

Ryde Aquatic Leisure Centre with Backwash Recovery System

Water Quality Monitoring (WQM) Strategy

City of Ryde has been monitoring the Terry's, Shrimpton's, Porter's, Buffalo and Archer's Creek systems for the last six years as part of a Water Quality Monitoring Strategy. Extensive biological sampling of stream macro-invertebrates (insects) give a picture of overall and long-term stream health (based on the tolerance of insect types found), while chemical monitoring reveals information on specific indicators at time of sampling. These include faecal coliforms (gut bacteria that indicates sewerage pollution), ammonia, phosphorus (indicates pollution from detergents and fertilisers) and dissolved oxygen (indicates if stream flora and fauna have enough oxygen to survive, this can be low in highly polluted areas).

The results are used to inform City of Ryde infrastructure, remediation and education programs and the reports are shared with local educational institutes and libraries. The monitoring results and improvement measures are also discussed at the Water Quality Monitoring

Community Working Group.

For copies of the reports or more information see: www.ryde.nsw.gov.au/ environment/water/quality_ monitoring_strategy

Water Sensitive Urban Design (WSUD) Systems and Interpretive Signs

Stormwater (the water that runs down gutters and street drains after rainfall) treatment systems have been built by the City of Ryde in Gladesville, Looking Glass Bay, Meadowbank Shops and Meadowbank Park. These include the constructed wetlands adjacent to the Field of Mars Wildlife Reserve, the tree pits and rain-gardens around Meadowbank railway station and a 190m² bio-retention basin that reduces stormwater pollutants entering Looking Glass Bay. The latter for example, is designed to remove 85% of Total Suspended Solids. 74% of Total Phosphorous and 57% of Total Nitrogen from the 1.2 hectare Amiens Street sub-catchment (a water catchment is a low lying area in the landscape where rainfall is captured and drains to a particular stream), that drains to Looking Glass Bay Creek.

The multi-layered filtration systems of the rain-gardens use biological processes in soil to filter pollutants and help regulate its functions over the long-term, minimising the need for maintenance.



Looking Glass Bay Interpretive Signage

Several innovative interpretive signs have also been designed with input from local schools to raise residents about the concept of a water catchment, the WSUD

systems and stormwater pollution. Associated bus tours, a teacher professional development session and student workshops helped educate the community about their operation and purpose.

> Student artworks on water conservation and stormwater protection













- 1. Meadowbank Park Interpretive Signage.
- 2. Looking Glass Bay Bioretention System
- Teacher Professional Development Session on Water Quality Monitoring, WSUD and Stormwater Education at Meadowbank Park
- 4. School waterways workshops at Looking Glass Bay
- City of Ryde Engineer presenting to local students on the WSUD systems at Meadowbank Shops

Catchment Connections

The City of Ryde Catchment Connections program continues to expand on a series of community engagement initiatives and bush regeneration activities. The three year project covers the Terrys, Mars, Shrimptons and Buffalo Creek catchments – all linking to the Lane Cove River. The partnership project is jointly funded by the NSW Environmental Trust and three Local Councils with City of Ryde as the lead Council.

Catchment Connections aims to improve the water quality of local creeks, preserve and enhance remnant bushland, improve local biodiversity and increase community awareness of catchment protection.

Engagement activities such as guided nature walks, including specialist themed walks such as a nocturnal (wildlife that is active at night), office worker's and multi-lingual walks, have been popular. As have initiatives such as a Sustainable House Day Tour of local Bushcare sites and Sustainable Home designs. The associated Future Focus Home and Garden Advisory Service has visited over 100 homes to advise on a range of sustainable living themes from rain-water tanks to drought tolerant plants.



Upcoming...

See www.ryde.nsw.gov.au/catchmentconnections or call 9952 8222 for updates on Guided Walks, Outreach Community and Office Workshops and other Catchment Connections initiatives in your local area.