

Hannah Fischer

*Pharmaceutical and Personal Care Products (PPCP's): Understanding the Effects on Stream and Aquatic Life*

Does waste from rural effluent water sources bring toxins, such as estrogen, caffeine, and over the counter drugs Pharmaceutical and Personal Care Products (PPCP's) into streams? Determine how stream water quality changes with effluent inputs to South Crestone Creek, as compared to Sangre de Cristo Creek and Wagon Creek. I believe that rural effluent sources do bring Pharmaceutical and Personal Care Product (PPCP's) contaminates to streams. The data will also show how even small rural subdivisions affect stream environment. My data supported my hypothesis, the data from Deadman Creek shows that Pharmaceutical and Personal Care Products (PPCP's) are able to transfer from affluent water sources to the stream system through the subsurface water. I was able to create a base of data on the Sangre de Cristo Creek and Wagon Creek which will be used for next year's testing on all creek systems. The same site will be tested next year but Pharmaceutical and Personal Care Products (PPCP's) test will be run at the EPA lab in Denver, while the standard water quality test will be run at the Bureau of Reclamation Lab in Alamosa. The data reflects the influence that these small subdivisions have on the environment.