

March 2012 in our Catchment

What a month! Was it ever going to stop raining? And when the water went away, the world had changed again. As Barry Starr noted in the article about the dramatic changes in the Tidbinbilla, the water spreads out and works on the banks until it meets resistance. After being soaked for months the banks were like butter this time! Do keep a careful eye on how your bank has change. Let us know ... perhaps it is a while since you did some photo-points ... and find a safe way down to your sampling spot.

Please be careful when you are entering your results:

- Even if your turbidity tube measures down to 9, please enter <10 for all reading below 10 NTU.
- With nitrate sticks, please enter the lower number, not the range of numbers.
- If you have a *Visocolor* Dissolved Oxygen Kit, please enter the **higher** number in the range...this goes for some phosphate kits also. Just the higher number...NOT the range. We do have more precise *La Motte* DO kits in the office, if you would like one.
- And, if you have a battery powered thermometer, check if it is still working. If it is dead, come in and get a plain old glass one.

Your Results

There were plenty of elevated readings for phosphate, especially along the Molonglo River as you would expect following a flood that did more than its fair share of bank excavation. While all the rain had a dilution effect on mineral content in the Carwoola creeks, there were some quite high Electrical Conductivity readings at Burbong Bridge on the Molonglo, in Burra Creek and at Narrabundah, Telopea Park and Norgrove Park. The South Canberra ones may be local flushing of urban concentrations of minerals. Dissolved Oxygen, even with the high flow, is still at low levels in the bottom of Sullivans Creek. And there are blanket weed outbreaks in a couple of very sunny sites with generally higher nutrients.

***Juncus usitatus*, *Persicaria lapathifolia* marginal emergent aquatic sub-community.**

While this is not quite a rare community, in a year like this it hasn't really had a chance to go through its cycle. Most waterways with sand bars or strands will develop this community, so it is not rare but it may be vulnerable.



At the bank edge of the sand bar there may be tussock grasses or timber, like casuarinas or gums and wattles. The dryer edge is often rich in species; forget-me-nots and veronicas and escaped clover and the ubiquitous drain sedge, but also some natives including rarities like *Samolus valendrii*. The middle zone is dominated by *Juncus* species, usually *J. usitatus*, but some taller sedges like *Schoenoplectus validus* (River rush) or *Bolboschoenus* species may be scattered through. In older, long established communities river reed (*Phragmites australis*) may be quietly taking over, and will eventually replace this sub-community.

In the water edge the tall knotweeds flourish. The common one is *Persicaria lapathifolia*, with quite thick stems, red striped knots, and heads of dangling pink flowers. They grow back each year from buried runners, appear in early summer all bright with lime-green dagger leaves, flower in February and stand dead and rusty from the first frost until the spring freshes sweep last year's stems away.



The biggest threat to this sub-community comes from invasive plants, especially Bathurst Burr, Fleabane and Soapwort. While the first two make plenty of seed they are annuals. *Saponaria officinale* or Soapwort is a perennial and a pest! It will happily take over a sandbar or turn the whole sandy bank a rich green, excluding everything including young trees and shrubs.

Look out for this sub-community, and give it a hand with a little weeding! It is well worth it.

Calendar

QAQC Saturday 21st April 2:00pm on Lions Youth Haven, Kambah

Sample Time Weekend, 21st/22nd April

More! Check the MCG website regularly for all kinds of activities in your area.

We should have a new Upper Murrumbidgee Waterwatch Facilitator by the end of May. You will all be sad to hear that Tanya Rucosky returned to the United States for family reasons rather suddenly earlier this year. Her position will be advertised this week, in case you know someone with energy and enthusiasm and a deep commitment to healthy catchments.

There will be a circular about the QA/QC sent round shortly.

Stephen Skinner

Waterwatch Coordinator, Molonglo Catchment Group