



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Claire I. Velez	Project Number 34057
Project Title Using Grey Water: Does Your Plant Care?	
Abstract Objectives/Goals The objective or goal of my experiment was to determine if grey water can be successfully used to grow plants. Today, water is being wasted all over the world and we don't realize how important it is to conserve water. Re-using grey water can help the environment by saving fresh water. The purpose of my project was to see what kind of re-used water will be healthy for plant growth. By doing this, I was hoping to see both what we can re-use and whether the re-used water will still keep a plant healthy and strong. Methods/Materials In my project I used 16 euryop daisies with 4 plants in each water group. One group was given dishwashing water, the other bath water, and another was given hand washing water. My control group was given regular tap water. I measured the growth of each plant with a caliper and a ruler every other day and recorded the height of each plant in my notebook. To make sure I measured correctly and consistently, I put a red mark on the bottom of each plant stem and measured from the mark to the tallest leaf. Results Over a 24 day testing period I found that the plants that grew the least were given the water that had the most soap or food particles. The plants given bath water grew an exceptionally larger amount than the other two sets of plants given dish water and hand washing water. Initially, I noticed that all of the plants grew similarly, which may have been because they had not felt the effect of the water yet. But after time, it became clear that some plants were growing more than others. In conclusion, my results showed that grey water was a successful means of growing plants. Two out of the three plant groups tested with grey water grew the same or more than the control group using tap water. Conclusions/Discussion These results indicate that grey water can be used to successfully water plants and in some examples, is actually better for plant growth than regular tap water.	
Summary Statement The purpose of my project was to test the use of three different types of grey water on the euryop daisy to find out if grey water can be successfully used to irrigate growing plants.	
Help Received Mother and father helped proofread my report; Danica Taber, UCSB Greenhouse Manager, helped mentor me and answer questions on general plant growth.	