

NORTHERN TASMANIAN WATER QUALITY MONITORING PROJECT

OUR VISION

Healthy waterways

OUR OBJECTIVE

To establish a network of water quality and river condition monitoring sites in northern Tasmania that supports NRM North objectives and targets, to develop a water monitoring and evaluation framework for the region and to engage the community in water quality monitoring.

SPECIFIC AIMS

To establish a network of monitoring sites that complements the current DPIWE and other networks and collects data identifying relevant resource condition targets, management action targets and agreed matters for targeting.

To realign community water quality monitoring in the region to national standards.

To produce a State of the Region report for the Asset of Water.

To incorporate and improve the capacity of the community waterwatch program to add high-quality, consistent and accurate data to the regional water quality-monitoring program.

WHO WE ARE

The Northern Tasmanian Community Water Quality Monitoring team is affiliated with Waterwatch Australia, a network that was established in 1993. Waterwatch is a network of trained coordinators and community groups that bring people together to monitor, restore and protect Australia's waterways for current and future generations. This team is providing a specific service to the NRM North and the community.

PROJECT BACKGROUND

NRM North identified the need to establish a network of continuous water quality monitoring sites so that information gathered could set resource condition and management action targets. The Australian Government's Natural Heritage Trust (NHT) is providing the funds for the project, and the project team is based at the Launceston Environment Centre. In-kind support is also provided by Dorset council.



WHAT WE DO

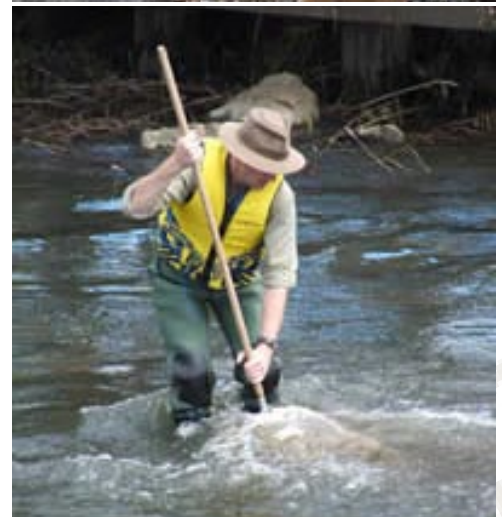
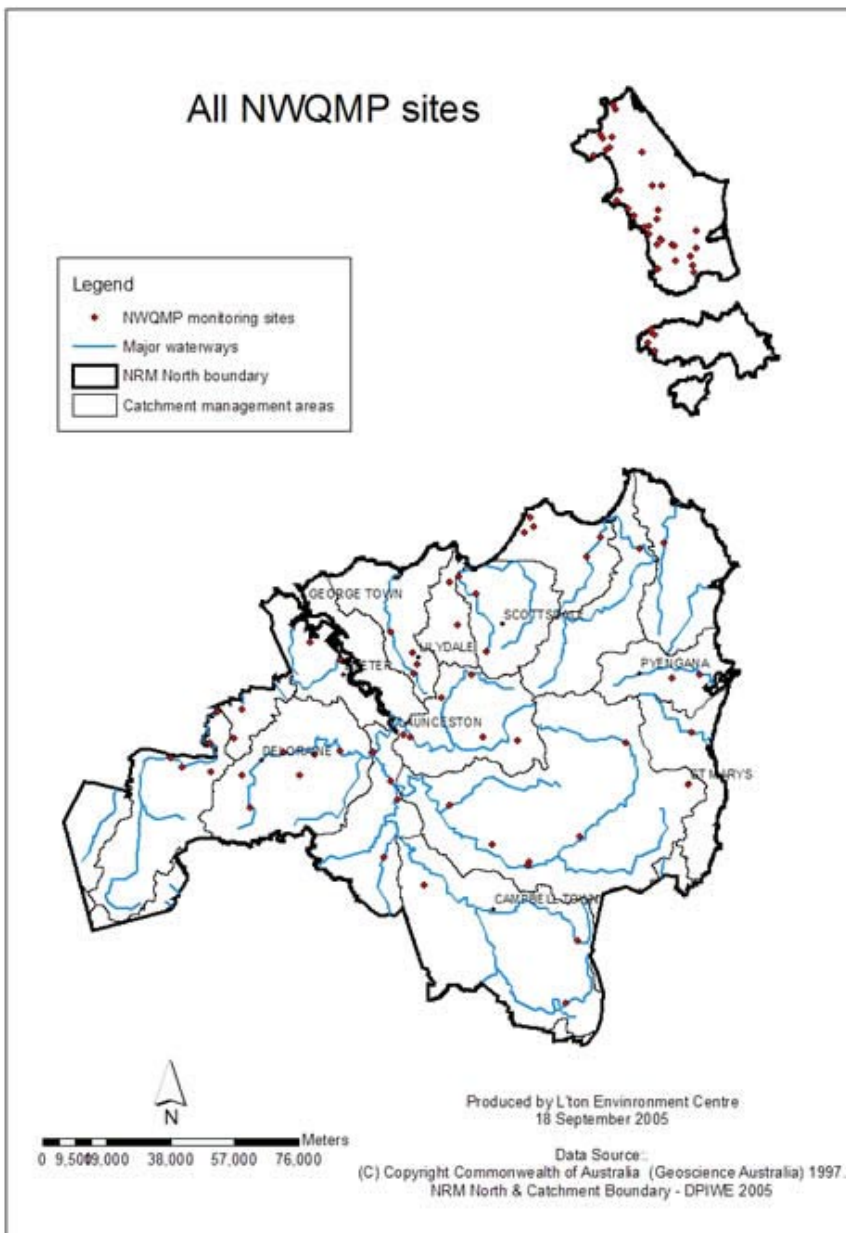
Month water quality testing:

- Salinity (Electrical Conductivity)
- Acidity (pH)
- Temperature
- Sediment (Turbidity)
- Nutrients (Nitrate, Total Nitrogen, Total Phosphorous)

Twice Yearly Ausrivas stream condition assessment:

- Stream bank habitat
- Macro-invertebrate stream life (water bugs)

LOCATION OF MONITORING SITES



WHAT DO THE TESTS TELL US?

Salinity is the level of dissolved salts in the water. Above a certain level, dissolved salts effect the survival of aquatic life and the suitability of the water for human, stock and irrigation uses. Salinity is an indicator of land management practices in the catchment. back to what we do

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 concentrations of dissolved solids in rivers. back to what we do

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. back to what we do

Turbidity is a measure of water clarity. Turbidity is affected by suspended material such as clay, silt, effluent, and algae in the water. During times of high rainfall, run-off and flow, turbidity levels can increase greatly. Water with high turbidity can absorb more heat from the sun than clean, clear water but less light for photosynthesis. This can lead to low levels of oxygen, a problem for living things such as fish and the giant freshwater lobster. back to what we do

Nutrients such as Nitrate, Nitrogen and Phosphorus can come from natural and human sources. High levels of nutrients can speed up bacterial growth leading to low levels of oxygen or can speed up plant growth leading to algal blooms. back to what we do

Macro invertebrate stream life populations are a robust indicator of overall river health and how pristine or degraded the river is. Macro invertebrates are sensitive to a wide range of water quality and river habitat criteria.

WATERWATCH VOLUNTEERS



The project supports a network of committed Waterwatch volunteers in the region. The project team are keen to link up with new volunteers who can test water quality at one or more sites on a monthly basis. Free training, equipment and technical support are provided, including quality assurance and control. Volunteers test for salinity, temperature and sediment levels. Samples can also be collected for nutrients. Results go into a database and provide valuable information about the state of our waterways. Remember, "volunteers work for free but not for nothing" and "you don't have to get wet but it is more fun if you do".

CAN I ACCESS THE DATA?

Waterwatch data from this project as well as data from DPIWE sites will be accessible online via the WIST (Water Information System for Tasmania) website soon.

FOR MORE INFORMATION

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ACKNOWLEDGEMENTS

This project has strong community support. Many thanks to the wonderful Waterwatch volunteers, landholders and schools involved, DPIWE Water Assessment and Planning Branch, DPIWE Rivercare section, Waterwatch Australia, [Five Rivers Waterwatch](#), Southern Waterwatch and to all the municipal councils in the region.



Natural Heritage Trust

Helping Communities Helping Australia

