

Your Results

After a very cold Waterwatch sampling weekend in April, it is impressive how many people were out there sampling! The welcome rain in April made a big difference to water quality results. There were no exceptional results for April, which is a very good thing following the various pollution events that took place earlier in the year. It is great to see so many “normal” measurements, though of course normal for Kelly’s Swamp in Jerrabomberra Wetlands is a far cry from normal for the upper Queanbeyan River. Following the rain there were good flows in most creeks and rivers, and many sites showed signs of high flows earlier in the month.

We had widespread rain over April with reports of 120mm or more in some places in our catchment. Canberra Airport recorded 92mm, so I find it hard to believe that Queanbeyan Bowling Club (the standard rainfall site for Queanbeyan since 1870!) recorded only 28mm. Any theories as to why Queanbeyan’s recorded rainfall at the bowling club is so low for April? And any advances on 28mm rainfall for Queanbeyan for April?

The great Waterwatch QA/QC event for autumn 2015

Sunday 31 May from 10am – 1pm including a light lunch

Kirby Building, Outward Bound, Naas Rd, Tharwa (see <https://goo.gl/tLBh6Z> for map)

QA/QC (Quality Assessment/Quality Control) is an important part of Waterwatch, helping to ensure our data is reliable and robust. And this is why we go to the effort of testing, after all, so the data we collect can be used for all sorts of purposes.

So please do come if you can, along with your water testing kits and calibration solutions. We are transitioning from using pH probes to pH strips which we hope will be more reliable, so come and get your pH strips, test the mystery solutions, and stay for lunch and a catch up after the QA/QC.

To get there: head south towards Tuggeranong then Tharwa. Head over Tharwa Bridge, turning left past Tharwa (don’t turn up the hill into Tidbinbilla Rd and the main part of Tharwa) and continue on Naas Rd past Cuppacumbalong to Outward Bound - it is 1.1km from Tharwa Bridge to Outward Bound.

Alternatively, if coming from the south you could turn off the Monaro Highway onto Smiths Rd, continue to the end of Smiths Rd at Naas Rd, then turn right and find Outward Bound on your right – it is 800m along Naas Rd to Outward Bound. Please RSVP to me, telling me if you are staying for lunch too. That way we’ll have enough tables and chairs, and enough lunch.

Bug Blitz and Riparian Assessments

I am racing against time to get Water Bug surveys completed for the bottom site in each reach before the end of autumn or the water is too cold. Water Bug surveys are fun and interesting, and improving my knowledge of the catchment, but they take some time to do. I am also doing Riparian Assessments (RARCs) at as many sites as possible before the end of June. If you would like to join me please let me know and we’ll organise a date.

We have already visited sites in the upper Queanbeyan, Burra, and upper Molonglo catchments, as well as various urban sites.

2014-2015 CHIP Report

All data that can be included in the Catchment Health Indicator Program report for the next year has to be added to our database by the end of June. If you need me to enter data, just let me know. This year we will also include RARC data.

The CHIP can be viewed at:

[www.act.waterwatch.org.au/Files/CHIP2013_14%20Report%2004FEB2015_FINAL%20\(low%20res\).pdf](http://www.act.waterwatch.org.au/Files/CHIP2013_14%20Report%2004FEB2015_FINAL%20(low%20res).pdf)

Beautiful Bugs

Water bugs (benthic macroinvertebrates¹) can tell us a lot about water quality and habitat. Many terrestrial insects have an aquatic nymph stage, other water bugs are aquatic as adults as well. They have a preference for a particular type of

¹ Benthic because they live on the stream bed or attached to plants or floating wood. Macroinvertebrates because they are animals that lack backbones and are visible to the unaided eye. Smaller benthic animals are known as plankton.

habitat and different sensitivities to pollution. For most water bugs, clean water is not enough, but for some even polluted water doesn't matter.

Stoneflies are the nymphs of insects that are often found resting on stones! Stonefly nymphs live under stones in fast-flowing streams cooler than 25 degrees – this habitat is known as riffle. They are often confused with Mayfly nymphs, but have long antennae and 2 tails instead of the Mayfly's 3 tails, and they are up to 50mm long though generally more like 20mm. Stoneflies are very sensitive to pollution so when we do bug surveys they are given a pollution rating of 10, the highest rating. They are also very sensitive to low oxygen levels so they prefer cool water which carries more dissolved oxygen. Stoneflies are in the Order Plecoptera. You can see pictures and read more about them here www.mdfrc.org.au/bugguide/display.asp?class=17&subclass=&order=4&Couplet=0&Type=3 Woo O'Reilly says they have a characteristic "shimmying" movement that catches her eye.

Other News & Events

Watch Out for Tagged Carp

31 tagged carp have been released into the upper Murrumbidgee River, upstream of the ACT. The tagged carp are marked with a long yellow tag near their dorsal fin. These carp are implanted with electronic tags so their movements can be tracked as they move along the river system.

If caught, please RELEASE tagged fish and report details to the number on the tag. A reward will be given for making a report. Please take photos if possible.

Carp movement is being studied as part of the Upper Murrumbidgee Demonstration Reach Carp Research project which also includes a trial carp trapping program. This project is a partnership between Bush Heritage Australia, NSW DPI (Fisheries), the Capital Region Fishing Alliance and the NSW Recreational Fishing Trust. For information about the UMDR Carp Research project go to www.upperbidgeereach.org.au or contact the UMDR Facilitator on 0429 778 633. Please share this information with anyone you know who fishes for carp in the Murrumbidgee region.

Feral Fish Scan Website Has an Updated URL

Feral Fish Scan has gone live nationally, which means anyone, anywhere in Australia, can enter pest fish sightings. This is great. We do maintain the upper Murrumbidgee webpage at a new URL - it can now be found at www.feralfishscan.org.au/uppermurrumbidgee. Please add any carp, gambusia and oriental weatherloach sightings you might see during your Waterwatching in the feral fish scan website. This is important catchment data that will help us map where feral fish hotspots are in our catchment.

New Images and Thoughts

There are some lovely new images on Ben Gawn's blog. Ben is the Director of the Murray-Darling Freshwater Research Centre and his blog is at <http://euastacus.tumblr.com/>

The latest blog post from Paul Humphries, a river ecologist at Charles Sturt Uni, talks about water in mythology. There are also some very interesting earlier blog posts such as 'Stuffed Murray cod in pubs', well worth investigating. See them at <https://paulhumphriesriverecology.wordpress.com/>

Thanks for getting out and collecting our Waterwatch data. It has been cold but there is something very beautiful about a frosty morning in these parts.

Deb Kellock
Waterwatch Coordinator, Molonglo Catchment Group
waterwatch@molonglocatchment.org.au
(02) 6299 2119