CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)
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Project Number
J0108

Project Title
Paddling for Power

Abstract

Objectives/Goals
The purpose of this project was to test hydroelectric water turbine efficiency.

Methods/Materials
Many materials were used throughout the project but the turbine itself is mainly constructed of PVC pipe, wood and plexiglass.

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.

Conclusions/Discussion
The results of the experiment, proved the hypothesis wrong. After much thought where there might have been error(s) or unforseen 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.

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