



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

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Project Title Should Unmonitored Urban Lakes Be Used for the "Fishing in the City" Program?	
Abstract Objectives/Goals Our objective was to investigate whether or not unmonitored urban lake water is consistently healthy enough for game fish, specifically trout, which are routinely stocked in urban lakes as part of the Fishing in the City program. This program is sponsored by the California Department of Fish and Game. Methods/Materials We examined the water quality of Lincoln, Belvedere, and Hollenbeck Park Lakes. These lakes are stormwater runoff reservoirs, and the City of Los Angeles does not routinely monitor their water quality. Therefore, we believed these lakes could pose a serious health risk to the fish that are stocked there. We analyzed water samples from six sites at each lake, on three different occasions, over a period of ten weeks. The parameters we measured were dissolved oxygen, pH, phosphate, turbidity, nitrite [NO(2)-], ammonia [NH(3)], nitrate [NO(3)-], and total chlorine. We used a Hanna Bench Photometer to obtain our data. Results Most of the samples that we tested contained toxic levels of substances that could hurt or kill fish, including nitrite, nitrate, ammonia, and total chlorine. Additionally, average dissolved oxygen levels were low enough to cause stress in trout, and turbidity levels were regularly high enough to cause gill obstruction. We also found dead fish floating in the lakes. Conclusions/Discussion Our results definitely support our hypothesis because the water quality of the three lakes was never consistently healthy enough for fish to live in. Our results need to be communicated to city and state officials so that the City of Los Angeles Stormwater Program or the Department of Fish and Game can monitor these lakes more frequently, so they can be healthy enough to sustain aquatic life.	
Summary Statement In this project we tried to determine whether or not unmonitored urban lakes are healthy enough to sustain the game fish that are routinely stocked in them.	
Help Received Dad drove us to the lakes to get water samples. Mr. Simonsen edited our work.	