



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Iloria S. Naik	Project Number S1199
Project Title Bioremediation in the Santa Ana River	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to determine if bioremediation occurs in the riparian zone of the Santa Ana River and if there is a seasonal difference.</p> <p>Methods/Materials I went to four specific locations along 75 miles of the Santa Ana River and collected water samples in all four spots in both the summer and winter. I used test kits to measure levels of iron, phosphate and nitrate, among other things. I also used B.A.R.T. test kits to measure levels of nitrifying and denitrifying bacteria.</p> <p>Results Water tested in the riparian zone proved to have the lowest levels of contaminants. In the summer, the warmer temperatures aided bioremediation.</p> <p>Conclusions/Discussion Riparian zones play an important role in bioremediation and should be expanded and/or developed near the ocean as well as in places like the concrete-lined LA River.</p>	
Summary Statement The role of riparian zones and the associated bacteria in the bioremediation of the Santa Ana River.	
Help Received Parents drove me to locations and purchase testing materials.	