

TBA

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Abstract

Bacterial water quality data have been collected regularly in Victoria since at least the early 1990s. Faecal bacteria data can not provide timely alerts to water users about potential health risk because water samples take 24 hours to analyse. For this reason EPA has begun to develop risk predictors that use meteorological forecasts and historical water quality data to estimate the risk of poor water quality one day in advance.

The risk predictor needs to be based on data of good quality. Data validation 'by eye' may still allow an unacceptable fraction of poor quality data to go undetected, and also tends to miss subtle patterns in the data that might warn of environmental change. Regular mining of data using statistical techniques can allow timely detection and followup studies of variations that could be due to either poor quality data or real environmental change.

This paper describes ongoing processes of monitoring, predictor development, data quality improvement and environmental management associated with a growing collection of environmental monitoring data.