



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

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Project Title Surviving Drought II: How Much More Food?	
Abstract	
Objectives/Goals The goal of this experiment was to determine if recycled water grew squash fruit in higher quantities and in higher quality than tap water.	
Methods/Materials	
Materials	
<ol style="list-style-type: none">1. 18 pots2. 18 square feet of black fabric3. 9 small bags of rocks4. 4 1/2 trash cans of soil5. 18 squash seeds6. 2- 2 gallon watering cans7. Recycled water source8. Tap water source9. Biomass scale10. Thermometer11. Clock	
Method:	
<ol style="list-style-type: none">1. Place pots in two rows of 9 each2. Fill the pots 1/3 of the way up with rocks3. Cut and place one square foot of fabric in each pot, covering the rocks4. Fill pots another 1/3 of the way with soil5. Plant 2 squash seeds in each pot6. Water daily and adjust amount used to the temperature and season7. Record data on amount of fruit produced and stand-out qualitative traits	
Results	
The recycled water grew roughly double the amount of squash fruit that the tap water grew. The recycled water squash was also more developed and healthier than the tap water squash.	
Conclusions/Discussion	
The results of my project show that recycled water is great for producing food especially when it contains high amounts of phosphorus. This is important because it may not be the quantity of water that will help us through this drought but quality in water that will help us in the end.	
Summary Statement	
After last year determining that vegetables can be grown with recycled water, this year I wanted to investigate if recycled water grew more squash fruit than first use tap water and by what margin.	
Help Received	
My grandfather provided access to gardening space as well as materials.	