



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

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<b>Project Title</b> Wash N' Grow: Can Plants Tolerate Grey Water?	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Do you ever think of how much water you're using every day, how this could affect the world. Are we able to conserve by using water twice? The purpose of my project is to see if we can reuse water, known as grey water from the laundry. The question investigated was if the amount of grey water would affect the growth of corn.</p> <p><b>Methods/Materials</b> I tested 3 variables for each group of detergent/water and control (water). Four seeds were planted in each pot (variable). Every 4 days I would water the plants. The grey water mix is made by hand. The ratio for detergent/water is based on the fl. oz. of detergent/number of loads. In the day the plants were kept in full sunlight then taken in the house for warmth. I recorded any observations and measured the plant height each day. I also labeled each sprout with the new measurement. I took pictures and after 3 weeks got my results.</p> <p><b>Results</b> The tallest plant is Tide low; it was 35.5 cm, compared to water's tallest plant at 31.4 cm. Natural low's tallest plant was 33.3 cm. In average though water: 26.01 cm, Tide low: 28.25 cm, Tide high: 7.6 cm, Natural low: 27.1 cm, and Natural high: 21.6 cm</p> <p><b>Conclusions/Discussion</b> My hypothesis was that the Natural low and Tide would grow at the same rate as water. These variables were actually a beneficial factor to the corn and grew taller. High Natural was taller than high Tide. Water was taller than both of the high variables. This experiment proved that a low amount of grey water is good for plants.</p>	
<b>Summary Statement</b> My project's purpose is to see if using grey water-different detergents and different amounts- would affect the growth of a corn plant.	
<b>Help Received</b> My mom helped me put together the board.	