



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Jena B. Stucker	Project Number S0611
Project Title How Do Abiotic Factors Affect a River's pH?	
Abstract Objectives/Goals To see how abiotic factors such as precipitation, ash fall, and temperature affect the Santa Ana River's pH. Methods/Materials I took samples of the Santa Ana River and tested the pH with litmus paper. I then recorded the amount of ash fall, temperature, and precipitation and compared it to the pH level. Results Ash fall made the pH level more basic due to its components, precipitation made it more acidic, and low temperatures made the pH level lower and higher ones made it higher. Conclusions/Discussion Ash fall made it more basic because wood and stucco (a main component in making houses) are basic compounds. Precipitation made it more acidic because most rainfall is more acidic. pH is temperature dependent. Higher temperatures would make the pH level go up and lower temperatures would make it go down.	
Summary Statement To measure the effects of temperature, rainfall, and ashfall on the Santa Ana River.	
Help Received Mother drove to test site.	