



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Connor S. Worley	Project Number J0619
Project Title Mudslide Mayhem	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The factors I will correlate to determine the soil's susceptibility to mudslides are the grain size of the soil, the water absorbency of the soil and the speed at which the mud slides when water is systematically added to the mud. I believe the more fine soil there is, the less water it will absorb and the faster the mud will slide.</p> <p>Methods/Materials I tested and measured with various sized filters the grain size of five soil samples (taken in 5 random spots in each forest, 15 samples in all) from three separate coastal forests: a redwood forest, a pine forest, and a eucalyptus forest. I also measured the soil's ability to absorb water and finally I tested the speed at which the mud slides and the amount of water needed to make it slide. After the experiment I graphed the correlation between average grain size of soil, water absorbency and how fast the mud slid.</p> <p>Results The water absorbency depended on the amount of fine soil-- the more fine soil present, the less water absorbed. For the mudslides, the speed depended on medium pebbles, the more medium pebbles present, the slower it slid.</p> <p>Conclusions/Discussion My conclusion is that the more large rocks there are in the soil and the less fine soil there is, the less chance of a mudslide.</p>	
Summary Statement With this project, I analyzed the key factors in soil to determine it's susceptibility to mudslides.	
Help Received	