

MiCorps Site ID# _____ Sample Date _____



FAMILY LEVEL IDENTIFICATION AND ASSESSMENT

Instructions: If you choose to identify macroinvertebrates at the family level, fill out the front page of the order-level Macroinvertebrate datasheet with the location and sample information, don't fill out the back with the simpler identification scheme, and then staple this to it. The Water Quality Index score can be calculated in a similar manner as in the simpler identification, though due to improved resolution of identification, you will see improved accuracy in assessing the water quality.

Count	Name	Sensitivity Rating	Count x Sensitivity
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ANNELIDA- Segmented Worms

Count	Name	Sensitivity Rating	Count x Sensitivity
	Hirudinea	10	
	Oligochaeta	10	

COLEOPTERA- Beetles

Count	Name	Sensitivity Rating	Count x Sensitivity
	Curculionidae	5	
	Dryopidae	5	
	Dytiscidae	5	
	Elmidae	4	
	Gyrinidae	5	
	Haliplidae	5	
	Hydrophilidae	5	
	Lampyridae		
	Noteridae		
	Psephenidae	4	
	Ptilodactylidae	3	
	Scirtidae	5	
	Staphylinidae	8	

DIPTERA- True Flies

Count	Name	Sensitivity Rating	Count x Sensitivity
	Athericidae	2	
	Blephariceridae	0	
	Ceratopogonidae	6	
	Chaoboridae	8	
	Chironomidae	6	
	Culicidae	8	
	Dixidae	1	
	Dolichopodidae	4	
	Empididae	6	
	Ephydriidae	6	
	Muscidae	6	
	Psychodidae	8	
	Ptychopteridae	9	
	Sciomyzidae	6	
	Simuliidae	6	
	Stratiomyidae	8	
	Syrphidae	10	
	Tabanidae	6	
	Tipulidae	4	

Count	Name	Sensitivity Rating	Count x Sensitivity
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CRUSTACEA- Crustaceans

Count	Name	Sensitivity Rating	Count x Sensitivity
	Amphipoda	4	
	Decapoda	6	
	Isopoda	8	

EPHEMEROPTERA- Mayflies

Count	Name	Sensitivity Rating	Count x Sensitivity
	Ameletidae	0	
	Ametropodidae		
	Anthropleidae		
	Baetidae	4	
	Baetiscidae	3	
	Caenidae	7	
	Ephemerellidae	1	
	Ephemeridae	4	
	Heptageniidae	4	
	Isonychiidae	2	
	Leptohyphidae	3	
	Leptoplebiidae	2	
	Metretopodidae	2	
	Neophemeridae		
	Polymitarcyidae	2	
	Potamanthidae	4	
	Pseudironidae		
	Siphonuridae	7	

GASTROPODA- Snails, Limpets

Count	Name	Sensitivity Rating	Count x Sensitivity
	Ancylidae	6	
	Bithyniidae	8	
	Hydrobiidae	6	
	Lymnaeidae	6	
	Physidae	8	
	Planorbidae	7	
	Pleuroceridae	6	
	Pomatiopsidae		
	Valvatidae	6	
	Viviparidae	6	
	Unidentified Snail	6.5	

Count	Name	Sensitivity Rating (0-10)	Count x Sensitivity
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HEMIPTERA- True Bugs

	Belostomatidae	10	
	Corixidae	10	
	Gelastocoridae		
	Gerridae	5	
	Hydrometridae		
	Mesoveliidae		
	Naucoridae	5	
	Nepidae	8	
	Notonectidae		
	Pleidae		
	Saldidae	10	
	Veliidae	6	

LEPIDOPTERA- Moths and Butterflies

	Cosmopterigidae		
	Nepticulidae	5	
	Noctuidae		
	Pyralidae	5	
	Tortricidae		

MEGALOPTERA

	Corydalidae	0	
	Sialidae	4	

ODONATA- Damselflies, Dragonflies

	Aeshnidae	3	
	Calopterygidae	5	
	Coenagrionidae	9	
	Cordulidae	2	
	Cordulegastridae	3	
	Gomphidae	1	
	Lestidae	9	
	Libellulidae	9	
	Macromiidae	3	

PELECYPODA-bivalves

	Corbiculidae	6	
	Dreissenidae	8	
	Sphaeriidae (aka Pisiidae)	8	
	Unionidae	6	

Note: MiCorps was not able to locate a tolerance value of every taxa listed here; in those cases, it was left blank. If you can aid our research with tolerance values, please email psteen@hrwc.org. If you find taxa with a missing tolerance value during your identification, record their Count but leave their "Count x Sensitivity" column blank and don't add the count into the Total Abundance, essentially leaving them out of the Water Quality Rating score.

Count	Name	Sensitivity Rating (0-10)	Count x Sensitivity
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PLECOPTERA- Stoneflies

	Capniidae	1	
	Chloroperlidae	1	
	Leuctridae	0	
	Nemouridae	2	
	Perlidae	1	
	Perlodidae	2	
	Pteronarcyidae	0	
	Taeniopterygidae	2	

TRICHOPTERA- Caddisflies

	Apataniidae	3	
	Brachycentridae	1	
	Dipseudopsidae	5	
	Glossosomatidae	1	
	Goeridae	3	
	Helicopsychidae	3	
	Hydropsychidae	4	
	Hydroptilidae	4	
	Lepidostomatidae	3	
	Leptoceridae	4	
	Limnephilidae	4	
	Molannidae	6	
	Odontoceridae	0	
	Philopotamidae	3	
	Phryganeidae	4	
	Polycentropodidae	6	
	Psychomyiidae	2	
	Rhyacophilidae	0	
	Sericostomatidae	3	
	Uenoidae	3	

OTHER GROUPS

	HYDRACARINA Water mites	6	
	COLLEMBOLA springtails	5	
	PLATYHELMINTHES- Turbellaria/Flatworms	4	

WATER QUALITY RATING

← Add up the Count columns on both sides (Total Abundance)	
Add up the "Count x Sensitivity" column for both sides →	

First: If your total abundance is Less than 30 → Automatically give it a WQR of 10 (Very Poor rating).

Less than 60 → Automatically give it a WQR of 7 (Poor rating)

Water Quality Rating =

**Sum of (Count x Sensitivity)
Divided By
Total Abundance**

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