



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Ivy A. Brott	Project Number 36896
Project Title Paddling for Power	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of this project was to test hydroelectric water turbine efficiency.</p> <p>Methods/Materials Many materials were used throughout the project but the turbine itself is mainly constructed of PVC pipe, wood and plexiglass.</p> <p>Results After multiple tests, it was concluded that the paddles with the 45 degree angle to the axle were able to produce the most electrical current.</p> <p>Conclusions/Discussion The results of the experiment, proved the hypothesis wrong. After much thought where there might have been error(s) or unforeseen variables, it was concluded that there were small possible errors or variables but not that could greatly impact the outcome. Ultimately, the 45 degree paddles were the most efficient source of hydroelectric power, therefore, if I were to build a large water turbine to produce electricity, I would use that type of paddle.</p>	
Summary Statement This project was used to test the efficiency and production of green energy using different paddle shapes on a hydroelectric water turbine.	
Help Received	