

Namoi Groundwater Sampling In July

A program for Namoi Valley Groundwater users to get involved in testing their bore water quality

Why test groundwater quality in the Namoi Catchment?

Groundwater quality has been found to be a significant issue in some parts of the Namoi Catchment. Operating a groundwater bore without monitoring groundwater level and groundwater quality is "like running a car without a fuel gauge or a dip stick".

What water quality parameters are being tested?

Salinity (electrical conductivity, EC), pH, chloride, sodium, magnesium, calcium, potassium, sulphate and bicarbonate alkalinity. These results will be used to calculate indicators of importance to irrigation usage (total dissolved salts, sodium adsorption ratio and hardness).

Who will take the samples?

Growers and landholders that use groundwater on their property for stock or irrigation purposes. Any growers and landholders in the Namoi catchment can participate in the sampling.

How do I get involved?

Pick up a groundwater sample bottle pack from Namoi Water, NSW Farmers, Cotton CRC offices or Namoi CMA offices (Tamworth, Gunnedah, Narrabri, Walgett) from late June.

This pack will have further instructions about sampling and information that needs to be recorded. If you have access to a water quality meter, measure EC and temperature should be measured immediately when the groundwater flows from the bore. Record this information on the form.

Completed samples can be mailed to UNSW WRL using the mailing pack supplied.

Why collect samples in July?

Groundwater systems in the Namoi are generally most stable in July, thus giving the most accurate readings. This will also coincide with a round of sampling being undertaken by the research team.

Can I use any sample bottle?

No. For quality assurance purposes, registered laboratories do not accept recycled bottles.

Why pump before sampling?

Pumping for at least 15 minutes prior to sampling is essential to purge stagnant water from the bore casing.

Where can I get a water quality meter?

The Namoi CMA has a few EC meters for loan (contact George Truman on 6742-9516).

A basic meter can be purchased for about \$150. Further information on where and what to purchase is available on the "DIY Groundwater Monitoring" factsheet on the Cotton CRC website.

How much will it cost?

FREE analysis is being offered for the first 200 samples received provided that these are:

- collected between 1st and 30th July, 2009
- accompanied by a completed sample information form
- one sample per property (preferably from the most frequently used bore)

The Cotton CRC and Namoi CMA are funding the once-off cost of about \$150 per sample. If you would like more than one sample to be analysed from your property or if your sample is not amongst the first 200 received then these can be analysed at a cost of \$100.

What happens to the testing results?

Sample results will be posted to participants in September, with a 2 page report providing a comment on the suitability of groundwater for irrigation purposes.

Results will be treated anonymously. The data will be grouped and mapped for each aquifer and reported in aggregated form. These maps will be provided to participants and will also be available via the Cotton CRC and Namoi CMA websites.

Where do I find out about more comprehensive water quality testing?

This project will be testing for major ions. It will not be testing for microbiological, nutrients, or other trace constituents. Comprehensive tests are recommended for bores used for other purposes such as drinking water, if there is a risk of nearby contaminants, or if there is potential for mining impacts.

Suggested contacts: Tamworth Environmental Laboratory ph. 6767 5119, DPI Wollongbar Farm Water Testing ph. 66261103 or Australian Lab Services ph. 8784 8555

Further information:

www.wrl.unsw.edu.au/site/projects

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