

WILD BRANCH RIVER REPORT

May 22, 2009

DATA RESULTS:

D.O = 14.5 ppm	TURBIDITY = 1.3 NTU	TOTAL CHLORINE = 0
pH = 8	TDS = 64 ppm	CONDUCTIVITY = 64.2 us
IRON = .09 ppm	HARDNESS = 40 ppm	PHOSPHATE ION = .06 ppm
NITRATE ION = .7 ppm		FREE CHLORINE = 0

Caddisfly Adult



Mayfly Adult



Water Penny Larvae



Macroinvertebrates

Captured & Released

- 15 Caddisfly
- 15 Mayfly
- 1 Water Penny
- 1 Crane Fly
- 1 Dragonfly
- 2 Dobson Fly

Velocity Results

Trial 1	11.03
Trial 2	10.03
Trial 3	12.69
Trial 4	13.00
<u>Trial 5</u>	<u>7.65</u>
	54.4 Total
	10.88 Average

Cranefly Adult



Dragonfly Adult



Dobsonfly Adult



DO = dissolved oxygen is vital indicator of water quality. Fish and other aquatic organisms need oxygen to survive. The colder the temperature, the more oxygen the water is capable of holding.

pH = phosphate is essential for plant and animal growth and comes naturally by rocks and the soil but too much of a good thing can be bad.

P = Phosphate also is found in cow manure and fertilizers and if farmer aren't careful when it rains it will run off into rivers and streams and too much phosphate can kill some fish and organisms in the water.

turbidity = clearness of the water. The more cloudy the water the more murkier it is and the particles that cause the cloudiness draw attention to sunlight which will make the water warmer and certain fish and organisms can't live in warm water.

hardness = is the ability of metal ions to react with soap and create soap scum. The harder the water, the lower the toxicity of other metals to aquatic life.

Chlorine = is a greenish yellowish gas that can be dissolved in water very easily. Small amounts of chlorine can kill fish and other aquatic organisms.

Conductivity = is the measure of the waters ability of an aqueous solution to carry an electrical current it helps to determine the dissolved solids in the water which determines the ionic effect in the water which can affect the plants and aquatic organisms.