Objective

Agricultural activities in catchments can lead to poor water quality. In addition, faecal pollution of agricultural waterways is a problem because it increases the cost of water treatment and poses public health issues. However, most of the time there is minimal information on sources of faecal pollution. Therefore, this project aims to determine the sources of faecal pollution in agricultural catchments, through the means of catchment-scale modelling.

Project Details

For this project, Tarago Reservoir catchment will be used as a case study. It is located southeast of Melbourne, Victoria. Water from the Tarago Reservoir supplies drinking water to the Mornington Peninsula. The Tarago Reservoir catchment consists of diverse land-use types, such as horticultural and livestock farmlands, townships, and state forest.

To carry out faecal pollution-related studies, several monitoring sites were established in 2016. To date, extensive flow and water quality data from the monitoring sites have been collected. These data will be used as inputs for the catchment-scale model.

By undertaking this project, students will be able to develop a catchment-scale water quality model to identify faecal pollution sources. Accordingly, this project will be a great opportunity for students who are deeply interested in catchment-scale modelling.

Prerequisites

Basic hydrological modelling knowledge. Experience in modelling is preferred but not required.

Additional Information