



**CALIFORNIA STATE SCIENCE FAIR  
2007 PROJECT SUMMARY**

<b>Name(s)</b> <b>Kevin J. Bajurin</b>	<b>Project Number</b> <b>J1002</b>
<b>Project Title</b> <b>Is There Too Much Arsenic in Bay Area Drinking Water?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> On January 23, 2006 the Environmental Protection Agency (EPA) lowered the allowable amount of arsenic in drinking water from 50 parts per billion (50 ppb) to 10 ppb. Arsenic is a semi-metal element in the periodic table, and is odorless and tasteless. Arsenic is also known to be a health threat to humans. Given the new standards, the objective is to determine whether Bay Area drinking water has less than 10 ppb.</p> <p><b>Methods/Materials</b> Drinking water samples were taken from public school drinking fountains in nine Bay Area counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma). Using an arsenic test kit ("Low Range Quick"), the water samples were tested for the level and presence of arsenic.</p> <p><b>Results</b> After testing the water samples and recording the results, only one water sample demonstrated the presence of arsenic (Santa Clara County), but was less than the EPA standard.</p> <p><b>Conclusions/Discussion</b> It appears that the water treatment in the Bay Area is doing better than the EPA standards.</p>	
<b>Summary Statement</b> This project studied and confirmed that the Bay Area meets federal water quality standards for arsenic.	
<b>Help Received</b> Father drove me to all 9 counties in the Bay Area and supervised me while I was performing the tests.	