To: Jackie Ordway, Instructor of ENGL 379 Technical Writing

From: Dylan Fisk, Student

Subject: A Report on the Feasibility of Writing and Submitting a Proposal to Seek Funding for Public Outreach and Home Water Filter Distribution for the Greater Springfield Area

Date: October 30, 2024

Purpose:

The purpose of this memo is to outline a potential project to inform and assist the public of the greater Springfield area with the mitigation of water quality-related health concerns in the time leading up to the completion of new water filtration infrastructure, and analyze the feasibility of composing and submitting a grant proposal for this project by the deadline provided.

Summary:

The potential grant proposal being outlined in this memo would ask to host information sessions and provide free home water filters for the residents of the towns and cities serviced by the Springfield Water and Sewer Commission in order to mitigate the effects of haloacetic acids (HAA5) on residents' health during the time it takes for the new West Parish Water Treatment Plant to be completed (projected to be finished in September of 2028). The level of HAA5 present in the drinking water of the greater Springfield area has been found to be in violation of the regulations set by the state and federal government. HAA5, a disinfectant byproduct, has been known to be a possible carcinogen to humans and pose special risk to children and pregnant individuals, so its abundant presence in the drinking water of over 230,000 people is a cause for

concern. While the Springfield Water and Sewer Commission has already begun work on water treatment infrastructure that will address this issue in the long term, its estimated completion date of September 2028 leaves the situation untended for the nearly four years left until it is functional. The project I would like to develop will step into this gap by informing the public of the risks their home drinking water poses and providing them with practical means to mitigate their HAA5 intake. To do this, the project will involve hosting public information sessions that double as distribution hubs for home water filters. Put together, these efforts will help provide the necessary education and a practical solution for water quality concerns until the treatment infrastructure is finished. I still have a lot of the specific details to work out, such as the cost of the filters and information session space, staff, and materials, as well as the timeline of the project. Considering what steps still need to be taken, I overall believe that I could feasibly create a grant proposal for this project by the deadline.

Background:

Water is one of the most necessary components of our survival, and for many, this precious resource comes most often straight out of their home's tap; "Every day, more than six million Bay Staters turn on the tap and take a drink of water from a public water supply."[1] Therefore, it follows that many people rely on the fact that their tap water is safe from contaminants that may harm their health.

However, this is not always so. In the case of the cities and towns serviced by the Springfield Water and Sewer Commission, an issue concerning a possibly harmful contaminant has come to light. Agawam (a suburb of Springfield) recently published their 2023 Annual Water Quality

[1] "Safe Drinking Water in Massachusetts." Massachusetts Department of Environmental Protection, 2024, https://www.mass.gov/info-details/safe-drinking-water-in-massachusetts

Report, which has revealed the presence of a quantity of certain disinfectant byproducts (dbps) that exceeds the health regulations of the state and federal government. These specific dbps are known as haloacetic acids (HAA5), and according to the Report, "some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer."[2] Research has also shown that very young children and individuals who are pregnant are especially at risk for the adverse effects of HAA5 in drinking water.[3] Therefore, there is a very evident health risk to the continual consumption of water contaminated with the abundant quantities of HAA5 that are present in the water distributed by the Springfield Water and Sewer Commission.

The Commission has publicly recognized the exceedent level of HAA5 and issued a notification to residents affected by it. However, their communication takes the approach of a non-emergency notification, focusing its attention on the claim that "there's no immediate health risk."[4] While this claim is true, it fails to communicate the long term dangers associated with HAA5 exposure. Fortunately, despite this claim, the Commission has moved forward with plans to construct a new water treatment plant, with hopes of finishing up construction around September 2028. While this new treatment plant will address the water contamination in the future, the Commission neglects to take any significant steps in mitigating the potential health risks posed by the water contamination in the nearly four years until their new infrastructure is completed.

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[2] "Annual Water Quality Report." Town of Agawam Department of Public Works, 2023, https://www.agawam.ma.us/DocumentCenter/View/2990/CCR-2023

[3] "Haloacetic Acids In Drinking Water Information for Consumers." Massachusetts Department of Environmental Protection, 2022, https://www.mass.gov/doc/factsheet-haloacetic-acids-in-drinking-water-information-for-consumers/download

[4] Shook, Ashley & Torres, Melissa. "High levels of haloacetic acids used to disinfect Springfield's drinking water detected." WWLP, October 26, 2023, https://www.wwlp.com/news/local-news/hampden-county/high-levels-of-chemical-used-to-disinfect-springfields-drinking-water-detected/

I would like to propose a two part process that would serve to lower the water quality-related health risks faced by the residents of the towns and cities served by the Springfield Water and Sewer Commission until construction of the new water treatment plant is completed. Some specific components of this process that I am considering are as follows;

- I would like to host public information sessions in each of the five towns that have all or most of their tap water serviced by the Springfield Water and Sewer Commission, those being Springfield, Ludlow, Agawam, Longmeadow, and East Longmeadow. I would like to host at least one but ideally multiple sessions per town, depending on cost, space availability, and staff. I still would need to figure out the aforementioned logistics and potential locations within each town to host these sessions.

- I would like the information sessions to, at the very least, have a speaker who would prepare material with the purpose of educating the lay people of these towns on the dangers of their water contaminants and ways to mitigate these dangers. Each individual who shows up to the information session would be given a handout to leave with, summarizing the speaker's most important takeaways.

- At the same time, I would like these sessions to be the primary location where complimentary home water filters would be distributed. I still need to figure out exactly what form these would take, but they would likely be either filtered pitchers or dispensers, both of which can be filled using tap water and can be conveniently stored in a refrigerator. The filters used would be activated carbon filters, which have been shown to effectively reduce the quantity of HAA5.[5] These would allow an entire household access to drinking water specifically filtered in a way that targets the contaminant of

[5] "Haloacetic Acids in Drinking Water | Health Risks." Life Ionizers, 2012, https://www.lifeionizers.com/blog/water-pollution-haloacetic-acids/

concern while not costing them more than the tap water they would have already been using. Ideally, these filtered products would be limited to one per household, yet I would have to figure out how and how seriously this policy is to be upheld.

- To obtain these water filters at a more reasonable price, I would like to appeal to one of the production companies (such as Brita) to potentially enter into a partnership of some sort. The details on this are very blurry right now, but the goal would be to cut costs on the water filters themselves as much as possible by potentially taking on a sponsorship or coming to some type of mutually beneficial agreement. I have not yet researched whether or not this is a possibility, but it is within my scope for this project, so I would like to spend some time reaching out to companies to see if this would be a possibility.

- I would like the information sessions to be widely advertised in public spaces, primarily utilizing printed flyers and social media outreach. These flyers and social media posts should advertise both the information provided in the session as well as the availability of free water filters for those who attend. This notion will hopefully act as a draw for people to come to these sessions.

- After all of the sessions have been completed, I would like to establish a set location for water filter distribution to continue. This location has not been chosen yet, but I would like it to be a space that is easily accessible to the public of each town. I would like new advertisements to be posted, sharing this location and the promise of free water filters. Each water filter distributed from this central location would have the handout from the information session enclosed to ensure that as many people as possible are aware of the importance of filtering their water. Not only would this help further spread awareness, but

would also allow those unable or unwilling to attend the information sessions to receive free water filters for their household.

- To measure the effectiveness of this project, I would like to use a mixture of assessments and quantitative statistics. The assessments (such as anonymous surveys or social media engagement) would focus on analyzing how successful the information sessions were at reaching and influencing the residents of these five towns. The quantitative data would come from the amount of water filters distributed and how the statistics of their distribution align with the information session timeline.

Considering all of these specifics, which I will continue to refine during the process of developing my grant proposal, I believe that the two part process of information sessions and water filter distribution would best serve to address the water quality-related health risks at a practical level until infrastructure development is completed.

I intend to approach this project from the angle of the Clean Water Fund, a nonprofit organization dedicated to "protect[ing] clean water from the watershed to the water tap."[6] I believe my project fits into the scope of their mission of outreach and education towards "drinkable water for all,"[7] since my project will not only educate but take direct action to provide clean drinking water for the greater Springfield community.

To fund this project, I intend to appeal to the United States Environmental Protection Agency's Drinking Water State Revolving Fund (DWSRF), a program which provides funding to projects which "eliminate or mitigate a risk to public health" and "achieve or maintain compliance with

[6] "Our Priorities: Water." Clean Water Fund, 2024, https://cleanwaterfund.org/our-priorities/water
[7] "Giving to Clean Water Fund." Clean Water Fund, 2024, https://cleanwaterfund.org/support-us/giving-clean-water-fund

applicable drinking water quality requirements", among other criteria.[8] I believe the project I am proposing fits this bill and would therefore be eligible for the funding provided by the DWSRF. I am willing to further research other options for funding, however, my initial study came up with very little other results, so I will likely continue forward with the EPA's DWSRF.

That all being said, there are still some final details that I would need to research before I can create my grant proposal. After finalizing the foundation I am appealing for funding, I would need to finish researching the best option for mass distribution of home water filters. Finishing this research as well as calculating the cost and creating the timeline for information sessions would allow me to create the budget for this project, a crucial next step in the grant process. While there is still much research to be done, I feel as though I have made great strides in defining the scope of the project and establishing the initial ideas, and as such, I believe that with the proper dedication and time management, I would be able to finish this grant proposal by the end of the semester. I envision myself finishing up the required research and finalizing the project's details by the end of Thanksgiving break at the very latest, leaving me with a couple of weeks to compose the proposal. This semester, I seem to have a lighter load of final papers and projects that could steal my attention, leaving me with a decent amount of time to dedicate to finishing this up by the end of the semester as long as I am willing to be disciplined in my working on it in small chunks until then.

Conclusion:

I could feasibly create a grant proposal for a two part project of information sessions and water filter distribution to mitigate water quality-related health risks in the greater Springfield area by

[8] Massachusetts Department of Environmental Protection. "Drinking Water State Revolving Fund (SRF) Program." Mass.gov, 2022, https://www.mass.gov/info-details/drinking-water-state-revolving-fund-srf-program

the end of the semester. Though I lack the specific expertise related to mass outreach and water quality awareness issues, I trust my ability to do the required research to educate myself sufficiently to design a project as outlined above. Once I have established the specifics of my project, I believe my numerous experiences as an academic writer will help me compose the grant proposal quickly and effectively. My passion for the greater Springfield community–my home for the almost twenty years I have been alive–will no doubt fuel my passion in designing and completing this proposal on time.

Works Cited

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