

Water and Power Scholarship Essay

Clean water and power availability is vital to everyone's daily life, and is something that is often overlooked. Many people tend to forget that not everyone has access to clean water and power everyday. There's been multiple disasters that caused people to lose access to clean water all over the world, including the United States. Events like the Minamata Disease, the Hinkley California groundwater contamination, and the Flint Water Crisis are all events that resulted in long term destruction of clean water and are places that are still in recovery. The improvement of STEM research is crucial so disasters like these can be avoided in order to increase clean water availability to all.

During the 1960s, a local utility company Pacific Gas & Electric in Hinkley, California, began to use a chemical called chromium 6 in order to prevent rusting in the pipes. Eventually, chromium 6 had found its way into Hinkley's underground water supply when dumped into the utility's company compressor station. Erin Brockovich, an environmental activist stated, "Everywhere I was going in this little community, somebody had asthma, a complaint of a chronic cough, recurring bronchitis, recurring rashes, unusual joint aches, nosebleeds." Residents were unknowingly using contaminated water that caused terrible health issues for more than 30 years. It wasn't till the late 1990s when the cause of the resident's symptoms became public, and a lawsuit was built against the Pacific Gas & and Electric Company. The Hinkley water crisis is a disaster that happened close to home and it took scientists a long time to find out the reasoning behind local residents having health concerns. As technology keeps improving, there will now be faster ways to find causes of issues involving safe water and electricity.

The United States Environmental Protection Agency has created laws like the Clean Water Act of 1972 and the Safe Drinking Water Act of 1974 to prevent events like the Hinkley

water crisis from occurring. The EPA set certain standards for drinking water and regulations from adding contaminants to the water supply. Public water systems are obligated to follow these rules and regulations in order to protect the public's health from using contaminated water.

Water is an essential resource where without it, it is impossible to survive. Many inhabitants in the US are still in need of complete plumbing resulting in 88.9% of the US population having access to potable water. With the help of STEM research, the percentage is estimated to rise by the year 2030 from 88.9% to 99.2%. Continuing to learn about previous water disasters is a way to learn how to avoid future problems. The Pasadena Water & Power Company makes it a priority for residents to feel comfortable knowing the water they're using is safe. The water in Pasadena is regularly tested and every year the water quality meets the guidelines. Local residents should feel immensely grateful to have a utility service that prioritizes STEM research and the safety of residents.

## Works Cited

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