



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) James L. Henrick	Project Number J0915
Project Title Fecal Flush: Level of Fecal Coliform (CFU's) Found in a Coastal Stream	
Abstract Objectives/Goals To measure fecal levels in Aptos Creek before, during, and after a rainstorm, to determine when it is safe to swim. I believe that the levels will increase dramatically during a rainstorm, and drop slowly afterward. Methods/Materials I collected water samples from the Aptos Creek. I placed Millipore#s test swabs in creek water then incubated at 35 degrees C for 24 hours. Examined swabs for blue microbial colonies of fecal coliform, under a microscope. I counted the colonies, graphed and charted the results. Results The fecal levels quickly rose to as high as 220 times the safe level for human contact. Surprisingly after the rain stopped the levels fell to zero as quickly as they had risen. Conclusions/Discussion My conclusion is that the levels rise to dangerous levels that are definitely not safe for human contact. People should wait several days after a rainstorm before playing in the coastal creek. However, I would not recommend swimming in the creek, ever.	
Summary Statement Measure the level of fecal coliform (CFU's) found in a coastal stream, to determine if it is safe to swim.	
Help Received Father helped drive to stream and confirmed CFU count; consulted Mr. Peters of SCC Dept. HHS	