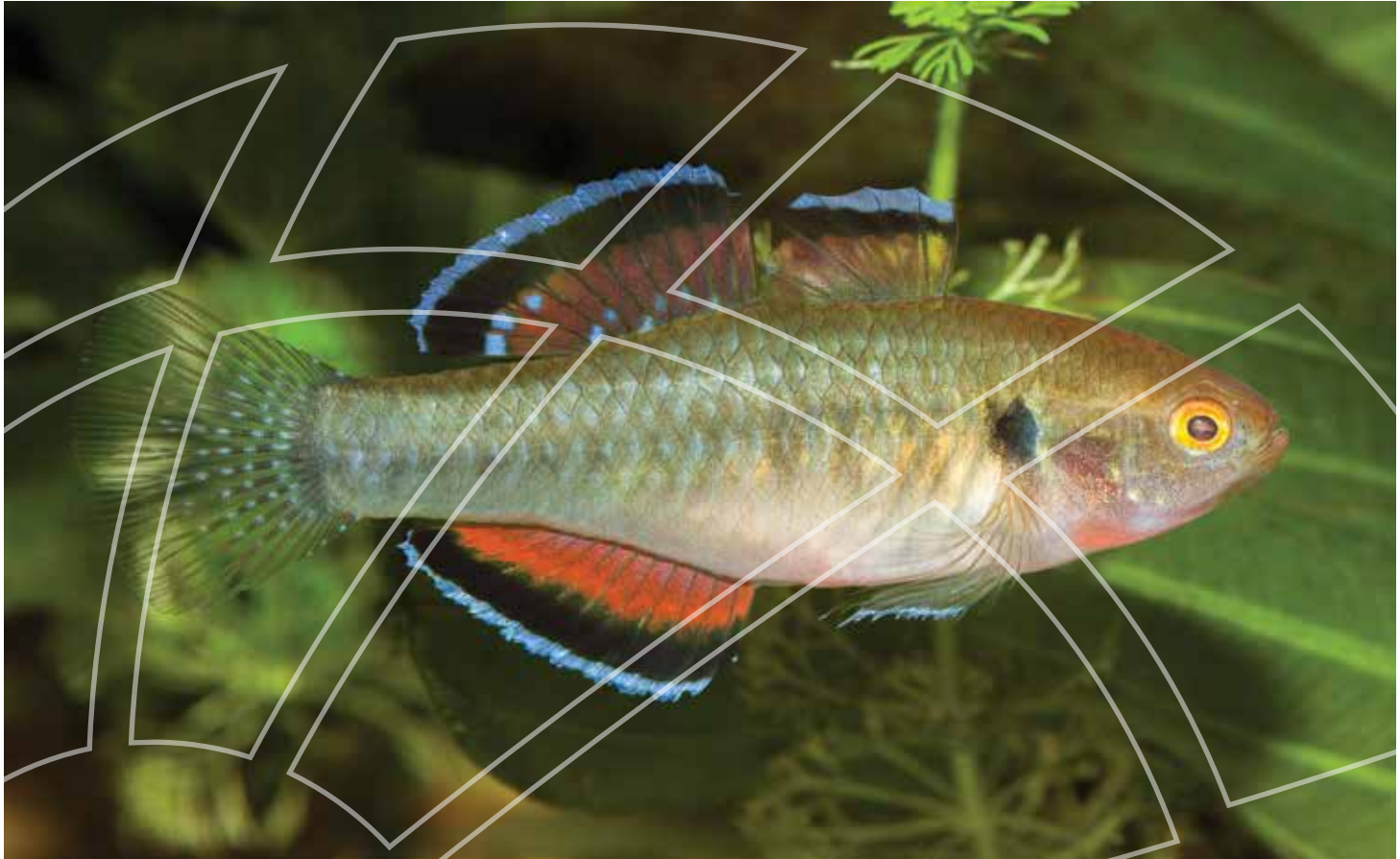


Freshwater Ecology



BMT WBM has provided expert freshwater ecology consulting services for over 20 years. Our projects have seen us working across a diverse array of freshwater habitats throughout Australia, Papua New Guinea and Southeast Asia. Our aim is to address the needs of our clients through the application of advanced assessment methodologies, critical analysis and rigorous design.

A key strength to BMT WBM's success and ability of producing outstanding deliverables is our multidisciplinary in house skills that provide an integrated engineering, ecological and scientific service. The diversity and strength of our staff enables us to supply innovative and practical solutions supported by comprehensive field data, sophisticated modeling and advance GIS analyses and presentation.



Industry Sectors

- Government (Local, State/Provincial and National Government)
- Urban developers (infrastructure, residential, commercial)
- Mining (open cut, underground, sand mines and quarries)
- Port development
- Heavy industry
- Oil and gas (exploration, development, refining)

Specialised Professional Services

- Environmental Impact Statements
- Baseline Studies and Constraints Assessments
- Infrastructure Planning Studies
- Outfall Pollutant Loads Environmental Assessments
- Monitoring Programs Development and Implementation
- Protected Area Planning & Management
- Environmental Research
- Climate Change Vulnerability Assessments

Areas of Technical Expertise

Aquatic ecosystem health assessments using aquatic macroinvertebrates

- Aquatic macroinvertebrate monitoring program design and implementation
- Aquatic ecosystem health assessments by accredited AusRivAS operators
- Analyses of univariate and multivariate statistical patterns, and SIGNAL and PET indices

Aquatic vertebrate fauna assessment

- Inventory and assessment of freshwater fish
- Targeted threatened aquatic fauna species assessments
- Electrofishing, seine, trapping and baited remote underwater video based survey methodologies
- Feral fish eradication

Habitat Assessments

- Riparian and aquatic vegetation surveys and condition assessment
- Instream habitat condition assessment
- Creek and lake bed habitat and bathymetry mapping using acoustic techniques



Ecosystem processes

- Benthic metabolism (daily respiration and gross primary production)
- Stable isotope analysis ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$)

Physiochemical water and sediment parameters

- *In-situ* water quality assessment and sample collection;
- Real time water quality monitoring
- Sediment ecotoxicology

BMT WBM operates a Quality Management System that meets the requirements of the International Standard ISO 9001:2008. We apply this standard in all our business activities to ensure that the data we collect meets our client's needs and the continual improvement of our services.

