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Paper 1: Public Management Failures in Flint Water Crisis

Responsibilities of the Governments and the Personnels in Flint Water Crisis

The Flint water crisis was a public management failure event sourced from historical contexts of demographic transition, infrastructure development, and enforcement failure. The federal and the local government were equally responsible for this calamity since they are both accountable in relative regulations from the legislative perspectives. The bounded rationality and underreach of the federal government, and the overreach of the local levels violate state and federal government policies in protecting public health and safety. The elected officials and their appointees should bear more responsibility in this crisis than public agency staff members since the decisive leadership in public management and communications between different levels of governments did not collaborate properly since staff were following leadership instructions.

Historical Background of Flint

The City of Flint was severely affected by policies that encouraged racial segregation. Even when Flint wasn't losing population, the City was unable to manage the water system well. With high industrial maintenance fees, poor, Black people in particular struggled to have clean water. Nonetheless, as nearby cities grew and the wealthiest moved out of town, Flint's population decreased sharply and the composition transformed dramatically; in 1923 more than 90% of the citizens were White people to 1967 over 57% composing of the Black. Fewer residents meant less taxes for public governance, and poorer inhabitants meant more

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social welfare expenses. While infrastructure fees like water remained as high as before, the City of Flint faced increasingly difficulties in public financing.¹

Financial Distress and Overreach of the Local in Water Management

Due to the decrease in the wealthy population and the reform of intergovernmental financial communications that reduced the proportions of money from the federal government and the state government in local governments' budget, Flint was unable to fulfill the legal requirements of maintaining water quality. Inadequate money was devoted to changing or updating pipelines, accumulating toxic elements to the drinking water. Water testing engineering were either hastily completed or remained incomplete, and thus the fact of water being unsafe for home usage remained unknown. Flint's local government overreached to hide the truth from its supervisory governments.

Local Flint residents were kept ignorant about the unsafe water although they had noticed some abnormal situations. Since lead in the water looked almost the same as clean water and copper water was slightly blue to green, both without a strong smell, people did not become aware of the polluted water not until they saw colored water from their taps. However, the local government remained dishonest in reporting the truth of mismanagement. It claimed that water became colored because it was stopped for a long time in the pipes under the empty houses, which were left by community members who had moved away. The

¹ Anna Clark. (July 2018.) The Poisoned City: Flint's Water and the American Urban Tragedy.

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government called for residents to flush the taps for a short amount of time every day to get the water moving, and to avoid colored water. Flint's local government, again, overreached to cheat the public and shut the public accountability system down.

Rationalized Policies and Underreach of the State and the Federal Government

The federal government did not start investigating and enforcing the City of Flint to follow the laws timely partially due to the nature of rationalized policies. Rationalized policies that were raised in favor of balancing cost-benefits of a policy program while simultaneously minimizing financial burden constrained the engagement of the public in public affairs. The law was more tolerant of toxic material containment than residents. While research showed that lead and copper are extremely toxic elements and that even a fairly small amount would result in chronic and non-reversible organ damage, the regulations kept stating tolerance of looser criteria: even if an amount of content over the upper limits was detected, the corrective action would not be triggered until more than 10% of the sampled service area is affected.²

Another reason for the federal government's delay was the underreach failure of public management. By regulation, the hierarchy mechanism of supervising drinking water quality starts from localities which were required to examine and report results to the states. The states will read through the results while also submitting them to the federal government. If

² Sara Hughes. (2020.) Flint, Michigan, and the Politics of Safe Drinking Water in the United States. Cambridge University Press. Doi: 10.1017/S153759272000136X.

any of the hierarchical agencies is unable to complete its supervision, the enforcement system should be provoked to act. The City failed to submit required reports to the state government and the federal government; meanwhile, both the state and the federal government remained silent in enforcing the obligations of the local government, which kept the mistake rolling.

Strengths and Weaknesses of the Plymouth 2021 and the Washington, D.C. 2022

Drinking Water Reports

The City of Plymouth 2021 drinking water report is organized as follows: an introduction, sharing of results, vulnerability disclaimers, treatment procedure, and customer obligations to protect drinking water. While the testing results are placed in the first section of the report, allowing readers to quickly obtain information they are looking for, and the report is kept short, it lacks further information about the water provider, infrastructure and maintenance, and the approachability basis becomes weaker as more links are inserted.³ On the contrary, Washington, D.C.'s 2022 drinking water quality report is twice as long as Plymouth's, but contains detailed information from water providers, treatment processing, testing results, vulnerabilities, to visualized water source. Examination results of regulated contaminants are in the last section of the report, which readers will not be able to reach efficiently until they scroll or flip to the last part of it.⁴

³ City of Plymouth. (2021.) Plymouth 2021 Drinking Water Report.

⁴ De water is life. (2022.) Washington, D.C. 2022 Drinking Water Quality Report. Retrieved on Feb 13, 2023 from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.dewater.com/sites/default/files/documents/2022_CR_FINAL_4.pdf.

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Weaknesses in the Plymouth 2021 drinking water report include sources of water and treatment procedures, sampling error in testing, and approachableness of elements in the tables. Washington, D.C. 2022 drinking water quality report presents as an example of improvement for the City of Plymouth.

Water Source and Treatment

Given the concerns for safe, clean water, the City of Plymouth should include water treatment process in layman terms to their consumers. Water Source is visualized as a highlighted map in the first few sections in contents of the D.C. report, following by graphics and texts illustrating mechanism and procedure of how homes used tap water is treated. Water source was not clearly revealed in the Plymouth's report. Although some disclosures are made regarding ways to deal with lead in water, house tap water treatment is not mentioned. The burden seems to be transferred from the water provider to households, who have neither tools nor techniques in examining degree of water cleanness. To correct this and increase public trust, including understandable information about water treatment process and techniques may be effective.

Concern of Sampling Error

Both the Plymouth 2021 drinking water report and the Washington D.C. 2022 drinking water quality report lack description about sampling. The claimed-to-be qualified percentage of households can be manipulated by controlling for the sampling process. While identifiable

sampling data should be stored confidentially, it is essential to describe sampling measurements so that the accuracy and generalizability of the results can be re-examined.

Typical Sources

Techniques of the typical sources in the last column of testing result tables in both reports may not be approachable to the public. The header is too brief for people outside of the testing or reporting agencies to catch the meanings. However, the Washington, D.C. 2022 report has a more approachable header, “Description/Typical Sources of Contaminants,” which is helpful in recognizing the reports. For both reports to be more readable, adding notations explaining the typical sources and degree of cautiousness of the regulated contaminants may be feasible.

Recommendations on Reforming of the Federal Government

The United States deploys a decentralized executive government, where the states and the localities are in charge of the initial steps of implementation, and the federal government is limited to setting criteria and being notified of the results at some points. Usually, the highly diverse demographic composition, historical background, and environmental conditions indicate the need of localized management instead of unified in terms of public administration. However, the need to clean and safe water does not vary person by person. Furthermore, thresholds of infrastructure for high quality of drinking water also share low differences. The common demands and consensus that citizens share regarding water quality

imply the responsibility of the federal government as an advanced resource management and allocation agency in monitoring water quality, frequency of water testing, usage of hardware device and techniques, and supporting financial needs of each state or county. Specifically, I recommend that the federal government should explicitly prioritize the public's worries of safe drinking water, strengthen its supervision of the process of drinking water accordingly to restore public trust, build upon current regulations regarding scientifically tolerable values of lead and copper in water, and gather more taxes from the state government for water system management.

Limiting toleration to water quality

The Flint water crisis has revealed two primary lessons: that scientific considerations alone failed to provide safe water to drink and use to the public, and that states and localities are not good at self-regulation / regulating themselves.⁵ While the federal government has already published the upper limits of lead and copper in water and times of water examination, these are the compromise between minimizing damage to human beings in the long term and saving the most money. The values are not accepted by the civics, who wish to utilize almost unpolluted tap water, to be protected of their rights of living, and to save money on buying bottle water, and the state and local governments are not actively following the rules. The federal government should align their missions with the public by being more

⁵ Sara Hughes. (2020.) Flint, Michigan, and the Politics of Safe Drinking Water in the United States. Cambridge University Press. Doi: 10.1017/S153759272000136X.

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proactive in adjusting current values of polluted in water to stricter limitation, randomly spot testing water, and triggering the fining process. With these reforms, the public is possibly more willing to trust the federal government of compiling their needs and wishes.

Increasing Financial Support

Financial reform is another step that the federal government should take. According to Sara Hughes (2020), local government in the State of Michigan suffered from a decrease in revenues and an increase in debts due to financial distress from the state government.

Intergovernmental spending between the State of Michigan and the federal government has also been decreasing. While the federal government has delegated the state and the local governments in multiple legislation and policy implementation, and thus step back in providing fundings, it should increase the amount of public budget offering to local government on water management because it has become unaffordable to the local governments. With the financial support, it is reasonable for the federal government to supervise the local government frequently and strictly. More financial support in improving the safety of water and less tolerant regulations regarding water quality could increase the likelihood that the United States would effectively manage the grand challenge of assuring safe and sustainable water systems for coming generations.