

Cathance River Water Quality

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Tests Performed at the Cathance River

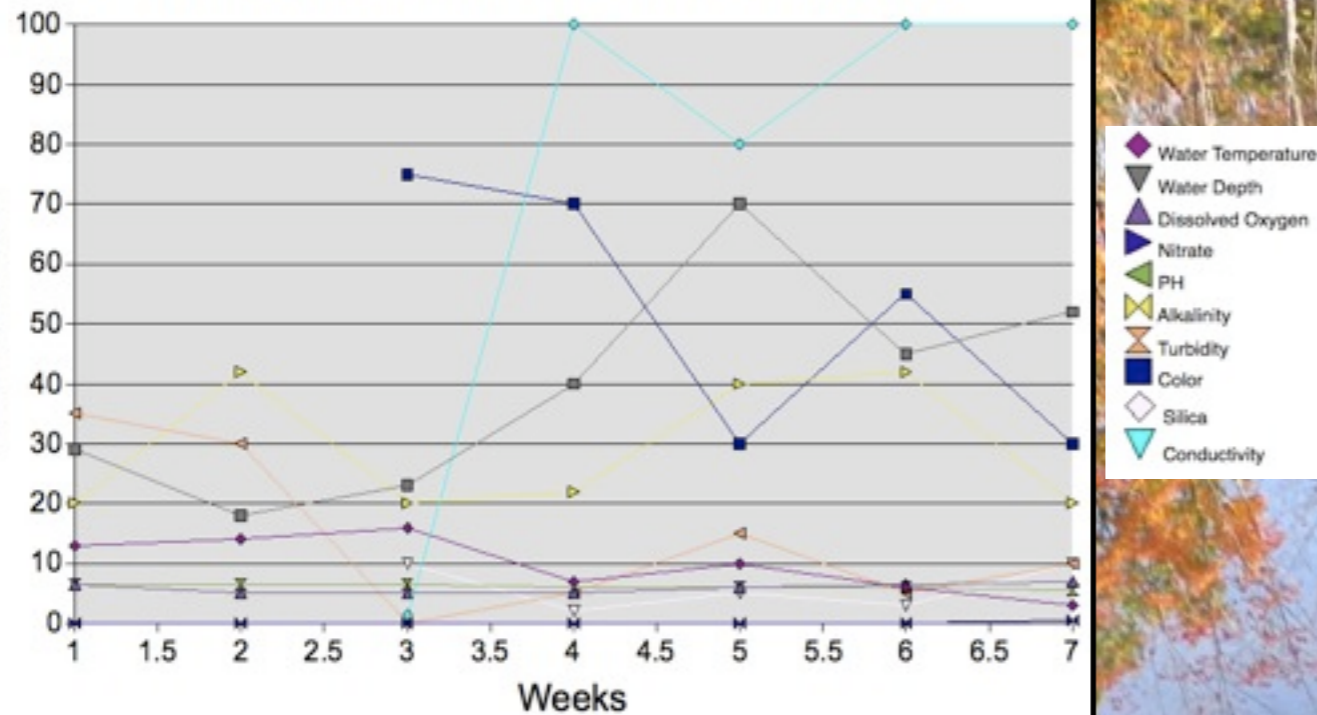


Table 1: Tests Performed and Results

Week #	Date	Water Temperature	Water Depth	Dissolved Oxygen	Nitrate	pH	Alkalinity	Stream Speed	Turbidity	Color	Silica	Conductivity
1	September 10, 2009	13°C	29 cm.	6.5 ppm	0 ppm	6.5	20 ppm	6 minutes 7 seconds per meter	35 JTU			
2	September 17, 2009	14°C	18 cm.	5 ppm	0 ppm	6.5	42 ppm	6 minutes 37 seconds per meter	30 JTU			
3	September 25, 2009	16°C	23 cm.	5 ppm	0 ppm	6.5	20 ppm	10 minutes 48 seconds per meter	0 JTU	75 apha	10 millimeter	130
4	October 1, 2009	7°C	40 cm.	5 ppm	0 ppm	6	22 ppm	2 minutes 7 seconds per meter	5 JTU	70 apha	2 millimeter	100
5	October 8, 2009	10°C	70 cm.	6 ppm	0 ppm	6	40 ppm	22 seconds per meter	15 JTU	30 apha	5 millimeter	80
6	October 15, 2009	6°C	45 cm.	6.5 ppm	0 ppm	6	42 ppm	2 minutes 45 seconds per meter	5 JTU	55 apha	3 millimeter	100
7	October 22, 2009	3°C	52 cm.	7 ppm	0.5 ppm	5.5	20 ppm	no stream speed	10 JTU	30 apha	10 millimeter	100

- * The dissolved oxygen was between 5 ppm and 7 ppm. The higher the oxygen level, the better the water quality. The minimum oxygen level for life is 2 ppm.
- * The nitrate was between 0 ppm and 0.5 ppm. Nitrate over .75 ppm can harm fish. The river had a healthy nitrate level and can support fish life.
- * The pH was between 5.5 and 6.5. The slightly acidic water makes it harder for aquatic life to exist. Aquatic life survives best in pHs between 6 and 9.
- * The alkalinity was between 20 ppm and 42 ppm. Normal alkalinity is between 20 ppm and 200 ppm.
- * The turbidity was between 0 JTU and 35 JTU. Clear river water is 10 JTU or below. This means that the river is not always clear and makes it harder to support a wide variety of life.
- * The color was between 30 apha and 75 apha. The range was so large because of the changing seasons. The leaves and pine cones and other assortments fell into the river.
- * The silica was between 2 millimeters and 10 millimeters. It should be between 0 millimeters and 8 millimeters. For the most part the river was in the correct range.
- * The conductivity was between 80 and 130. This shows the effects of rainwater versus ground water. There is generally lower conductivity from rain water.

- Thank you CREA and Bowdoin College -