Fighting for the Right to Safe Drinking Water

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by

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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In the United States, local drinking water quality varies widely, some water is considered unsafe. The American Community Survey of 2018 reported that 2,732,488 households did not have hot and cold running water. While this is slightly down from the 2,757,002 households in 2017, it is still a significant number of people (U.S. Census Bureau, 2020). These numbers only take into consideration the running water availability of households and says nothing about the accessibility of the homeless. Moreover, whether the water is safe is not taken into account either. The only factor is whether running water is available, no matter the state of the water.

Because water is essential, one would expect some governing body to guarantee safe access. The World Health Organization (WHO) produced guidelines for water quality, but it does not have the means to enforce them (WHO, 2017). The Environmental Protection Agency (EPA) leaves most regulation and enforcement to the states (EPA, 2020). Local governments must follow regulations, but some lower-income areas lack the resources necessary to provide safe water to everyone or to enforce regulations. In such cases, the state government should allocate resources to make sure that everyone has access to clean drinking water.

Unfortunately, the same reasons that the aforementioned organizations cannot fully make sure that everyone has safe access to water is the same reason that it would be hard to hold state governments accountable for doing so. Organizations all over the country are intensifying the advocacy. Local organizations in Flint, Michigan, Newark, New Jersey, and Washington, D.C., as well as national organizations helping multiple different cities and communities are fighting to prevent further infringement of the right to safe water.

Review of Research

The trend in drinking water related research seemed to be geared towards analyzing the link between tap water and bottled water. Some argued that it is a system involving both "the municipal water supply and the bottled water industry" (Gerstein, 2012) while others reported that it was more closely related to how people felt about their tap water and water providers (Miguel, 2006). There was also an interest in the effects of unsafe water on children (Bartlett, 2003) and low to middle income areas (Prüss-Ustün et al., 2016). While these articles provided needed input to mitigate health risks and potentially uncovered a problem with municipal water supply, they did not delve into any approaches for communities to fix the problem.

In 2019, DigDeep partnered with the US Water Alliance to tackle the ever-present question of how communities fit into the grand scheme of water safety (McGraw, Fox, 2019), but by this time there have been plenty of water crises that people were unprepared for. This actually helped the two organizations make a stronger case as they were able to perform case studies in areas where there was already great water insecurity. Besides the water access problems, the thing linking these communities is the support and advocacy of organizations fighting for the betterment of the situation. In each of the six case studies, it was documented that significant progress was made. This can be attributed to people coming together and speaking out which can be confirmed through looking at other communities that got together to advocate during their crisis as well as a community that seems not to have done so, or at least did not do it as well. DigDeep and US Water Alliance's research advertises the former, but it does not do well to avoid the confirmation bias of not providing the latter.

Flint, Michigan

One of the most well-known water crisis cases is that of Flint, Michigan. City officials decided to switch from using Delaware's water system in favor of using water from the Flint River. This switch took place in April 2014 and it did not take long before problems to surface. Despite citizens' complaints and concerns about the quality of water, officials insisted that there was nothing wrong with the water and it was fine to drink (Denchak, 2020). There was nothing being done to remedy the situation, so organizations stepped up to aid Flint in its struggle.

The Flint River was arguably already in bad shape before it was used as Flint's drinking water supply, but it is more of a priority to get it cleaned up now that people are ingesting it. The Flint River Watershed Coalition's mission is "partnering to protect, promote, and improve the Flint River and its watershed" (Flint River Watershed Coalition, n.d.) This coalition's website hosts information on Flint River and provides an alternative to the idea that the river was the source of the problem with its "#ITSNOTTHERIVER" statement. The coalition asserts that "the Flint River is a vibrant ecosystem that supports a growing population of species" and that it was "failure to properly treat the water, coupled with the failure for local, state, and federal agencies to take action" that caused the water crisis (Flint River Watershed Coalition, 2017). Armed with this information, citizens are able to decide whether they want to prioritize advocating for cleaning up the river or demand that water treatment quality is improved.

While The Flint River Watershed Coalition focuses much of its information on the Flint River, Flint Cares is providing a broad range of resources on the water crisis as a whole. From information on pipes and testing to questions about shower filter availability and if they work, Flint Cares aims to "provide Flint residents with the most accurate, up-to-date and trust worthy information regarding the water crisis" (Flint Cares, 2020a). The partnership also supplies times

and locations for meetings with officials so that people can get their voices heard (Flint Cares, 2020b).

The previously mentioned organizations are doing well to assemble readily available information, but other organizations were more interested in helping to "resolve scientific uncertainties associated with drinking water issues being reported" (Bill et al., n.d.). The Virginia Tech Research Team (TVTRT) was a group of volunteers from Virginia Tech who saw a more direct way that they could use its resources to help the community. The group did research not only to inform residents about what was in their water, but also to study what was happening in the pipes. By "empowering Flint residents and stakeholders with independent information about their tap water" and studying how Flint's water distribution system was affected by various elements, TVTRT hoped to "to inform decision making and policy considerations, if necessary, on the part of both citizens and government agencies" of Flint (Bill et al., n.d.). TVTRT added a source to the pool of information to be used when deciding what to advocate for in the case of citizens and when making sure the Flint Water Crisis does not happen again in the case of the government.

For some organizations, just providing the public with the tools to fight for themselves is not enough and a more active approach is taken. Clean Water Action makes it its mission to organize "strong grassroots groups and coalitions, and campaigns to elect environmental candidates and to solve environmental and community problems" (Clean Water Action, 2020). The organization wants to directly affect legislation in favor of protecting drinking water and the environment. The hard work paid off when they helped to implement "the nation's strongest state "lead and copper" rules in Michigan to keep lead out of contact with drinking water" in 2018 (Clean Water Action, 2019). In the same year, Clean Water Action "began organizing for a

strong Statewide Sanitary Code" to end the annual 9.4 billion gallons of sewage, caused by leaking septic systems, polluting Michigan waterways (Clean Water Action, 2019).

The "lead and copper" rules wasn't the first time that Flint celebrated a legal victory. In 2016, The American Civil Liberties Union (ACLU) of Michigan "filed a federal lawsuit against state and city officials seeking a court order requiring them to comply with the Safe Drinking Water Act" with the purpose of securing safe drinking water while the state and city replaced the lead pipes (ACLU of Michigan, n.d.). While it was not until 2017 that justice was served, the lawsuit culminated in a \$97 settlement involving a four-part plan for repairs including the state and city replacing "all lead and galvanized pipes throughout Flint in the next three years" and monitoring the tap water for lead (ACLU of Michigan, n.d.). The Flint residents did not bring this crisis upon themselves, and some organizations were willing and able to put their time and resources into fighting to make sure that Flint residents did not have to foot the bill for cleaning up someone else's mess. The ACLU of Michigan promised a diligent investigation and to "hold accountable those responsible for and urge swift and full resolution of this disaster" and they are delivering on that promise (ACLU of Michigan, 2020).

Flint received aid in a variety of ways as different organizations had different resources. Charles Stewart Mott Foundation does not employ workers to fight legal battles, rather it provides grants in an effort to "help our hometown of Flint solve problems, create opportunities and build a vibrant future for the community and its residents" (CSMF, n.d.a). From October of 2015 to September of 2016, the foundation supplied a \$4 million grant to "be used to pay the additional cost of purchasing Detroit water for the residents of Flint" alongside money from the state of Michigan and City of Flint (CSMF, n.d.b). This helped to provide water security for residents, but would not ultimately solve the problem. Charles Stewart Mott Foundation did its

part in finding a resolution by providing a \$100,000 grant "to support Virginia Polytechnic Institute and Marc Edwards to act as advisors on the sampling of water, ongoing issues related to water quality, and water infrastructure upgrades" in 2016 (CSMF, n.d.c). While the water quality information was in high demand, the foundation saw that in-depth exploration into the actual cause of the crisis was needed so that when the time came to replace pipes there was research and studies readily available for reference.

Newark, New Jersey

The EPA sets standards and regulations for how much lead and copper are allowed in tap water and action must be taken if samples show that this level has been exceeded. Because the EPA is a federal agency that regulates several different sectors across the nation, communities might not always see the swift resolution that they hope for. Despite violating the action level set in place by the Lead and Copper Rule and failing to meet deadlines to supply information to the New Jersey Department of Environmental Protection because of said violations, Newark did not hear from the EPA for two years concerning lead levels. It appears that Newark residents are on their own as even judges do not seem to see the dire state that they are in, but organizations are still fighting to end Newark's suffering (Anselm, B., 2020).

Regardless of the losses that have been endured in the past, some remain hopeful that they will be heard if they keep fighting and reaching out. With a goal of education and mobilization to demand clean water, Newark Water Coalition believes that it is "up to the residents to hold [our government] accountable" (Newark Water Coalition, n.d.). Previous cries for help have been shut down and ignored, so Newark Water Coalition is casting a wide net to garner support for the cause. It is "calling on our government stakeholders, healthcare providers,

faith and community-based organizations to make this public health crisis a priority." The coalition created a list of five demands including pipe replacement, treatment for those exposed to lead, testing of blood and water, and not paying for non-usable water (Newark Water Coalition, n.d.). Newark Water Coalition also urges residents to do their own research as that is the only way that people can ensure that they have and give accurate information.

Instead of just asking that, or demanding, the government do something, Jersey Water Works took it a step further and came up with a plan for what to do. It believes that "Every person in New Jersey deserves a safe, healthy environment that nurtures their full potential." and "lead exposure thwarts this basic goal" (Jersey Water Works, n.d.a). Because of this, it created the Lead in Drinking Water Task Force. This 30-member task force compiled a report, *Lead in Drinking Water: A Permanent Solution for New Jersey*, with a list of 19 recommendations, grouped into five actions, to take to virtually rid New Jersey of lead in water in 10 years (Jersey Water Works, 2019). These actions involve the replacement of pipes and ensuring water quality through rules and programs, with the first action being to "coordinate a state-level campaign for a lead-free New Jersey." The plan pays special attention to water quality in schools and child-care facilities (Jersey Water Works, 2019). Each member of the Lead in Drinking Water Task Force also submitted a list of public projects and programs that they were committed to doing, or planning, with the intention of helping to "advance the goal of drastically reducing lead in drinking water in New Jersey" (Jersey Water Works, n.d.b).

Clean Water Action is a national organization, so Michigan was not it's only focus. It aided Newark in its battle and helped neighborhoods "enroll to get their old lead service lines replaced and receive water filters to protect their tapwater in the interim" (Clean Water Action, 2019). While enrolling for a service does not guarantee that it will be done in a timely manner,

residents could rest easier knowing that the replacement would happen eventually as opposed to being completely in the dark. Similarly, providing water filters is only a band-aid fix for the real issue, but at least residents could remove some contamination while waiting for the pipe replacement. Although the aforementioned victories were probably not exactly what was hoped for in regards to lead, Clean Water Action "secured the nation's strongest drinking water standard for toxic PFAS chemicals, in New Jersey" in 2018 (Clean Water Action, 2019). Hopefully this will avert a PFAS crisis before one can even begin to occur.

Washington, D.C.

From 2000 to 2004, Washington, D.C., experienced lead levels that greatly exceeded the action level in water tested from home taps. According to the EPA, there are three likely contributors to the problem, starting in 1992, but the backed cause was "triggered by a change in disinfectant from free chlorine to chloramine in November 2000" (Edwards, 2009). This was thought to be the case by the person who the District of Columbia Water and Sewer Authority (WASA) funded to look into the lead level increase. Regardless of the cause, the people were suffering and something needed to be done.

Potomac Conservancy is "fighting to ensure the Potomac River boasts clean drinking water, healthy lands, and vibrant communities" (Potomac Conservancy, 2020a). Similarly, Potomac RiverKeepers Network works to "protect the public's right to clean water in our rivers and streams" and "stop pollution to promote safe drinking water, protect healthy river habitats, and enhance public use and enjoyment" (Potomac Riverkeepers Network, 2016). While these organizations are working hard to protect the river that provides drinking water to 5 million Washington, D.C, residents in the metro area (Potomac Conservancy, 2020b), the water crisis did

not start at the source. No matter how hard they work to preserve the integrity of the river, it will be in vain if the cause of the problem is not fixed.

Flint and Newark attracted enough attention to gain support from outside organizations which strengthened their fight and gave them the resources they needed to take legal action.

Considering Washington, D.C., had the earliest crisis of the three, maybe it will reevaluate the strategy after seeing the success of the other campaigns.

National Organizations

Flint, Michigan, Newark, New Jersey, and Washington, D.C., had severe water crises resulting in thousands of people being without safe drinking water, but the movement to secure safe drinking water can, and has, started well before a crisis ever occurs in some places. There are plenty of national organizations that are taking action in places with little to no need for immediate help.

Founded in December 1966, The Water Research Foundation was created with the mission of conducting research for the advancement of the water sector (Water Research Foundation, 2020a). Similar to The Virginia Tech Research Team, the intent is for the research to aid in determining the best course of action concerning the water sector and "ensuring water quality and improving water service to the public" (Water Research Foundation, 2020b). The website hosts all of the current and completed projects over a wide range of topics including advanced treatment and distribution system management, which were two of the big problems above-mentioned crises. While the information is only accessible through becoming a subscriber for a variable amount of money, the money goes towards current and future research which then becomes available to all subscribers. The website implies that subscriptions are not available to

the public, but only to those that manage facilities, but as long as the people who have the most power to implement the research have access to it, it can be put to good use. Unfortunately, this gives an advantage to the facilities that can afford the subscription to access the information, but the Water Research Foundation may allow wider access in the future.

Clean Water Action is one of the most valuable organizations in helping communities across the nation secure safe water. 2018 was a very busy year for Clean Water Action as it not only secured legal victories for Michigan and New Jersey, but Maryland as well. It won "strengthened rules to limit septic pollution and improve public notification of sewage wastewater overflows in Maryland" (Clean Water Action, 2019). Clean Water Action also took a stand on the oil and gas sector trying to infringe on water security. It "mobilized hundreds of thousands of Clean Water Voters in grassroots campaigns to push back against all the proposed Dirty Water rollbacks" (Clean Water Action, 2019). Dirty Water rollbacks referring to rollbacks resulting from the Navigable Waters Protection Rule, which Clean Water Action calls the "dirty Water Rule (Grinberg, 2019). Clean Water Action has organized and supported various communities across the nation in an effort to "keep our clean water laws strong and effective to protect water and health" (Clean Water Action, 2020). The annual report that it puts out with the Clean Water Fund details the work that it has done to make a difference.

Conclusion

It is well known that something that seems to be very important to one group may be less important to a group that is not directly affected or has different priorities. When managing and overseeing an entire state, sometimes things go unnoticed, fall through the cracks, or are generally put on the back burner. Other times, the conscious decision is made to ignore the

needs of the residents because there may be too much work involved, the community is so small that no outsider will ever know that they are being slighted, or some other illegitimate reason. In both cases, but especially the latter, the best course of action is to band together and gain as much traction as possible. This strengthens the cause and lends itself to the notion that the needs of the many outweigh the needs of the few, as the more people pressing a matter, the more important it will seem.

The cities impacted by water crises realized that they would be better suited in groups as opposed to individuals and made it happen. The more people fighting for a particular cause, the more opportunities there are for word to be spread. Once these communities garnered enough traction, it caught the attention of national organizations with access to bigger platforms and more resources. Ultimately, all of these organizations are working towards the same goal of safe drinking water for everyone, no matter the advocacy route taken. The cities that have not been impacted are at an advantage as they have the opportunity to nip any crises in the bud. When it comes to any unfavorable situation, prevention is easier than a cure and these cities already know what the struggle of curing a water crisis looks like.

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