ABSTRACT

TITLE:	E. Coli in the Animas River
AUTHOR(S):	Rafferty, Madison
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ABSTRACT: Water is a vital part of every living thing and needs to monitored and tested regularly, to ensure it stays in good health. One of the many pollutants and bacterium tested in nearly all water systems is E.coli 0157:H7. E.coli has many different forms, most of which are present in the intestines of many animals and humans, but E.coli 0157:H7 is a dangerous form of E.coli that can wreak havoc on the body. Consequences of becoming contaminated with E.coli can result in diarrhea, severe dehydration, and, in worst cases, death. This study focuses on the E.coli levels in the Animas River located in Durango, Colorado. Samples were collected at 12 different sites locate along the Animas River beginning at the 9th Street bridge and ending just below the newly constructed rapid area called Smelter. Each sample site consisted of 3 individual samples above, at, and below the site. This is done so in order to create a comparison when looking at the results. Once the samples are collected the are tested through a specific procedure that requires exact measurements and precision to minimize any potential errors. The results are then analyzed and documented for future use. When analyzing the results it is essential to note how many colony forming units (CFU) there are per sample. Any samples containing more than 240 CFU's is considered toxic according to the EPA. The results of this research will help determine what levels of E.coli are in the Animas River and if there is any need for concern.