



**CALIFORNIA STATE SCIENCE FAIR  
2007 PROJECT SUMMARY**

<b>Name(s)</b> <b>Danielle R. Detering</b>	<b>Project Number</b> <b>S1902</b>
<b>Project Title</b> <b>Temperature, Trout</b>	
<b>Abstract</b> <b>Objectives/Goals</b> In this on going project, I am looking for the optimum temperature for salmonid growth in the San Lorenzo River. Data from 2005 showed a positive correlation between salmonids# median size and the water temperature of the river. I hypothesize that there will again be a positive correlation between salmonid growth patterns and water temperature. <b>Methods/Materials</b> Don Alley, a fisheries biologist who is my mentor, and myself deployed HOBOS at seven locations along the main stem of the San Lorenzo River and Zayante Creek in mid-August 2006. HOBO temperature probes were programmed (set to collect data every thirty minutes), secured and submerged underwater at each site. They were retrieved in early October 2006, and their data was transferred to a computer using BoxCar Pro 4.3. The median temperatures at each location will be compared to the median salmonid size as provided by Don Alley. <b>Results</b> My data shows there is a weak correlation between median water temperature and median salmonid length. However, a previous year shows a strong correlation between median water temperature and median salmonid length. Now the question is: why are they so different? <b>Conclusions/Discussion</b> This difference of yearly results may be caused by the weather. The previous year was more humid, and this provided more food in comparison to this year, which was much drier.	
<b>Summary Statement</b> In this on going project, I am looking for the optimum temperature for salmonid growth in the San Lorenzo River.	
<b>Help Received</b> Don Alley, a fisheries biologist who is my mentor. mom, and sister helped with project layout. sister took pictures.	