



Biological Assessment

* Recommended frequency – no more than 3 times a year, preferably between mid-July to mid-Oct*

Date _____ Time _____

IOWATER Monitor _____ # of Adults (incl. you) _____

Site Number _____ # of under 18 _____

Other Volunteers Involved _____

Was the stream dry when it was monitored? Yes _____ No _____

____ Were Benthic Macroinvertebrates Found? (If no, please provide any relevant comments in the "Other Assessment Observations and Notes" section at the end of this form)

Benthic Macroinvertebrates (record the number of each collected, then total each group)

<u>High Quality Group</u> <i>(pollution intolerant)</i>			<u>Middle Quality Group</u> <i>(somewhat pollution tolerant)</i>			<u>Low Quality Group</u> <i>(pollution tolerant)</i>		
Tally Column	Total # found	HQ BMI	Tally Column	Total # found	MQ BMI	Tally Column	Total # found	LQ BMI
		Caddisfly			Alderfly			Aquatic Worm
		Dobsonfly			Backswimmer			Black Fly
		Mayfly			Crane Fly			Bloodworm
		Riffle Beetle			Crawdada			Flatworm
		Snail (not pouch)			Crawling Water Beetle			Leech
		Stonefly			Damselfly			Midge Fly
		Water Penny Beetle			Dragonfly			Mosquito
TOTAL		(A)			Giant Water Bug			Pouch Snail
					Limpet			Rat-tailed Maggot
					Mussels/Clams			Water Scavenger Beetle
					Orbsnail	TOTAL		(C)
					Predaceous Diving Beetle			
					Scud			
					Sowbug			
					Water Boatman			
					Water Mite			
					Water Scorpion			
					Water Strider			
					Whirligig Beetle			
			TOTAL		(B)			

____ Other _____ (no tolerance group assigned)

$$\text{Index of Biotic Integrity (IBI)} = \frac{(AX3)+(BX2)+(CX1)}{A+B+C} = \underline{\hspace{2cm}}$$

(Over)

Benthic Macroinvertebrate Collection Time (check one)

0-15 min. _____ 15-30 min. _____ 30-45 min. _____ More than 45 min. _____

Collection Nets (How many nets are you using to collect critters?)

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6+ _____

Collection Sieves (How many sieves are you using to collect critters?)

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6+ _____

Identification Confidence Level (Are you confident that your identification is correct?)

- _____ I'm not sure
- _____ I think they've been identified correctly
- _____ Some are definitely correct, I'm not sure about others (Please clarify in "Other Assessment Observations and Notes" section at the end of this form)
- _____ I'm fairly confident they've all been correctly identified
- _____ I guarantee they have been identified correctly

Stream Reach Length (How far along the stream did you search?)

___ 0-25 meters ___ 25-50 meters ___ 50-75 meters ___ 75-100 meters ___ 100+ meters

Microhabitats (check all present in stream reach, check if sampled)

- | | | | | | |
|------------------------------------|-------------|-------------|-------------------------------|-------------|-------------|
| Algae Mats | Present ___ | Sampled ___ | Leaf Packs | Present ___ | Sampled ___ |
| Logjams | Present ___ | Sampled ___ | Rocks | Present ___ | Sampled ___ |
| Root Wads | Present ___ | Sampled ___ | Weed Beds | Present ___ | Sampled ___ |
| Fallen Trees | Present ___ | Sampled ___ | Undercut Banks | Present ___ | Sampled ___ |
| Silt/Muck | Present ___ | Sampled ___ | Rip Rap | Present ___ | Sampled ___ |
| Sand | Present ___ | Sampled ___ | Overhanging Vegetation | Present ___ | Sampled ___ |
| Junk (tires, garbage, etc.) | Present ___ | Sampled ___ | | | |
| Other (describe) | _____ | | | Present ___ | Sampled ___ |

Stream Habitat Type (check all types sampled in stream reach)

Riffle _____ **Run** _____ **Pool** _____

Aquatic Plant Cover of Streambed (at transect – check one)

0-25% _____ 25-50% _____ 50-75% _____ 75-100% _____

Algae Cover of Streambed (at transect – check one)

0-25% _____ 25-50% _____ 50-75% _____ 75-100% _____

Is sewage algae present in the stream?

No _____ Yes _____ If yes, please submit a photographic record & contact IOWATER.

Invasive Species (check all found)

- | | | |
|----------------------------|-------------------------|----------------------------|
| ___ Eurasian Water Milfoil | ___ Curly-leaf Pondweed | ___ Zebra Mussels |
| ___ Brittle Naiad | ___ Purple Loosestrife | ___ Chinese Mystery Snails |
| ___ Bighead Carp | ___ Silver Carp | ___ Rusty Crawfish |

Other Assessment Observations and Notes
