



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

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| Name(s) Alex T. Bignell | Project Number J0802 |
| Project Title Water, Water, Everywhere... | |
| Abstract Objectives/Goals Santa Cruz County is looking for more water options because our current supply of water is overused. Officials have limited choices because of environmental issues with dams and fully employed underground aquifers. One of the options being considered is desalination of seawater. The objective of this experiment was to see if Santa Cruz County residents and plants would prefer tap water over desalinated seawater in relation to taste. My hypothesis is that Santa Cruz County residents and plant life will not be able to tell the difference and therefore will not prefer tap water to desalinated seawater. Methods/Materials The experiment consisted of 3 separate tests. It tested 10 barley-seed pots: 5 watered with desalinated seawater and 5 watered with tap water. Measurements were recorded every day. The experiment also ran a test on 6 wheatgrass-seed six-packs: 3 watered with desalinated seawater and 3 watered with tap water. Measurements and sprout numbers were recorded every day. The human test consisted of SCC students tasting both desalinated seawater and tap water, then filling out a survey asking questions about the taste of the water. Results The desalinated seawater had the higher measurements in the barley testing. The desalinated seawater had higher measurements but less sprouts than the tap water in the wheatgrass testing. The tap water had a higher average rating but more students preferred desalinated seawater in the human testing. Conclusions/Discussion Neither the plants nor the human subjects showed a clear preference for tap water over desalinated seawater, thus supporting my hypothesis. | |
| Summary Statement My project is a comparison of desalinated seawater and tap water in relation to preference of people and plants in Santa Cruz County. | |
| Help Received Steven Bignell (Dad) drove me to Sears and provided cash for an electric distiller. Mary Bignell (Mom) helped align my display board. | |