

Freshwater Indicator Species: Lab Notes

Introduction/Background

This activity will place students in the position of a biologist who has been contracted by the Environment Protection Agency (EPA) to report on the quality of water samples. Students will have to identify different freshwater aquatic organisms from water samples, assign them SIGNAL scores, then draw conclusions on the quality of the different water samples.

Equipment and materials

- Microscope – compound and stereo
- Petri dishes, 1 per water sample analysed
- Cavity slides
- Flat glass slides
- Cover slips
- Droppers
- Water samples with aquatic organisms

Hazards

- Contaminated and dirty water could be harmful

Risk management

- Wash hands after activity and do not touch eyes, mouth or face
- Wear gloves during activity
- Do not eat or drink during activity

Material sources/Suppliers

- Materials are common and should be available from the school's science lab. Alternatively, please contact your laboratory equipment supplier.
- Water samples can be collected from any creek/river/stream
 - A guide to collecting suitable samples can be found here: <https://www.epa.vic.gov.au/our-work/publications/publication/2003/october/604-1>

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