



Catchment Group Water Testing Overview

A quick guide on establishing water testing for catchment groups

Water quality testing is a common starting point and of interest for many catchment groups. It helps gather a baseline set of data and establish a picture of what is occuring in your catchment. Water testing along with observations of how stocking and grazing practices, rainfall, and other external factors impact on the health of your waterway are all good reasons to monitor waterways with your group. Some land owners have been doing this in their own streams for a while and others are new to water quality testing. Some catchments have <u>SOE</u> (state of the environnment) sites, which are monitored by regional council. Running your own testing allows you the flexibility and control to test what, where and when you want. Having someone help you to start out is invaluable for understanding the 'how to' and for insight from the experiences of others. OCC can help begin this process with your group.

BEFORE TESTING DAY

- 1. With your group, establish what it is you want to measure. Different types and scales of testing are available for creeks, stock water, irrigation and drinking water.
- 2. Establish where to take samples from (using a map is handy). Confluences will give a general picture, and farm boundaries a more targeted picture. GPS sample sites and sending these through to the lab prior to taking samples mean the bottles can arrive to you pre labelled, saving time on the day. It also makes returning to the sampling site more accurate for future tests.
- 3. Establish frequency. Many groups choose to monitor quarterly and if anything of concern comes out of particular test sites, a more frequent, or targeted regime could be implemented to determine exact location or source of the concern.
- 4. Decide who in your group will be responsible for managing distribution of kits, collection of samples, packaging and connection to the courier service. You might have one person do all of this, or each landowner responsible for taking their own test. Having one person collect all the samples in one place for the courier service ensures smooth running with getting samples to the laboratory. This can be your 'depot'.
- 5. Select which laboratory you will use. There are a number available in the South Island. For some groups, the frequency of the courier service is what will determine which lab is used, as the samples need to be in the lab within 24 hours of collection. Each lab will have a suggestion of which courier works best for them. A list of laboratories is at the bottom of this document.





- **6.** Set out your testing sites, testing days, and times clearly and make sure everyone involved has this information. Names and phone numbers on this shared document are helpful too.
- 7. Arrange with the lab to send out the testing kits well before testing day so people can pick kits up from the depot. Read the instructions that come with the testing kits, as they may differ from this outline. If you've not taken samples before, get someone out to help who has experience. OCC can help get the right person to you for this. This video, put together by Craig Simpson & ORC is a great starting point. https://www.youtube.com/watch?v=08V2XasNm0E

TESTING DAY

- 8. Have space ready in your fridge and freezer for the water samples, which need chilled after collection and for the freezer pads which go in the courier box with the water samples. Freeze the freezer pads well ahead of time.
- 9. Having a sampling day recording sheet is a great way to keep a record of conditions on the day eg. Recent rain, stock grazing close-by, recording the odour and colour of water all helps with understanding and unpacking results later on.
- 10. Deploy kits and take samples, chill and package ready for the courier. Send away the same day as the courier drop off/ pick up.

AFTER TESTING DAY

- 11. Results will come to you via email as a numerical reading. To gain an understanding of what is happening in your water a series of collections need to be made over a period of time in order to build a picture of trends in the data. This can then help in determining what is occuring, building a picture of your water quality. To find out what the acceptable levels are for your catchment (of what you are measuring) according to regional water plans, you'll need to check on the regional council website. www.orc.govt.nz https://www.orc.govt.nz/plans-policies-reports/reports-and-publications/water-quality/state-of-the-environment-water-quality-reports
- 12. Collate the data you collect in a safe repository. Analysis of this data will become very useful as your group establishes what actions to take, and what effect these actions could have and in future, have had on water quality in your catchment.

WATER TESTING LABS

Eurofins	Hills Laboratories	Watercare Laboratory Services
03 343 5227	03 377 7176	03 409 0559
www.eurofins.co.nz	www.hill-labs.co.nz	www.watercarelabs.co.nz
Wigram, Christchurch	Hornby, Christchurch	Frankton, Queenstown

