

Macro-invertebrate record sheet—Method 2

Date (dd/mm/yy)
 / / Monitor(s) _____

Site code _____ Tributary/site name _____

Have you filled out your field cover sheet? Yes No

| Common name | Scientific order (unless indicated otherwise) | Pollution sensitivity (SIGNAL 2 scores) | Tick if present at site | Put the pollution sensitivity here |
|-------------------------|--|--|-------------------------|------------------------------------|
| Stonefly | Plecoptera | 10 | | |
| Scorpion fly | Mecoptera | 10 | | |
| Mayfly | Ephemeroptera | 9 | | |
| Caddisfly | Trichoptera | 8 | | |
| Toe biter | Megaloptera | 8 | | |
| Water mite | Acariformes | 6 | | |
| Spongefly and lacewing | Neuroptera | 6 | | |
| Horsehair worm | Nematomorpha | 6 | | |
| Beetle | Coleoptera | 5 | | |
| Shrimp, yabby and crab | Decapoda | 4 | | |
| Sponge | Porifera | 4 | | |
| Seed shrimp | Ostracoda (subclass) | 4 | | |
| True fly | Diptera | 3 | | |
| Dragonfly and damselfly | Odonata | 3 | | |
| Mussel | Bivalvia (class) | 3 | | |
| Round worm | Nematoda (phylum) | 3 | | |
| Side swimmer | Amphipoda | 3 | | |
| Nemertean | Nemertea | 3 | | |
| True bug | Hemiptera | 2 | | |
| Flat worm | Turbellaria | 2 | | |
| Water slater | Isopoda | 2 | | |
| Segmented worm | Oligochaeta (class) | 2 | | |
| Flat worm | Turbellaria (class) | 2 | | |
| Caterpillar | Lepidoptera | 2 | | |
| Snail | Gastropoda (class) | 1 | | |
| Hydra | Hydrozoa | 1 | | |
| Leech | Hirudiea (class) | 1 | | |
| Brine shrimp | Anostraca | 1 | | |
| Clam shrimp | Conchostraca | 1 | | |
| Springtail | Collembola | 1 | | |

Write the number of different taxa groups found at your site here →

Write the sum of sensitivity scores here ↑

SIGNAL 2 score = sum of sensitivity scores
÷ number of different taxa groups

The SIGNAL 2 index score for your site =

Your site is:
Healthy **Mildly polluted** **Moderately polluted** **Severely polluted**

Macro-invertebrate sensitivity scores adapted from:
 Chessman B 2003, *SIGNAL 2—a scoring system for macro-invertebrate ('water bugs') in Australian rivers*, Monitoring River Health Initiative technical report No. 31, Department of Environment and Heritage, Canberra.

| Signal 2 score | Habitat quality |
|-----------------|---------------------|
| Greater than 6 | Healthy |
| Between 5 and 6 | Mildly polluted |
| Between 4 and 5 | Moderately polluted |
| Less than 4 | Severely polluted |

Macro-invertebrate record sheet—Method 3

Date (dd/mm/yy)
/ / Monitor(s) _____

Site code _____ Tributary/site name _____

Have you filled out your field cover sheet? Yes No
 Have you conducted a basic physico-chemical assessment at your site and attached the field sheet? Yes No
 Have you conducted intermediate-level stream condition and habitat assessment at your site and attached the field sheet? Yes No
 Length of survey reach 100 m Other _____

Habitats found in each reach

| | 0% | 1–20% | 21–50% | 51–80% | > 80% |
|--------------|----|-------|--------|--------|-------|
| Riffle | | | | | |
| Run | | | | | |
| Edge | | | | | |
| Macrophytes | | | | | |
| Pool (rocky) | | | | | |
| Dry | | | | | |

Edge habitat (sweep sample)

Did you sample edge/backwater? Yes No Type: Edge Backwater Pool
 Length of edge sample: 10 m Other ___ m
 Collected by: _____ Sample sorted by: _____
 Time taken to sort sample: 30 mins other ___ mins Number of vials: _____
 Approximate number of macro-invertebrates sorted: < 100 100–150 150–200 > 200

The information in the section below refers to the entire edge habitat in the reach

Stream velocity: No flow Slow Medium/moderate Fast Very fast
 Take five representative measurements over the range of depths in the edge habitat:
 1. ___ cm 2. ___ cm 3. ___ cm 4. ___ cm 5. ___ cm Mean: ___ cm

The information in the section below refers only to the sample area

| Biotic substrate cover | < 10% | 10–35% | 36–65% | 66–90% | > 90% |
|--|-------|--------|--------|--------|-------|
| Periphyton (algae attached to substrate such as rocks) | | | | | |
| Moss | | | | | |
| Filamentous algae | | | | | |
| Macrophytes | | | | | |
| Detritus (dead or decaying organic matter) | | | | | |

| Abiotic substrate cover | < 10% | 10–35% | 36–65% | 66–90% | > 90% |
|--------------------------------|-------|--------|--------|--------|-------|
| Bedrock | | | | | |
| Boulder (> 256 mm) | | | | | |
| Cobble (64–256 mm) | | | | | |
| Pebble (16–64 mm) | | | | | |
| Gravel (4–16 mm) | | | | | |
| Sand (1–4 mm) | | | | | |
| Silt/ clay (< 1 mm) | | | | | |

