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Water, Water, Everywhere, but Not a Drop to Drink: E. coli Dangers!

Water samples were taken from the Eagle River watershed, and tested for Escherichia Coli above and below five wastewater treatment plants. The hypothesis of this project was that the levels of E. Coli would increase as the river flowed downstream because the towns put their effluent into it. Ten different water samples were examined using the SM9223 Colilert MPN for Total Coliform and E. Coli test to determine the change of E. Coli quantity in the river. The results were: <1 MPN of E. Coli in Homestake and Red Cliff, 6.3 in upper Avon, 11.0 in lower Avon, 47.9 in upper Edwards, 10.9 in lower Edwards, 3.0 in upper Eagle, 172.7 in lower Eagle, 17.3 in upper Gypsum, and ended in lower Gypsum at >2419.6! The levels of E. coli did increase significantly as it passed through more towns. The results support the theory that humans negatively impact the E. Coli quantity in the Eagle River. The Gypsum wastewater plant is contributing to the high levels of E. Coli. future testing could be done to see how well we are managing our wastewater, hopefully preventing future problems with E. Coli.