



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Alexa K. Mason	Project Number S0706
Project Title Bamboo Backup: Arundo Stocks Change Santa Ana River's Course during 2005's Winter Storm	
Abstract Objectives/Goals This project was to determine if the Arundo was capable of stopping the flow and forcing the water to erode the surrounding area. It is believed that if the Arundo is able to make a dam, then the Santa Ana River bed will be eroded and diverted. Methods/Materials A stream table is made to recreate the events. A piece of 4x8 plywood, elevated to 30 degrees, covered with a foot thick of sand. Then turn a hose on, letting it create a natural path, from the top. After 5/10/15 minutes, block the course with leaves, mud, and sticks. After another 5/10/15 minutes, unblock the path and wait for it to backtrack. Results Six out of nine times, the stream will return to its natural path. All three of of three 5 minutes intervals returned, two of the three 10 minute intervals, and one of the three 15 minute intervals returned. Conclusions/Discussion In conclusion, when a river's (or water's for that matter) course is blocked, it erodes the soil, creating a new path. Water will always go the path of least resistance. Once the blockage is destroyed, it reverts back. Exactly like the Santa Ana River did after the storm.	
Summary Statement The diversion of water and it's erosion.	
Help Received My Honors Chemistry Instructor helped me put together my board; Mr. Mains (hydrologist) helped with field work	