



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> Nicholas W. McCracken	<b>Project Number</b> <b>J0919</b>
<b>Project Title</b> <b>The Trasfer of Toxins Through the Water Cycle</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my project is to see if toxins are able to travel through the water cycle. If It remains toxic? How Toxic? Can this effect our crops and does this provide dangers to animal life. Daphnia will be used in this process.</p> <p><b>Methods/Materials</b> I built a box that could catch evaporation. We used tranpaency film on the top of the box. This collected the condensation (like a gutter) transfered the condensation into a cup. The box itself was a plastic box. Water with different pesticide solutions were placed into the box. The evaporation process lasted 8 hours.</p> <p>After condensation was collected, I put the condensation into a test tube. 4 for each solution and control. I then used an eye dropper to collect daphnia and place into the test tubes. Calculated death rates of daphnia.</p> <p><b>Results</b> Light dose of pesticide. (5 sec) - took 24 hours to kill all daphnia Medium dose (10 sec) - took 12 hrs Heavy dose (15 sec spray) 2 hours Conrol ( no spray) 2 weeks or longer for daphnia to die</p> <p><b>Conclusions/Discussion</b> I learned that pesticide can be transfered through the water cycle and that "acid rain" is real and a problem in our society today. Acid Rain is pollution and my project is from daily or home use of pesticide. People need to be aware that when they are using household chemicals this can be a danger to us all.</p>	
<b>Summary Statement</b> Determining if pesticide can travel through the water cycle and do damage to the environment.	
<b>Help Received</b> Parents helped supervise and build. Teacher helped with writing and supplies.	