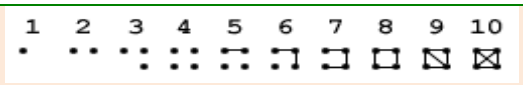
BENTHIC MACROINVERTEBRATES: Assess your macroinvertebrate collections by counting and identifying to the family-level if possible. Use the table to record your data.



The dot-dash tally method is a convenient way to record your data. Each dot or dash represents one tally.

Insect Groups

Patterned stoneflies Taxa ____ Total ____	Winter stoneflies Taxa ____ Total ____	Roach-like stonefly Total ____
Giant stonefly Total ____	Brown stonefly Total ____	Spiny crawler mayfly Total ____
Square-gilled mayfly Total ____	Minnow mayflies IIIII Taxa 1 Total 5	Flatheaded mayfly Total ____
Brush-legged mayfly Total ____	Burrowing mayflies Taxa ____ Total ____	Net-spinning caddisflies III Taxa 1 Total 3
Case-building caddisflies Taxa ____ Total ____	Free-living caddisfly IIIII IIIII IIIII IIIII Total 20	Common netspinner IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII Total 45
Dragonflies Taxa ____ Total ____	Damselflies Taxa ____ Total ____	Riffle beetle IIIII IIIII IIII Total 14
Long-toed beetle Total ____	Water penny Total ____	Other beetles (true bugs) Taxa ____ Total ____
Hellgrammite/Fishfly Total ____	Alderfly Total ____	Aquatic moth Total ____
Non-biting midge IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII II Total 77	Black fly IIIII I Total 6	Crane fly IIII Total 4

Watersnipe fly Total	Dance fly I Total 1	Dixid midge Total
Net-wing midge Total	Horse fly Total	Other fly larva I Taxa 1 Total 1

Non-Insect Groups

Crayfish Total	Scud/Sideswimmer IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII IIIII II Total 62	Aquatic sowbug Total
Water mite Total	Operculate snails Taxa Total	Non-operculate snails I Taxa 1 Total 1
Pea clam Total	Asian clam Total	Mussel Total
Flatworms II Total 2	Aquatic worms IIIII IIIII IIIII IIIII IIIII IIIII I Total 31	Leeches Total
Other aquatic invertebrates Taxa Total	Comments:	

Total Taxa	Total Number
14	272

Describe other aquatic life (e.g. fish, amphibians) collected or observed, as well as other indications that the reach is being used by other animals (i.e. birds, mammals, reptiles).

RAINBOW TROUT

LEVEL-TWO BENTHIC ASSESSMENT

The SHADED boxes indicate that multiple families are possible; tolerance values are provided.

Macroinvertebrates		Totals	Tolerance score	Families	Macroinvertebrates		Totals	Tolerance score	Families
1	Patterned stoneflies				6	Aquatic moth			
2	Winter stoneflies				4	Riffle beetle	14	56	1
1	Roach-like stonefly				5	Long-toed beetle			
1	Giant stonefly				3	Water penny			
2	Little brown stonefly				5	Whirligig beetle			
3	Spiny crawler mayfly				7	Other beetles/bugs			
5	Square-gilled mayflies				3	Hellgrammite/Fishfly			
4	Minnow mayflies	5	20	1	6	Alderfly			
3	Flatheaded mayfly				9	Non-biting midge	77	693	1
3	Brush-legged mayfly				6	Black fly	6	36	1
5	Burrowing mayflies				5	Crane fly	4	20	1
4	Net-spinning caddisflies	3	12	1	3	Watersnipe fly			
3	Case-building caddisflies	1	3	1	6	Dance fly	1	6	1
5	Common netspinner	45	225	1	5	Dixid midge			
3	Free-living caddisfly	20	60	1	2	Net-wing midge			
4	Dragonflies				7	Horse fly			
7	Damselflies				8	Other fly larva	1	8	1
Non-Insect Groups									
5	Crayfish				5	Pea clam			
5	Scud/Sideswimmer	62	310	1	6	Asian clam			
7	Aquatic sowbug				4	Mussel			
6	Water mite				5	Operculate snails			
10	Aquatic worms	31	310	1	7	Non-operculate snails	1	7	1
10	Leeches				Other invertebrates				
7	Flatworms	2	14	1					

Complete your calculations using the metrics below. These metrics are combined to determine your overall score and integrity rating.

Total Number	**Total Tolerance**	**Total Taxa**
273	1469	15

Comments: _____

Metrics	Results	Points	**10**	**8**	**6**	**4**	**2**
1. Total Taxa	15	8	> 18	18 - 15	14 - 11	10 - 7	< 7
2. EPT Taxa	5	6	> 10	10 - 8	7 - 5	4 - 2	< 2
3. Biotic Index	5.38	6	< 3.5	3.5 – 4.5	4.6 – 5.4	5.5 – 6.5	> 6.5
4. % EPT Abundance	27.1	2	> 80	80 - 70	69.9 - 60	59.9 - 40	< 40
5. % Tolerant	41.2	2	< 2	2 - 10	10.1 - 15	15.1 - 20	> 20
6. % Dominance	28.2	4	< 10	10 - 15	15.1 - 25	25.1 - 50	> 50

Stream Score **28**

Integrity Rating

> 48	48 - 36	35 - 24	< 24
Optimal	Suboptimal	Marginal	Poor