

Annual groundwater salinity sampling

Monitoring groundwater resources regularly is important for tracking the resource condition over time.

Water licence holders play an important role in helping to monitor groundwater by collecting samples from the wells or bores on their property. These samples are analysed by the Department for Environment and Water and the results will complement other monitoring activities undertaken in prescribed water resource areas.

Information gained from sampling is used to analyse salinity and total dissolved solids (TDS), which helps with monitoring water quality trends over time.

Samples are usually requested near the end of the irrigation season as this is when the salinity levels are likely to be highest. For most irrigators this is also the most convenient time as a sample can be taken easily after an irrigation cycle, rather than having to start and purge the well/bore to clear out stale water and get a representative sample from the aquifer.



If you choose to test your groundwater source independently using a scientific service provider, please note that you must provide permission to the Department for Environment and Water's Groundwater Science team to allow direct access to results from the company engaged to undertake sample analysis. Permissions may be granted on an ongoing or temporary basis. Please email dewgroundwater@sa.gov.au (<mailto:dewgroundwater@sa.gov.au>) for more information.

Stock and domestic wells are not required to be sampled however participation is welcomed provided samples are taken from operational wells using the same sampling method.

By following the sampling procedure below, samples taken from each well will be representative of the local groundwater.

Results

Results are emailed directly to participants and can also be accessed at [waterconnect.sa.gov.au](https://www.waterconnect.sa.gov.au/Systems/GD/Pages/default.aspx#Unit%20Number) (<https://www.waterconnect.sa.gov.au/Systems/GD/Pages/default.aspx#Unit%20Number>).

Information gained from results will be summarised in the annual water use report for the Prescribed Areas and helps us understand how the resource is changing over time and support its sustainable management.

Procedure

Please follow these steps when taking a water sample from each licensed well:

1. Use one sample bottle per operational well. Refer to listed wells on your water licence. We provide sample bottles, and will advise you by letter of the collection and drop-off location(s).
2. Rinse all equipment, including the sample bottle, with the water to be tested before collecting the final sample. It is preferable to rinse the sample bottle three times.
3. Purge or bail the bore (or well) according to the process in the bore purging factsheet (link below). It is important to allow time for groundwater to replenish the bore before collecting a sample. **The easiest way to do this is to take a sample at the end of an irrigation cycle or after purging the bore for at least 20 minutes.**
4. Carefully label all sampling containers with the following information:
 - sampling date
 - name of licence holder
 - email address
 - phone number
 - water license number
 - unit/well or bore number (e.g. 6529-119)
 - meter serial number can be noted in "Remarks"
 - notes on any problems encountered during sampling, or if this is taken from a source other than the well/bore.
5. Return each sample to the advised drop-off location by the date outlined in the letter.

Your ongoing participation is greatly appreciated. If you have any questions in relation to well/bore sampling methods or the location of your well/bore, please contact us on 8532 9100 or mrlandscape.water@sa.gov.au (<mailto:mrlandscape.water@sa.gov.au>)

YouTube: (https://www.youtube.com/embed/np1y6_-A3mY?rel=0)

More information

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