

# PROJECT DATA SHEET *Study of bacterial populations and process operations in wastewater treatment plants*

## Client

The Lower Molonglo Water Quality Control Centre and URS

## Location

Canberra

## Year

2005

## Contact

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## The challenge

The microscopic examination of activated sludge is a valuable process necessary to ensure satisfactory performance of a wastewater treatment plant.

Floc quality, microbiological diversity and filament abundance are able to assist in evaluating settleability, stability, and influent characteristics; however, it is unable to provide information on the identity or abundance of the important bacterial populations associated with nutrient removal and settling performance.

## The solution

Ecowise Environmental is the first organisation to commercially utilise fluorescent in situ hybridisation (FISH) to more effectively examine activated sludge on a microscopic scale.

FISH enables in-situ monitoring where we are able to observe, identify and quantify the important bacterial populations associated with nutrient removal and settling performance

## The outcome

By monitoring the population abundance trends of important bacteria, we are able to correlate their occurrence with plant performance to assist in operational requirements. We provide a comprehensive report detailing the methodology, results, interpretations, possible solutions and options to our clients.

