



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Samantha O.K Slykas	Project Number J1128
Project Title Potable Seawater?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals I wanted to learn which way was most efficient to desalinate seawater and find a usage for the remaining salt.</p> <p>Methods/Materials Materials: seawater, heater source, TDS meter, pH meter, filtration media, Iodine (chemical), buffering agents for calibration of meters. Experimental design and methods such as: filtration capture, boiling and condensation capture, solar and evaporation capture, Iodine for chemical change.</p> <p>Results Chemical TDS 9,400ppm / pH 7.23 Evaporation TDS 667 ppm / pH 7.07 Filtration TDS 933ppm / pH 6.95 Boling TDS 7ppm / pH 5.65</p> <p>Conclusions/Discussion I discovered that the boiling reclamation was the best method for achieving my goal, followed by evaporation (solar) .The boiling cost is effective and the solar evaporation was extremely slow for collection.</p>	
Summary Statement Knowing that water is our most important resource, I wanted to find a cost effective way to provide potable water from seawater.	
Help Received My mother and grandfather helped me set up equipment and locate more research.	