

# Waterwatch

Waterwatch is a network of trained coordinators, community groups and volunteers that bring people together to monitor, restore and protect Australia's waterways for current and future generations. The Northern Water Monitoring Program supports the Waterwatch network in Northern Tasmania through training, equipment and support.

## Northern Water Monitoring Team

34 Cameron Street, Launceston  
Postal address: PO Box 392,  
Launceston, Tas 7250

Ph 03 6331 8558; Fax 03 6331 8418

### Dorset and Flinders

Debbie Searle: 6352 6536; 0429 318 554  
Email: [dsearle@dorset.tas.gov.au](mailto:dsearle@dorset.tas.gov.au)

### Tamar Valley, Break O'Day and Northern Midlands

David Keast: 0429 318 553  
Email: [david.keast@lec.org.au](mailto:david.keast@lec.org.au)

### Meander Valley

Toni Harper: 0429 318 555  
Email: [toni.harper@lec.org.au](mailto:toni.harper@lec.org.au)

## Acknowledgements

The program exists due to the strong support it receives from many sections of the community. Special thanks to Waterwatch volunteers, participating landowners, the Water Quality and Aquatic Ecology Units of DPIW, Waterwatch Australia and Waterwatch Tasmania. Thanks also to the municipal councils in the region, especially Dorset Council which provides in-kind support. Funding for the program is provided by the Australian Government through the Natural Heritage Trust.



## Natural Heritage Trust

*Helping Communities Helping Australia*

A Commonwealth Government Initiative



Natural Resource Management  
in Northern Tasmania

# Northern Water Monitoring Program

**Working towards healthy rivers and  
catchments in Northern Tasmania**



## Who Are We?

The Northern Water Monitoring Program is a joint project of NRM North and the Launceston Environment Centre. It was established to determine the state of water resources in the region and to monitor and evaluate the results of on-ground natural resource management works.

### OUR VISION

Healthy waterways and catchments.

### OUR OBJECTIVE

To monitor and assess water quality and stream condition throughout Northern Tasmania and support NRM objectives and community groups.

### OUR AIMS

Establish a strategic network of monitoring sites that complements the monitoring undertaken by DPIW and other agencies;

Collection of data that contributes to NRM North objectives and targets;

Production of an annual *State of the Region: Water Quality and Stream Condition in Northern Tasmania* report;

Support of the local Waterwatch network through equipment, training and data processing.

## What Do We Monitor?

### Water Quality

Monthly sampling at 52 sites for:

- Temperature
- Acidity (pH)
- Salinity (electrical conductivity)
- Turbidity

Periodic sampling at various sites for Nitrate, Total Nitrogen, Phosphate.

### River Biological Health

Rapid Biological Assessment is carried out during Spring and Autumn at 29 sites. This includes:

- Stream bank habitat assessment;
- Aquatic macro-invertebrate (water bugs) sampling using the AUSRIVAS model;
- Analysis of the results using the AUSRIVAS predictive model.



## What do the tests tell us?

**Electrical conductivity**, or the level of dissolved salts in the water is an indicator of factors including land management practices. High levels of salinity may make water unsuitable for human, animal or agricultural use and may kill aquatic life.

**pH** is a measure of how acidic or basic water is. pH directly affects aquatic life, the nutrient uptake by plants, the solubility of heavy metals and the concentration of dissolved solids in rivers.

**Temperature** is affected by weather, inflows, sediments, shading and sunlight. High temperatures speed up biological and chemical processes and limit the amount of oxygen that can dissolve in water.

**Turbidity** is a measure of water clarity and is affected by suspended material such as clay, silt, effluent and algae in the water. During times of high flow, turbidity can increase greatly. Water with high turbidity can absorb more heat from the sun but less light. This reduces photosynthesis and can lead to low levels of oxygen.

**Nutrients** such as Nitrogen and Phosphorous can come from natural and human sources. High levels of nutrients can speed up bacterial and plant growth leading to low levels of oxygen and/or algal blooms.