



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Natalya Dreszer	Project Number J1011
Project Title Catching the Wave: Capturing the Wave Updraft for a Brighter Future	
Abstract Objectives/Goals This experiment was about getting enough energy from an ocean wave in 24 hours to power a light bulb for a days use. Methods/Materials I used a tube 10cm in diameter fitted with a fan working as a wind turbine and recorded the volts and amps that a rising wave could produce. Results My calculations told me that 2,640 tubes would be needed to power a light bulb in a day. I also calculated that around 76.5 by 76.5 meters of ocean surface would be required to power a household. Conclusions/Discussion Even though it is improbable that a house will be powered by ocean waves any time soon, small lighthouses and warning buoys could definitely be powered with this technology today!	
Summary Statement I built a tube with a fan to measure how much energy I could get out of and ocean wave and I found out that I would need 2,640 tubes to get enough energy to power a light bulb for a days use in twenty-four hours.	
Help Received I would like to acknowledge my dad, who made sure I finished everything on time, and made sure I didn't fall off the cliffs time and time again. I would also like to thank my science teacher, Mr. Atchley, who read through countless reports and inspired us all.	