

MACROINVERTEBRATE ANALYSIS

Supporting freshwater monitoring through accurate biological assessment



WHAT ARE MACROINVERTEBRATES?

Macroinvertebrates are small aquatic animals such as insects, worms, and snails that are visible to the naked eye and live in freshwater ecosystems (either in their larval stage, or their whole lives). Because they respond to changes in water quality over time, they are widely used as biological indicators of stream and river health.

WHAT WE DO

At Geotechnics, we offer professional macroinvertebrate identification and analysis from submitted freshwater samples. Our trained technicians conduct detailed identifications using a high-resolution ZEISS Stemi 305 stereomicroscope, ensuring accurate results that support informed environmental decision-making.

PROTOCOLS WE USE

- Protocol C1: Coded abundance
- Protocol C2: 200+ Fixed Count with Scan for Missed Taxa
- Protocol C3: Full Count with Subsampling Option

OUR TESTING INCLUDES

- Taxonomic Identification to macroinvertebrate group level
- Calculation of Ecological Indices
- Comprehensive Digital Reporting

WHY THIS TESTING MATTERS

Long-term Water Quality Monitoring -

Biological communities reflect changes over time, making them ideal for tracking pollution or ecosystem recovery.

Supports Environmental Compliance - Widely used by councils, consultants, and researchers to meet regulatory and consent requirements.

Reliable Ecological Insights - Helps identify the presence of tolerant vs. sensitive species to assess stream health.

WHY US?

- High-quality analysis using industry standard equipment
- Adherence to national recognised protocols (NEMS)
- Experienced and trained macroinvertebrate technicians