

November 2014 in our Catchment.

We welcome 2 new Waterwatchers this month, one who'll be testing the upper Molonglo River above Captains Flat, and one doing 2 sites on the Molonglo River just above Lake Burley Griffin, picking them up from another Waterwatcher who retired to focus on full time uni. It's great to have some new Waterwatchers on board! If you know of anyone you think might like to join us, do please ask them and let me know.

Last month, what really stood out was generally lower Dissolved Oxygen (DO) in many creeks and rivers (not just the usual ones). I'm talking about % saturation of DO here, because DO mg/L is affected by temperature, dropping as the water temperature rises. As you've probably seen when you've recorded your DO in mg/L in the new Waterwatch database, the DO % saturation is automatically calculated if there is also a water temperature recorded.

The general drop in DO across the catchment can have several causes. With little or no rainfall and high evaporation, flows are reduced. When flows are reduced and evaporation is high, EC tends to increase and DO to decrease. As flows reduce, the proportion of running water coming from groundwater (most streams are connected to groundwater) increases, and groundwater is typically lower in DO.

Of course at some sites we only had low flows until the welcome rain on the Sunday of our Nov sampling weekend. Rain was hit and miss across the region, so I hope you got some out your way. Queanbeyan Bowling Club had only 36mm rainfall for November which soon evaporated in the warm windy weather and above average temperatures.

Throughout the catchment, water temperatures are warming up and close to the optimum for aquatic health.

The only exceptional reading in November's Waterwatch data was at O'Malley again. The EPA went out to check the site again and told us that since there was no visible evidence of the previous sewer leak, no odours, and visually the pond looked OK, they believe that the very low DO and very high phosphates (P) are an artefact of the organic matter that was deposited by the sewer leak. P is not generally removed from a system, only recycled, so algal blooms can cycle on and off all the while the P is not tightly bound to clay particles or buried in sediments on the bottom. The algal blooms use up nutrients until there are none available, then die off and their decomposition may rapidly deplete oxygen, but will also make some P available again, hence the cycle.

Finally, I have attached a Waterwatch datasheet (in Word and PDF formats) that matches the new Waterwatch database more closely. Hope to see you at Lynton Bond's "farewell" next week (invitation sent a few days ago) and I'm looking forward to meeting some of you for the first time there.

Enjoy the beautiful weather and may more rain come your way.

Download Waterwatch datasheet ([PDF](#) 123KB or [MS Word](#) 796KB)

It's a little fishy...

A fishy focus this month, with 3 different angles on fish in our freshwater systems (pun intended).



A mountain galaxias (Photo: Phil Salhqvist)

Firstly, some good news. Thankyou to our curious Waterwatcher, Phil, for this information. He saw small fish in Primrose Valley Creek and decided to investigate. He caught a fish in a bucket, then transferred it to a jar to take photos before releasing it back into the creek. He did his own research, but also sent the photos to Dan Starrs, the Upper Murrumbidgee Waterwatch scientific officer and fish researcher, and Dan confirmed what Phil thought: the fish were Mountain galaxias (*Galaxias olidus*). Phil was pretty certain about the species, but its colour didn't look quite right. Dan responded "Regarding its colour – if it was only 30mm long it is a juvenile. All the photos on the internet are of large adults which can be around 10cm long. As juveniles they are fairly transparent, as are many fish species at a small size."

How refreshing to come across an instance of native fish, instead of the more usual *Gambusia* and carp!

Speaking of carp, I want to let you know about an ABC Rural story that featured on the 666 ABC morning show last week. The ABC journalist, James Bennett, joined the Waterwatch coordinators from the region last week to look at a carp trap being trialled. You can read his article on their website at abc.net.au/news/2014-12-05/carp-herpes-hope/5939966, and also listen to the short audio piece, where you'll hear Woo O'Reilly of Upper Murrumbidgee Waterwatch (that Molonglo are a part of), and Antia Brademann of Cooma Waterwatch and Upper Murrumbidgee Demonstration Reach.

I also want to mention the new Feral Fish Scan website again. Some of you were introduced to the website at our quality assessment/quality control (QA/QC) event in late October. From the Feral Fish Scan website:



"Carp are a major problem in the upper Murrumbidgee catchment. Knowing more about carp in our catchment is really important! They are one of our worst aquatic pests and can breed up very quickly. Mapping carp hotspots and where they breed is important for understanding their behaviour and identifying opportunities for control. Carp are often thought to require large and warm wetlands to breed, but we have very few of those types of wetlands, and we still have lots of carp! We need your help to fill in the pieces of this Carp Puzzle. ..."

You can help by recording sightings of pest fish in the FeralFishScan community mapping facility throughout our catchment area. This data will then be available for everyone to see and use."

Please visit www.feralscan.org.au/feralfishscan.

One of our fabulous Waterwatchers took the opportunity at the QA/QC to record a congregation of 100's of carp he saw wallowing in the Molonglo River near Dairy [Flat] Rd. Antia Brademann was really pleased to get that information and to see the photos he took.

But it's not all doom and gloom of course. Apart from Phil's recording of mountain galaxias in Primrose Valley Creek, the dominant species in lower Sullivans Creek is the native Western carp gudgeon (*Hypseleotris klunzinger*), as Dan Starrs showed me when we sampled waterbugs there recently. There aren't many places where carp don't dominate in the rivers and bigger creeks around here, but that is one of them.

Calendar

Date	Event	Location
6 th January	Revegetation Activity, Jerrabomberra Wetland	9:00am at the Wetlands Office, Dairy Flat Rd.
17 th & 18 th January	Sampling time	Your site

Deb Kellock, [Molonglo Catchment Officer](#)