

PROJECT *Snapshots*

Cumberland High School and Tara Anglican School for Girls helping swim toward 2005



Cumberland High School (above) and Tara Anglican Girls (below) at the Lake Parramatta Open Day'



A big thanks to the fantastic volunteers from Cumberland High School and Tara Anglican School for Girls who came along to the Lake Parramatta Open Day on March 9th to demonstrate Streamwatch for the community. The two groups demonstrated how to test the quality of water and conduct water bug surveys. They certainly added a great deal of interest to the day, with their stalls always swamped with people.

Macarthur Girls High School go back to Little Coogee



On Saturday 5th April the Upper Parramatta River Catchment Trust participated in the "Back to Little Coogee Beach" day at Parramatta Park. With help from Macarthur Girls High the Trust ran water quality tours down to the river. The Streamwatch teams from the school did a great job in educating the community about local water quality issues

Community Business Awards

For the first year the Trust is a proud sponsor of the Environment Category in the Community Business Awards run through the Cumberland Newspaper Group. The Hills Shire Times is now calling for nominations from businesses in the Baulkham Hills area. If you know of a business that has good environmental practices, please encourage them to enter. For more information, please contact the Trust or cut out a coupon in the Hills Shire Times.

Private Certifiers Course

On-site Stormwater Detention (OSD) is the primary method used in this catchment to ensure that new developments do not worsen existing flooding problems. Since the policy was adopted by the Trust and four councils in 1991 it has been applied by councils consistently across the catchment.



James Henderson, the Trust's Stormwater Inspector, showing a local resident features of on-site stormwater detention

In recent years changes to the Environmental Planning and Assessment Act 1979 have allowed private certifiers to approve Construction Certificates (formerly Building

Applications). Only council staff could do this previously. In order that certifiers are aware of the implications and importance of OSD, the Trust will conduct a seminar for private certifiers in early May. Attendance is free but places are limited

New Minister for Trust

Following major portfolio changes announced by the NSW Premier, Bob Carr, after the March State Election, the Hon Craig Knowles MP has been given responsibility for the Trust.

Mr Knowles heads a 'super ministry' as Minister for Infrastructure and Planning, and Minister for Natural Resources. His ministry includes the new Department of Sustainable Natural Resources, the new Department of Urban and Transport Planning, the Hunter Catchment Management Trust and the Upper Parramatta River Catchment Trust. Ms Jennifer Westacott has been appointed Director General of both departments.

The Trust's former Minister, the Hon John Aquilina MP, is to become the Speaker of the Legislative Assembly. The Trust thanks Mr Aquilina for his strong interest and support whilst he was our Minister.

Following in their sisters footsteps

Tara Junior School at North Parramatta is another new member to the Streamwatch family. In the footsteps of their older sister school, Tara Junior will become regular water quality monitors.

The Year 3 class, lead by their teacher Ms Vicki Bredin will test sites around the school, in neighbouring streams and community ponds, to better understand water quality issues within the catchment.

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Loyalty Road Flood Basin



The Basin is formed by a 30 metre high by 110 metre long concrete wall and associated structures, including a large culvert through the base of the wall that carries dry weather flow and allows bushwalkers to pass beneath the wall. James Henderson (insert) the Trust's Stormwater Inspector undertakes regular inspections of the Basin to ensure that there are no changes in the structure which might affect its flood mitigation performance or safety

In 1995 the Trust began construction of the Loyalty Road flood-retarding basin in Excelsior Reserve at North Rocks. With funding assistance from all three levels of government the 30 meter high basin was designed to safely control the biggest flood achievable in the Darling Mills Creek. It is the largest flood-retarding basin in New South Wales.

The basin was completed in 1996 making over 300 properties downstream in North Rocks, Northmead, North Parramatta, the Parramatta central business district and parts of Rosehill flood free or protected from above floor flooding in a 100 year flood.

The Basin works by temporarily impounding water in the valley upstream during major storm events when flows in the creek exceed the capacity of the culvert in the base of the wall. This reduces the peak flow and hence the peak flood levels downstream.

The Trust also monitors and maintains the basin wall and its environs. Most of the maintenance is done by workers from the Metropolitan

Periodic Detention Centre at Silverwater Gaol. Regular monitoring inspections are carried out by the Trusts Stormwater Inspector. Professional contractors have been employed since 1996 to remove weeds and plant native trees and shrubs in the reserve for 2 kilometres upstream of the wall at a cost to date of some \$500,000. Currently Hills Bushcare Pty Ltd, a local firm, holds this contract.

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Fertile plains or polluted waters? Snapshot of the Catchment's water quality

The Trust has been monitoring water quality in the catchment for the past 13 years and recently has commenced water testing during major storm events. It is during these storm events the majority of pollutants are washed into the creek system.

The data has revealed that:

- 30 large truckloads of dirt (325 tonnes),
- enough nitrogen to fertilise more than 40 hectares of high yielding wheat (over 3 tonnes of nitrogen) and
- enough phosphorus to fertilise 5000 highly productive orange trees in an orchard (half a tonne of phosphorus)

have been washed out of the catchment and into the upper reaches of Sydney Harbour.

These statistics show that these 'hidden' pollutants are still a major problem affecting the local waterways. To date, the Trust has established that litter loads have reduced dramatically as a result of community education and a number of litter traps installed in the catchment. However, the concentrations of 'hidden' pollutants, such as nitrogen and phosphorus have not changed a great deal over the last 12 years.

The Trust has been working with local councils to help improve water quality, but these results show we still have a long way to go. A new water quality model is being set up

to look at the improvements of the 20-year Stormwater Management Plan, and focusing on the most important actions to improve water quality in the short term.

Anyone in the community can help reduce the amount of pollution that flows in to the River by making sure only rain water goes down the stormwater drains, reporting mud washing off building sites to their local council and reducing the use of fertilisers on their lawns and gardens.

Trust encouraging waterwise practices

The Trust is leading efforts to promote water conservation and re-use in the Sydney region.

The Trust is focusing on a new approach, known as Water Sensitive Urban Design (WSUD), that treats stormwater as a valuable resource, rather than as a waste product. The recent drought has highlighted the importance of using our precious water resources more efficiently.

The Trust helped obtain grants from the NSW Stormwater Trust in partnership with Sydney Water and councils throughout Sydney, for two WSUD projects that will profoundly change the way Sydneysiders use their water.

The Sydney WSUD Capacity Building program aims to provide local council staff with the skills, knowledge and confidence to encourage WSUD. It has held three successful seminars for council staff and others on design, construction and costing aspects of WSUD,



Private rainwater tanks, like this, are used as part of the Water Sensitive Urban Design process

with a further seminar on planning uses scheduled for June. Over half the councils in Sydney have entered the Sustainable Water Challenge - a friendly 'learning by doing' competition in which council teams will design practical WSUD developments on a real site. As well model WSUD plans are being prepared by many Sydney Councils.

The WSUD Demonstration Sites in Western Sydney project aims to contrast and showcase five WSUD sites in the West. These will range from the large 3000-lot Second Ponds Creek subdivision at Schofields to an aged housing facility at Seven Hills. Most of the project sites should be completed by the end of 2003. Rainwater tanks, innovative natural drainage systems and landscaped water quality filters are some of the many features being used. The project is also preparing a comprehensive set of technical specifications for WSUD project that all local councils and adopt and use. Site tours and information sessions for council and interested members of the public will be completed as the demonstration sites near completion.

Further work is being undertaken to include more project sites. Over the next 3 years, commercial and industrial WSUD developments will be added to the collection as well as further information dissemination to the wider community.

For further information, please contact Peter Morison, Environmental Programs Officer, at the Trust.



Dr Stephen Lees presenting the Streamwatch kit to the NorthWest Disability Service

NorthWest Disability Service in a Streamwatch first

Streamwatch in the Upper Parramatta River Catchment has taken an exciting new step forward with the NorthWest Disability Service joining. They are the first Streamwatch Group in Sydney for young people with disabilities.

In a ceremony on March 6th Dr Stephen Lees, the Trust's Executive Officer, presented the Service with a Community Testing Kit. The group will regularly test Quarry Branch Creek at Baulkham Hills as an extension to their environmental program.

If you would like further information about joining Streamwatch, contact the Trusts Streamwatch Coordinator, Lee Lau, on 9891 4633.

Outstanding flood problem area studies

In August 2002, five consulting firms were invited by the Trust to undertake studies of the 27 outstanding flood problem areas in the catchment. One study each in Holroyd and Parramatta and three studies in the Blacktown local government area have been completed. Three studies in Baulkham Hills Shire are well underway and another two have commenced in Holroyd.

Most of the flood problem information comes from storms in the late 1980s. The studies are done in stages so that if it becomes obvious that there is no cost effective solution to a problem or if the problem is only minor, then the study can be cut short to avoid wasting resources. As the studies are completed, solutions are identified and ranked. The Trust, working with the councils will solve these problems as funds become available.

One of the Blacktown studies recommended a culvert upgrade at the Michigan Road crossing of Grantham Creek in Seven Hills to relieve flooding of up to 30 residential properties. Blacktown City Council has applied for a Government flood grant to help pay for the project. The Trust has agreed to match Council's contribution towards this project. If the grant application is successful works could commence late this year.

For more information about outstanding flood problems please contact John Carse the Operations Engineer at the Trust on 9891 4633.

New Trust Chairman takes over



Mr Bob Junor has been appointed as Chairman of the Upper Parramatta River Catchment Trust. He replaces Mr George Whitehouse who died in early January.

Mr Junor chaired his first Trust meeting at the offices of Parramatta City Council on 21 March 2003.

Bob Junor grew up in Blacktown and attended Parramatta High School. After gaining a diploma from the Hawkesbury Agricultural College has joined the NSW Soil Conservation Service. He spent the early years of his career at Parramatta working landholders in the Hawkesbury-Nepean catchment before a series of postings to various regional offices. He returned to Sydney in 1981 becoming, in turn, Chief Soil Conservationist, Deputy Commissioner and Commissioner. Since his retirement from the public service Bob has consulted extensively in the fields of natural resources management, vegetation, flooding and salinity. He has also headed or been a member of many high-level committees, councils and working parties, including chairman of Greening Australia NSW. He is a member of the Board of the NSW Environment Protection Authority since its commencement in 1992.

At his first Trust meeting Bob Junor expressed delight at being appointed to the Trust and paid tribute to his predecessor as Chairman. He acknowledged the achievements of present and past Trust members and outlined some key challenges and opportunities facing the Trust.

Bob and his wife Robyn live in the catchment at West Pennant Hills. They have 3 children and 8 grand children. Bob's recreational interests are tennis, bushwalking and painting.



During rain events the Parramatta River turns a brown colour as it is laden with suspended sediment



Garth Graham is a surveyor employed by Baulkham Hills Shire Council to collect GPS data on their drainage system for the flood studies