

April 2012 in Our Catchment



As one of the weather scientists was remarking the other day rainfall is an extremely hard thing to measure, fickle, patchy and inconsistent. My perception has been that April has been quite wet, but a quick scan through the BOM records and the reality is yes and no! So I hope your site wasn't quite as flood modified as mine!

That said, the mornings have been crisp and it has been a very good month for fungi! Here are a couple of pine mushrooms I found, and ate, on Anzac Day. Pine mushrooms are rather distinctive; I don't recommend you go eating wild mushrooms unless you are very sure that you know what they are.

A big cheer for all the people who valiantly came down to Lions Youth Haven for the QA/QC, it was a pleasure to see you all.

Your Findings

The pH in Banksia St wetland was quite alkaline this time. Electrical conductivity was well within reference in most places, but high as usual in two of the Carwoola area creeks and in Yarralumla Ck. Oxygen saturation remains very low in the lowest parts of Sullivans Ck. The high phosphate in Jerrabomberra Ck at Royalla may have something to do with new building work, but the elevated nitrates in the Queanbeyan from the dam to the cemetery are hard to explain. The reeds are once again taking over at Briars Sharrow Road. The Teloepa Drain has a rich beard of blanket weed, while Lake Burley Griffin has cyanobacteria visible close in to Regatta Point, and there is a skin of Euglena on Sullivans Creek near the Union building.

Recent Discussions of the importance of Flow in aquatic ecosystems

Not very long back I listened with considerable interest to the leaders of three research teams discuss their findings about water in our (specifically the Murray darling) landscape. The main topic of discussion was flow, and more specifically low or no flow!

I suppose it was no news to be told that with the depletion of water in regulated wetlands between 1999 and 2009 diversity and overall numbers of water birds had declined in line with water loss, and that breeding birds had likewise declined. The situation in unregulated wetlands may be the same, but is more variable. There was more variety in the kinds of birds, but they were not breeding much either.

What was important was that at last we had some well analysed data on the interaction of flow and both macroinvertebrates and riparian vegetation. The most significant impacts came with long periods of very low or no flow. Ephemeral streams have very different faunas to permanent streams. There was a close correlation between poor water quality and decreasing flows. Refuges are very important to the macroinvertebrates not just the fish. The damage appears to be done when flows are decreasing rather than increasing.

The vegetation picture is very much the same. While each of the rivers responded individually there were some general patterns that emerged. The bank vegetation needs ups and downs in flow especially in the dry season. The in-stream vegetation needs the bottom stirred up from time to time, and does best when the time between disturbances is short.

The implications of this are plain for us with so much of our water coming from controlled water bodies. If there are infrequent releases from Captains Flat dam or Googong then life in the Molonglo and the Queanbeyan below can quickly get stressed! And below Scrivener things are just as dire! Dynamic flow regimes give rivers life.

To read more about these matters, and much more go to the National Water Commission website at www.nwc.gov.au .

Calendar

The next Waterwatch sampling weekend is Saturday and Sunday the 19th and 20th May.

Saturday 19th May 3:30 pm Platypus Walk Queanbeyan Weir

If you would like to come to this walk, meet Stephen Skinner and Luke Johnston on Collett St at the bottom of Rutledge St and we will proceed from there. Wear walking shoes, and bring suitable clothing and a camera or binoculars. The circuit will probably take about 1 ½ hours.

Stephen Skinner

Waterwatch Coordinator, Molonglo Catchment Group

The operation of the Molonglo Catchment Group and Waterwatch program is assisted by the Australian Government's Caring for our Country and the ACT Government. Some administrative assistance is provided by the Australian Government's GVESHO program.