## **Better Water Conservation**

The dry, brown hills and parched earth of California's Central Valley illustrate the effects of the last five years of the drought. Since California serves as a major producer of the United States' crops, the plight of California farmers affects the entire country. Though California has not yet found the best way to manage water conservation, it needs do a better job of protecting water especially in the agricultural industry.

The first reason water is wasted is that farmers can grow any crops they want with no restrictions, even when there is a drought. Historically, farmers have always looked for crops that are worth more money. Often, this leads to growing crops that are inefficient water users. Nuts are one of the most profitable crops, bringing in ten thousand dollars an acre compared to a thousand for others (Smith). However, this is part of the problem because nuts need a lot of water to grow. Farmers make a lot of money from pistachios and almonds, but they are "some of the thirstiest crops around" (Smith). The problem has gotten worse with the shortage of water. The price of nuts has gone up because they are water wasters, so farmers then take advantage of the price increase and plant more. This contributes to even more stress on California's aquifers. The government needs to step in and stop this cycle.

Not only are the types of crops reducing available water, but irrigation methods also prevent conservation. Many California farmers use older methods such as canals to flood fields. When they water their fields, they release too much water at one time so that it cannot soak into the ground. A better method would be

"using drip lines, injection into the soil and other systems to reduce water consumption" (Johnston). These methods help to control the amount of water released and to do it slowly so that it can be absorbed into the ground. Farmers could also develop methods for capturing and storing run off. When fields are watered, the excess water runs off of the field and is lost, but collecting it in a nearby pond would allow for reuse. Rainwater should also be collected for reuse. Regulation of the types of water or crops planted could be one way to monitor the conservation of water.

Furthermore, state and federal governments need to do a better job regulating wasteful water use. In California, citizens have many rules about conserving water. For example, they are not permitted to waste drinking water on things like cleaning sidewalks. They are also required to use shutoff valves when using a hose to wash their cars. While average citizens are required to help with the water problem, companies are not held to the same standard. Many sellers of bottled water use water from the forests in California. Investigative reporter discovered that the state is not "tracking exactly how much water is used by all of the bottled water plants in California," and they are not even "monitoring the effects on water supplies and ecosystems statewide" (James). Allowing companies to operate for almost 30 years without monitoring them and without a permit means that the there are unknown consequences on the environment, in particular the water supply.

All of these aspects of the problem prove that regulation is needed to manage the limited water resources in California. The best way to do so is through the

Sustainable Groundwater Management Act. This act gives local agencies the power to regulate as well as make sure that both surface and groundwater are used responsibly so that water resources are not depleted ("Sustainable"). The act helps to manage farmers and corporations so that one of California's most valuable resources is not wasted. While the act itself will not regulate the crops that can be grown, its regulation of groundwater and making sure the aquifers that wells draw water from will help prevent the thirstiest crops from depleting resources. It might change farmers' minds about what crops are the most important to grow especially if aquifers and wells are regulated to prevent groundwater depletion.

Residents of the state of California can do their part by conserving water, but this is a small part of the issue compared to the water needed for agriculture and business. If nothing is done to regulate these, California's water will just go down the drain.

## Works Cited

- James, Ian. "Bottling Water Without Scrutiny." *Desert Sun*. The Desert Sun, 8 Mar. 2015. Web. 9 Nov. 2015.
- Johnston, David Cay. "California Farms Are Slow to Adopt Water-Saving

  Techniques." *Newsweek*. Newsweek, 13 Feb. 2014. Web. 12 Nov. 2015.
- Smith, Stacey Vanek. "The Twisty Logic Of The Drought: Grow Thirsty Crops To Dig Deeper Wells." *NPR*. NPR, 6 Aug. 2015. Web. 10 Nov. 2015.
- "Sustainable Groundwater Management." *California Groundwater*. CA.gov, 10 Nov. 2015. Web. 12 Nov. 2015.