## Surface water quality monitoring

Surface water quality monitoring provides background information for the ecological monitoring programs. Any significant variation in surface water quality over time, either due to climate or pumping, should be identifiable based on the combined field and laboratory regime.

## What we are doing

Barwon Water undertakes surface water quality monitoring at five sites in the Salt Creek catchment and six sites in the Anglesea River catchment. Sampling is conducted monthly for:

- pH
- Total dissolved solids (TDS)
- Electrical conductivity (EC)
- Dissolved oxygen (DO) (surface and bottom of water body)
- Temperature.

Seven of these sites also have more comprehensive laboratory monitoring undertaken twice a year. The water quality parameters monitored through this sampling include:

- Major cations (i.e. sodium, calcium and magnesium) and Anions (i.e. chloride and sulphate)
- Salinity (TDS and EC)
- pH

## What we have found

The water quality data collected through this sampling helps inform the ecological monitoring programs and identify any causal links to population changes that may be observed.

We also use it to analyse relationships between changes in water quality and changes in surface water levels and flows. For example, the graph below is showing the relationship between pH and flow across the catchment.