**Commonly seen species on the Gold Coast**

*If you find additional species please add them to the bottom of the sheet and include their score in your calculation.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Common name** | **Order** | **Family** | **SIGNAL** | **Card no.** | **Tick if present** |
| Stonefly nymph | Plecoptera |  | **10** | 1 |  |
| Mayfly nymph | Ephemeroptera |  | **9** | 2 |  |
| Snail-shelled Caddisfly larva | Trichoptera | Helicopsychidae | **8** | 3 |  |
| Toe biter | Megaloptera |  | **8** | 4 |  |
| Sleeping bag caddisfly larvae | Trichoptera | Calamoceratidae | **7** | 5 |  |
| Cone-shaped caddisfly larvae | Trichoptera | Conoesucidae | **7** | 6 |  |
| Riffle Beetle | Coleoptera | Elmidae | **7** | 7 |  |
| Stick caddisfly larva | Trichoptera | Leptoceridae | **6** | 8 |  |
| Net spinning caddisfly larva | Trichoptera | Hydropsychidae | **6** | 9 |  |
| Water mite | Arachnida (Class) Acarina (subclass) |  | **6** | 10 |  |
| Marsh beetle larva | Coleoptera | Scirtidae | **6** | 11 |  |
| Water penny larva | Coleoptera | Psephenidae | **6** | 12 |  |
| Long jawed Spider | Arachnida (Class) | Tetrangthidae | **6** | 13 |  |
| Azure damselfly larva | Zygoptera (Suborder) | Diphlebiidae | **6** | 14 |  |
| Toad Bug | Hemiptera | Gelastocoridae | **5** | 15 |  |
| Water flea | Crustacea (subphylum) Cladocera |  | **5** | 16 |  |
| Whirligig beetle adult | Coleoptera | Gyrinidae | **4** | 17 |  |
| Whirligig beetle larva | Coleoptera | Gyrinidae | **4** | 18 |  |
| Water Strider | Hemiptera | Gerridae | **4** | 19 |  |
| Freshwater crayfish & yabby | Decapoda | Parastacidae | **4** | 20 |  |
| Freshwater shrimp & prawns | Crustacea (subphylum) Decapoda |  | 4 | 21 |  |
| Seed shrimp | Crustacea (subphylum) Ostracoda (subclass) |  | 4 | 22 |  |
| Riffle shrimp | Decapoda | Atyidae | 4 | 23 |  |
| Water Measurer | Hemiptera | Hydrometridae | 3 | 24 |  |
| Dragonfly larva | Odonata | Epipoctophora | 3 | 25 |  |
| Small water strider | Hemiptera | Veliidae | **3** | 26 |  |
| Mussel | Bivalvia (class) |  | **3** | 27 |  |
| Water Scavenger beetle adult | Coleoptera | Hydrophilidae & Hydrochidae | **3** | 28 |  |
| Amphipod | Crustacea (subphylum) Amphipoda |  | **3** | 29 |  |
| Non-biting midge larva | Diptera | Chironomidae | **3** | 30 |  |
| Pond damselfly larva | Zygoptera (Suborder) | Coenagrionidae | **2** | 31 |  |
| Predacious diving beetle adult | Coleoptera | Dytiscidae | **2** | 32 |  |
| Predacious diving beetle larva | Coleoptera | Dytiscidae | **2** | 33 |  |
| Waterboatman | Hemiptera | Corixidae | **2** | 34 |  |
| Creeping water bug | Hemiptera | Naucoridae | **2** | 35 |  |
| Pygmy Backswimmer | Coleoptera | Pleidae | **2** | 36 |  |
| Flat worm | Platyhelminthes (phylum) Turbellaria (class) |  | **2** | 37 |  |
| Water Slater / isopod | Isopoda |  | **2** | 38 |  |
| Mosquito larva | Diptera | Culicidae | **1** | 39 |  |
| Freshwater snail | Gastropoda |  | **1** | 40 |  |
| Leech | Annelida (phylum) Hirudinea (class) |  | **1** | 41 |  |
| Segmented worm | Annelida (phylum) Oligochaeta (class) |  | **1** | 42 |  |
| Backswimmer | Coleoptera | Notonectidae | **1** | 43 |  |
| Giant water bug | Hemiptera | Belostomatidae | **1** | 44 |  |
| Black fly larvae |  | Simuliidae | **5** | - |  |
| Hunter Caddis | Trichoptera |  | **6** | - |  |
| Damselfly |  | Lestidae | **1** | - |  |
| Barry 4 eyes |  | Corixidae | **2** | - |  |
| Fan tailed damselfly |  | Megapodagrionidae | **5** | - |  |
| Bloodworm |  | Ceratopogonidae | **4** | - |  |
| Ginger nut caddis | Trichoptera | Ecnomidae | **4** | - |  |
| Tassled Maggot |  | Althericidae | **8** | - |  |
| Pog | Ceratopogonidae |  | **4** | - |  |
| Log Cabin Caddis | Leptoceridae |  | **6** | - |  |
| Nosey Tiger | Dytiscidae |  | **2** | - |  |
| Gomphid | Gomphidae |  | **5** | - |  |
| Ginger nut caddis | Ecnomidae |  | **4** | - |  |
| Bandit caddis | Ecnomidae |  | **4** | - |  |
| Aeshna brevistyla | Aeshnidae |  | **4** | - |  |
| Jappa mayfly | Leptophlebiidae |  | **8** | - |  |
| Caddisfly flat shack | Leptoceridae |  | **6** | - |  |
| Shield shrimp | Notostraca |  | **1** | - |  |
| Gordian worm | Nematomorpha |  | **6** | - |  |
| Killer Mayfly | Ameletopsidae |  | **8** | - |  |
| Side Swimmer | Amphipoda |  | **3** | - |  |
| Two-tailed tiger | Dytiscidae |  | **6** | - |  |
| Ptilodactylids |  |  | **10** | - |  |
| Telephebiidae |  |  | **9** | - |  |
| Fishing Spider | Pisauridae |  | **5** | - |  |
| Water Tiger | Dytiscidae |  | **2** | - |  |
| Tasselled scavenger | Hydrophilidae |  | **2** | - |  |
| Segmented Worm | Oligochaeta |  | **2** | - |  |
| Dragonfly larvae | Gomphidae |  | **5** | - |  |
| Nematode | Nematoda |  | **5** | - |  |
| Riffle Beetle Larvae | Elmidae |  | **7** | - |  |
| Needle Bug | Hemiptera |  | **3** | - |  |
| Dixid | Dixidae |  | **7** | - |  |
| Tabanid Larvae | Tabinidae |  | **3** | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |

## Calculate a Pollution Sensitivity SIGNAL Score

Calculating the score is as simple as following four basic steps:

**Step 1**

Make a list of the water bugs found and their SIGNAL index numbers (above) 

**Step 2**

Add the individual SIGNAL index numbers together.

*e.g. 4 + 2 + 4 + 6 = 16*

**Step 3**

Divide this number by the number of different types of water bugs found.

*e.g. 16 ÷ 4 = 4* This is the SIGNAL Score for your site

**Step 4**

Find where the SIGNAL Score sits in the following table to determine waterways health:

Your waterway is considered:

|  |  |
| --- | --- |
| **SIGNAL Score** | **Waterway Health** |
| Higher than 6 | Healthy Waterway |
| Between 5-5.9 | Mild Pollution |
| Between 4-4.9 | Moderate Pollution |
| Less than 4 | Severe Pollution |