

May 2013 in our Catchment

It did rain a bit, a little bit, and there was snow on Mt Franklin and Mt Ginini. That said, there is a growing number of spots where people have no water to report on! If we have another cold, dry winter I think we will be then well into a drought in anyone's estimation.

Your Results

Parameter	Where it comes from	How it affects things	Local events
pH	The country rock is largely responsible for water pH; acid over granite or sandstone, alkaline over basalt or limestone	pH helps keep the main minerals dissolved in the stream or pond; too acid, too much sulfur; too alkaline too much phosphorous	Teloepa Creek is once again under stress, with a pH above 9!
Electrical Conductivity	The ground water and soil determine the EC	Limey soils are naturally more conductive, more dissolved CO ₂ ; waterlogging also increases mineral content.	Woolshed Creek where they are making the new road is off scale, Stony Creek and Eddison Pond are up to more than 1200 $\mu\text{S}\cdot\text{cm}^{-1}$ and at least 15 sites are high.
Turbidity	This is how much light can penetrate the water.	Silt and dissolved humus change turbidity	The Queanbeyan at the border had a turbidity of 80 NTU while they were clearing the gravel bar at Buttles Ck.
Phosphorus	Phosphorus is found in small amounts in disturbed soil; the other source is fertilizer.	Every cell needs P to carry its Oxygen: excess leads to rapid growth of planktonic algae.	Toad Hall pond and Sullivan's Ck below the Union are rich in P and so is Reedy Ck!
Ferals	Introduced fish and weeds	Gambusia and European Carp outcompete the locals	The willows in Tinderry Creek are being dealt with: well done, Sandy!

Six sites were checked but found to be dry this month.

Monitoring to Action

Every now and then Waterwatching is brought under scrutiny by various authorities and asked to justify its existence. This always feels uncomfortable, considering that it is an organisation of volunteers (as you all well know) and that it backs up and backfills water data for local and state government at a tiny cost to the public purse.

In the last couple of weeks a number of things have happened that provide much needed boosting support for both us staffers and you volunteers.

We put your data up for review, going back to 2003, and the University of Canberra told us that all readings (even the dissolved Oxygen) compared favourably with those collected for the ACT authorities by the technicians. Well done all of you!

The next two stories are about actions associated with monitoring. The first is about the fortuitous engagement with agencies, the second demonstrates that agitation by local ParkCare groups and Waterwatchers can lead to riparian restoration actions.

On Monday 20th, I went down to the Morisset Street low level bridge with one of our indigenous work experience students to show him water testing. We arrived at the same time as the blokes who had brought the digger in to dredge out the mouth of Buttles Creek. This action had been in the planning for a while, so I'd completely forgotten it. The blokes said they were going to dig out the logs and restore the swimming hole. Natasha Abbot arrived from the Queanbeyan City Council and explained that what was actually happening was the dredging of the bar across the mouth of Buttles Creek to restore some complexity to the river downstream of the weir and before the viaduct. It was hoped to save the bar near the low level bridge (with its rush and knotweed community) and the riffle with its *Bolboschoenus* fringes, and the logs and get a hole for yellow belly to breed in. The student saw Waterwatch interact with the council officers and get support from the local Landcare group. Natasha wanted confirmation



of the vegetation communities, and jokingly suggested we go and measure down near Marco Polo Creek to see the before and after the dredging!

On Wednesday 22nd after much preparation, Haydn Burgess and I went out to the now rather changed Woolshed Creek reach below the Southwell property to save some of the native and local aquatic plants for replanting into the constructed creek when the Majura Parkway work is completed. It was Majura Valley Landcare that agitated to have as much of the creek left as it could be, and to ensure that the new creekline would have local flora. So Haydn and I got eight boxes of *Schoenoplectus validus* River Sedge, five boxes of *Eleocharis acuta* Spike Rush, and five hard won boxes of *Phragmites australis* Reeds and placed them into one of the run-off ponds to propagate them and make them ready to plant out in the spring.

Sedges ahoy: the collection. Photo: Haydn Burgess, Greening Australia.

Now that really is monitoring to action ... our Waterwatcher at WOO060 got the data to back up Ette Southwell's description of how good the Creek could be, which gave us (MCG) the clout to get the developers to let us save the plants. And so Greening Australia and us did it!

Calendar

15 th and 16 th June	Waterwatch Monitoring	Your sites
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Stephen Skinner

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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.