

Clean Water: The Struggle for Earth

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What is the most effective method of rediscovering our self-reliance and health? How can we revert back into a self-sustainable society? How can a community develop a better relationship with the landscape, instead of just expending resources inefficiently? Green technology is a new field of research that has been used by different people around the world for centuries, yet it is hard to transition back to, for we are addicted to the insatiable methods of getting what we need by exhausting the resources around us. My ancestors were some of the best at living in a self-sustaining way, on k'iwinya'n (acorns), tohna:y (variety of fish), k'iLixun (deer), yine:taw (wild potatoes) and other indigenous plants in our area. Then the aftermath of contact forced us into an entirely new culture, a culture whose effects of surviving we watch and live every day. In order to restore equilibrium, we must get back in touch with sensible approaches through some thoughtful techniques and methods that incorporate the past, present, and future of our Earth and people.

According to American Indian Science and Engineering Society Engineer of the Year, Nancy Jackson, "American Indians own or have been entrusted 10 percent of the Nation's remaining resources-of immense importance, 27 percent being the nation's fresh and clean water" ("Address"). Considering that Native Americans own only one percent of their original lands, one would come to this cold hard fact; the current caretakers of our lands are not being efficient with its limited resources. We are more concerned about the dollar bill than with the health of the ground we live upon; this must change. Why not use this nation's wealth for something that will revolutionize our ways? It is not a new

concept to “go green,” yet society has trouble sacrificing a little profit for a healthier lifestyle. The ideas are out there, yet no one is willing to make the necessary steps that would make these ideas a well funded reality, at least until there is a danger that will set things into motion.

Sanitation is one of the biggest issues facing those more dependent on clean water sources to survive. Those living in poverty are greater affected by infected water sources than those with access to better sources. Damon and White, founders of water.org, state that, “The water & sanitation crisis claims more lives through disease than any war claims by guns.” They also state that, “Half of the world’s hospitalizations are due to water-related diseases,” and that roughly 63 percent of the people on Earth, “have access to improved sanitation” (“WaterFacts”).

One of the most basic and immediate places that everyone accesses water is the tap system set up in their home. Most of these tap water systems pull water from the wells in the ground, beneath their house. Houses also have a septic system located near this water source and this septic system, and depending on where one lives, can be a universal system or an individual leach field. Universal systems are better isolated and tend to keep water and soil sources around houses clean, but individual leach fields can contaminate drinking water sources with such harmful contaminants as “bacteria, nitrates, tracer quantities of toxic materials and salts”(Pederson). These contaminants are known to cause diseases like Hepatitis A, fuel parasites like Giardia and Cryptosporidium, and can cause E coli poisoning. On my reservation, almost everyone lives with an independent sewage tank and leach field and I have learned how harmful these tanks are to one’s well systems. My aunt cannot drink the water from her faucet because her water

tested positive for dangerous levels of E coli and lead. I was certain that she is not the only one in this situation so I pulled up the Hoopa Tribal Water Control Plan off of the internet. According to the document, “The only contaminant that affected a designated use...was the Total and Fecal Coliform found in surface waters and some wells...there is much concern over the potential impairment by contamination in soil working it’s way into sediments and water sources” (Norton 22).

As a young male pursuing a career in environmentally friendly engineering, I plan on returning from college to address the water quality and sewage issues affecting the lives of those in my community and those in similar situations. I want to design a water purifier that is affordable and very easy to access, or something that one can construct from the basic resources one finds at home. I would also like to design a universal sewage system that can be constructed within rural communities and can function on different elevations of terrain. My goal is to make a positive impact on the health and overall living conditions of not only the members of my tribe, but potentially for indigenous people all over the world.

Our planet is a finely tuned contraption; there are so many intricate gizmos that depend upon each other in order to perform a function. When parts go haywire, (by human intervention), the machine experiences a malfunction, and the contraption does not operate in balance. In order to restore balance, we must put in the time and effort to fix the problems and issues we’ve created. To do nothing would ensure that we do not care about what is left to future generations. The answer is green technology. The question is, are we ready to proceed forward with the preservation of our most valuable resource, or shall we descend further into this pit until there is no way out of it? The

words of Mohandas Gandhi, “Be the change that you want to see in the world,” inspire me to be an agent of change that not only benefits my tribe, my diverse local community, and denizens of the world; but the national resources critical to life for the planet.

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