus and heavy metals.

There was also a small working display of a bioretention system to meet the requirements of the Water Sensitive Urban Design (WSUD) system. WSUD promotes a structured design to trap stormwater, filtering it through a filter substrate before entering stormwater drains. Key to the design is the use of specific plants to utilise and convert nutrients. The Bioaction design simplifies the engineering design and construction process. Further developments are well underway in the design of a precast pit which will form and integral part of the retention system construction.

Wyong Shire use FiltaBoom

A recent installation FiltaBooms for bank stabilisation proved to be highly successful



New way of stabilising turf

Bioaction have been trialing the establishment of turf utilising CoirNet



What's New

Murdoch University conducting valuable biofilter trials at RRRC - Perth

Bioaction has been working in conjunction with Environmental Biotechnology Cooperative Research Centre and Murdoch University in odour abatement trials at the Regional Resource Recovery Centre owned by the Souther Metropolitan Regional Councils in Perth.

These trials will provide valuable research into the microbial inoculation and biofilter media structures.



Research test units at the Regional Resource Recovery Centre. Tests conducted by Sebastian von Eckstaedt

Turf growing trials using CoirNet

Recent trials of establishing turf on CoirNet haven proven to be very successful. When the turf was laid on the netting the roots immediately bound around the netting seeking the moisture held in the coir fibre.

The turf was laid on moistened netting and then directly onto plastic.

This has significant application in ensuring the establishment of turf regardless of the soil condition. It is also especially applicable to sloping sites where soil loss and erosion is problematic.



This images shows roots well established in the CoirNet.

Stormwater killing our most valuable resources



"One of the most contaminated harbours in the world" ... Gavin Birch and Stuart Taylor testing in Hawthorne Canal, Lilyfield.

ABC Catalyst program highlights the impact of stormwater

Sydney's Neutral Bay, looks picture perfect, but lurking in the mud are high levels of organochlorine pesticides like DDT, heavy metals like lead, and the highest concentrations of toxic hydrocarbons to be found anywhere in the harbour.

So who's responsible? The legacy of industrial pollution usually gets the blame. But it's been illegal to dump toxic waste directly into the harbour for over thirty years. And still, toxins in the sediment remain dangerously high. There has to be another culprit.

"The other source of contaminants is stormwater." Says Assoc Proffessor Gavin Burch

"We've analysed sediments from core samples down different embayments and right near the stormwater outlets the contaminants are generally highest" Serena Lee

When it rains, the heavy metals and other chemical residues on our roads and buildings are washed into the drains.

"Up to four kilograms of zinc occurs in some of these very large truck tyres" Assoc Professor Gavin Birch

Toxic hydrocarbons called PAH's come from car and truck exhausts. Pesticides and fertilisers are lifted away with the topsoil. Fine clay particles in the run-off are electrostatically charged. Like tiny magnets, these particles attract contaminants, such as heavy metals, dioxins and organochlorines.

"Our work has shown that the concentrations of contaminants in the stormwater hasn't improved over time, the risk obviously is that these contaminants are being transported around the harbour." Assoc Professor Gavin Birch

www.abc.net.au/catalyst/stories/2917562.htm

