



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Kennedy J. Bingham	Project Number J1105
Project Title Thirsty	
Abstract Objectives/Goals My objective is to determine which type of water purification system is most effective; carbon filtration or UV purification. Methods/Materials Experimental Procedures 1. Get water from El Estero Pond and NPS Pond. 2. Test untreated water sources for iron, copper, nitrites, nitrates, ph, alkalinity, hardness, chlorine, and visual bacteria. 3. Test water sources after treating with carbon filter. 4. Test water sources after treating with ultra-violet light. Materials List: - Water quality test kit by PRO-LAB (3) - Bacteria in water test kit by PRO-LAB (3) - Water from NPS Pond (1(32oz.)) - Water from El Estero Pond (1(32oz.)) - Pen / pencil (1) - Science journal - UV Purifier (1) - Carbon filter(1) - Water Containers (2) - Cups (2) - Microscope (1) - Dropper (1) - Slides (6) - Sample containers (6) Results My results are represented graphically in detail on my board. Conclusions/Discussion I believe that UV purifiers are the best way to go for purifying potentially dangerous water. Carbon filters are for filtering metals and water in industrial areas. UV lights are for killing bacteria. So, it depends on the water source; lakes or river versus industrial area.	
Summary Statement My purpose is to discover whether carbon filtration or UV purification of water is most effective.	
Help Received My dad helped me get the samples of water, buy the testing kits, & run the experiment. My siblings helped with the ideas. A classmate helped me identify the bacteria. My teacher let me use his microscope & slides, and dropper.	