Objective
There are many rivers and lakes within Victoria that suffer from poor water quality events. Examples include the Gippsland Lakes, and the Yarra River.

This project aims to understand what causes these acute poor water quality events in Victoria, and we can do to stop these events happening in the future.

Project Details
Changes in land use, land cover, weather and climate all have the potential to result in poor water quality in rivers and streams, which can have substantial negative consequences for both human communities (from a social and economic perspective) and aquatic environments. Understanding these drivers of water quality is vital for assessing current levels of risk, predicting future water quality scenarios, and implementing appropriate and timely mitigation measures.

In this project, students will draw on a Victoria-wide water quality dataset, provided by our project partner (DELWP), that combines traditional sampling, automated high-frequency sensor data, climate, and landuse/landcover data to better understand the drivers of acute poor water quality events.

Understanding these events will provide a clearer picture of threats to the ecological health of rivers and streams, and the human communities that rely on them, and will aid in targeting mitigation measures.

The student will join an existing project team of researchers from Monash University and the University of Melbourne. If this project is successful, project outcomes will be reported back to the Department of Environment Land Water and Planning of Victoria.
Prerequisites

Familiarity with data analysis software packages (e.g. R, MATLAB, Python) and GIS software is beneficial.

A keen interest in water resources research is essential.

Additional Information

NA