



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> Connor J.K. Lyons	<b>Project Number</b> <b>J1215</b>
<b>Project Title</b> It's Crystal Clear	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of this experiment was to see which of the five collected water sources (pool, lake, tap, bottle, and ocean) was the most contaminated. <b>Methods/Materials</b> There were four trials each conducting eight different tests checking to see if different contaminants were present in each of the five water sources. The eight contaminants that I was testing for were bacteria, lead, pesticide, nitrate, nitrite, pH, hardness, and chlorine. All of the trials were done on consecutive days and results were documented after each test. The humidity or room temperature could not be controlled and could have possibly contributed to variance in the test results on the day they were conducted. <b>Results</b> As expected, the tap and bottle water had the best scores with both of them passing all of the tests. The surprising result was that the pool and ocean water tied the lake water with the lowest average out of all of the five sources. The results showed the pool water had the most inconsistent test results of all the water sources. <b>Conclusions/Discussion</b> My hypothesis was proven both partially correct and incorrect. I predicted that the lake water would be the most contaminated and the tap and bottle water would be the least contaminated and the test results showed that to be true over all four trials. The results also demonstrated that the pool and ocean water tied the lake water with the lowest average and were equally contaminated. The test results validated the research I did that stated all water sources are threatened by many contaminants.	
<b>Summary Statement</b> This project looked at the environmental impact to water sources by testing for the presence of multiple contaminants.	
<b>Help Received</b> My Mother helped me in assembling my display board and my Father helped me with creating graphs.	