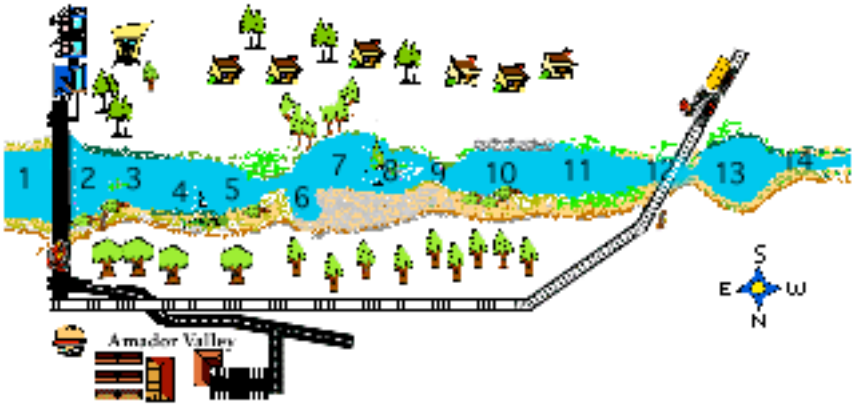
# Creek Organism Collection / Observation

Date: 08/31/2010




Location(s) __4-5_ __6-7__ 10-11__ __12__ __14__

| Very Sensitive to Pollution | √ | # | Somewhat Tolerant to Pollution | √ | # | Very Tolerant of Pollution | √ | # |
|---|---|---|---|---|---|---|---|---|
| Caddis Fly Larvae | | 75+ | Crayfish | | 2 | Pouched Snail | | 40+ |
| Mayfly Larvae | | 5 | Amphipod | | 100 + | Orb Snail | | 5 |
| Helgremite (Dobsonfly) | | 0 | Damselfly Nymph | | 11 | Flatworms | | 7 |
| Stonefly Larvae | | 0 | Dragonfly Nymph | | 8 | Nematode (not segmented) | | 6 |
| Riffle Beetle | | 0 | Cranefly Larvae | | 0 | Leech (segmented) | | 5 |
| Water Penny | | 0 | Soldierfly Larvae | | 0 | Oligochaete (segmented – bristles) | | 2 |
| Gilled Snail | | 2 | Black Bass | | 20+ | Blackfly Larvae | | 2 |
| Frogs/Tadploes | | 1 | Blue Gill | | 4+ | Midge Larvae | | 8 |
| Creek Chub | | 0 | Mosquito Fish | | 50+ | Clams | | 5 |
| Volvox | | 15 | Daphnia | | many | Spirogyra | | limited |
| # of **different species** multiplied by 2 = | | | # of **different species** multiplied by 1 = | | | # of **different species** multiplied by -1 = | | |

Add the number from the three groups above and use the scale below to assess water quality

Excellent (>10) Good (9-7) Fair (6-5) Poor (<5) **(circle ranking)**

Dipnet & Kicknet Data - To be used in Early Fall and Late Spring Assessments Only

| Unknowns | √ | # | Description (legs / segmented / appendages / shape / appx. Size / movement / shell / color) |
|---|---|---|---|
| A | | 3 | Squawfish Observed – (moderately tolerant) seen twice |
| B | | 5 | Water Scorpion (Aquatic Stick insect) – moderately tolerant |
| C | | 2 | Copepod– 100+ (moderately tolerant) |
| D | | | Plankton Net – abundant zooplankton collected near site 14 |

| | | Plankton Samples | | | | |
|---|---|---|---|---|---|---|
| Phytoplankton | | | | Zooplankton | | |
| Organism | Number | Tolerance | | Organism | Number | Tolerance |
| Volvox | 14 | moderately | | Euplotes | 4 | moderate |
| Zygnema | 11 | tolerant | | Amphipod | many | moderate |
| Spirogyra | abundant | tolerant | | Daphnia | many | moderate |
| Unknown Diatoms | 10 | | | Mite | 4 | tolerant |
| Coccones | abundant | tolerant | | Orb snail | 11 | moderate |
| Cladophora | 2 | moderately | | Mayfly | 3 | not tolerant |
| Tabellaria | abundant | moderately | | Nematode | 5 | tolerant |
| Chlamydomonas | 2 | not tolerant | | Ostracod | 7 | moderate |
| Oedogonium | 6 | tolerant | | Cyclops | 9 | moderate |
| Protococcus | 2 | moderately | | Paramecium | 4 | moderate |
| Cymbella (diatom) | 12 | moderately | | Planaria | 3 | tolerant |
| Scenedesmus | 1 | moderately | | Water strider | 6 | moderate |
| Fragillaria | 2 | moderately | | Pouched snail | many | tolerant |
| | | | | Vorticella | many | tolerant |
| | | | | Nauplius | 4 | moderate |
| | | | | Midge larva | 7 | tolerant |
| | | | | Sponge | 1 | moderate |

# Data - 8/30/2011

Dissolved Oxygen

Water Temp - 20C - 24C

| Site | Depth | algae/plant phytoplankton | Initial | Light | Dark | Difference |
|---|---|---|---|---|---|---|
| 11 | Top | phyto | 4.5 | 2 | 0.1 | 1.9 |
| 11 | Bottom | phyto | 4.4 | 0.3 | 0.1 | 0.2 |
| 12 | Top | plant | 5.4 | 12.6 | 3.6 | 9 |
| 12 | Bottom | plant | 5.1 | 8.6 | 4.9 | 3.7 |
| 13 | Top | algae | 7.2 | 6.3 | 2.4 | 3.9 |
| 13 | Bottom | algae | 6.8 | 4.9 | 1.9 | 3 |

| Site | Depth | Flow | D.O. | |
|---|---|---|---|---|
| 2 | top | calm | 8.9 | morning |
| 6 | top | calm | 4.5 | afternoon |
| 7 | top | calm | 5.1 | afternoon |
| 7 | bottom | calm | 4.7 | afternoon |
| 12 | 8" | moving | 8.2 | morning |
| 12 | top | moving | 9.1 | morning |
| 12 | top | calm | 5.7 | afternoon |
| 12 | top | moving | 7.7 | afternoon |
| 12 | 12" | moving | 5.2 | afternoon |
| 13 | top | moving | 8.5 | morning |

| Site | pH | Nitrate | Conductivity | Turbidity |
|---|---|---|---|---|
| 1 | 2.17 | 0.9 | 333 | 6.2 |
| 2 | 4.3 | 0.1 | 214 | 11 |
| 3 | 3.5 | 0.3 | 313 | 5.3 |
| 4 | 4.17 | 0.8 | 748 | 177 |
| 5 | 3.89 | 0.6 | 324 | 27 |
| 6 | 3.8 | 0.4 | 320 | 22.3 |
| 7 | 4.3 | 0.6 | 300 | 24 |
| 9 | 2.71 | 0.5 | 329 | 17 |
| 10 | 2.5 | 0.5 | 325 | 9.6 |
| 11 | 4.6 | 0.8 | 525 | 194 |
| 12 | 3.08 | 1 | 323 | 2 |
| 13 | 3.75 | 0.7 | 502 | 195 |
| 14 | 5.1 | 0.1 | 318 | 218 |

pH actual readings are unreliable but may reveal differences in site pH (more/less acidic/basic)