



# Ripple Effects

*Photos and Writing on Issues  
of Water and Culture*



By Students of  
Tshwane University of Technology, South Africa  
Aalto University, Finland  
University of Louisville, USA



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# Introduction

Helsinki, Finland, Pretoria, South Africa, and Louisville, United States, are thousands of miles apart, separated by oceans, continents, climates, and cultural differences. Yet, across these differences, water is an essential element in all our lives. Water is an essential resource for life. Water is also a political and social issue and is deeply embedded as part of culture and identity. Our experiences with water across cultures and locations offer ways we can see differences in place, environment, and culture, but also how we can see what is similar both in our challenges and our celebrations. Grounded in the belief that learning about the experiences and thoughts of others across cultures, help us understand more about the world and how our own students understood themselves within this world, we began this project.

The essays in this book resulted from a project created for students to investigate issues of nature and climate change as a physical and cultural experience, both in their communities and with peers in other countries. As teachers, we wanted to provide opportunities for students to learn about local places across cultures that help them more clearly imagine the global scope of climate change. Toward that end, we asked the students in our three courses - a science-writing course for engineers in Finland, an environmental management course for science students in South Africa, and two professional and public writing courses in the US, to create photo and writing essays around issues of water designed to identify and explore ideas and issues around water in their local environments . The students then read and responded to the essays from their peers in other countries. We hoped this photo and writing essay project would offer students the chance to explore crucial ideas and issues around water security in their communities and within the larger natural ecosystem. Furthermore, to identify how differences in culture and discipline shape the same multimodal essays in other parts of the world. This project took place in the second half of 2025 at Tshwane University of Technology in Pretoria, South Africa; Aalto University, located in Espoo, Finland, and the University of Louisville, in Louisville, USA.

The project draws on the ideas and processes of Ripple Effects International, a photo and writing initiative focused on issues of sustainability and culture in which people can share images and writing that capture their experiences, insights, research, and feelings related to water resources and other aspects of the natural environment. Around the world, issues around water resources are critical issues that have an impact on health, culture, and sustainable development and Ripple Effects International is a way for people to reflect on and learn about these issues from around the world. Ripple Effects International was co-founded by Bronwyn and Mary Brydon-Miller at the University of Louisville and has included global projects ranging from primary and secondary school children to community groups. Following their introduction to the project, both Nicole and Cathy recommended adapting it for university students, prompting this tri-nations collaboration. The first Ripple Effects collaboration took place in the first half of 2025 and resulted in our first book of student essays, which can also be found on the Ripple Effects International site. During the project, Tryphina Mashishi, an Environmental Science Lecturer at Tshwane University of Technology, and Narjis Sherafati, a PhD student at the University of Louisville, joined the project team.

In this book, you will see how young people perceive and understand the environmental challenges they encounter within their everyday lives, as well as the solace and pleasure they find in the natural world. The images and the words will offer insights into the distinctive cultural differences between the three countries, and commonalities that show how life on the other side of the world is often similar in quite unexpected ways. The essays show how the distinctive places we inhabit influence understandings of environmental issues and climate change. Finally, the essays show the power of “multimodal” work, of using both images and words, to provide a more nuanced and complex understanding of culture and nature than could be expressed in just words or images alone.

We want to thank all the students who participated in this project for granting us insights into their world. We also want to thank Dr Sarah Strickley for support in publishing this ebook, Mary Brydon-Miller for her ongoing support and advice, and Emily Baird for help with the design of the ebook.

If you are interested in taking part in a Ripple Effects International project or in using the process in your school or community setting, please visit the website:

<https://rippleeffectsinternational.org/>

**We hope you enjoy this work.**

Dr Catherine Dzerefos, Tshwane University of Technology, South Africa

Dr Nicole Ivarsson-Keng, Aalto University, Finland

Dr Bronwyn T. Williams, University of Louisville, USA

# Aalto University, Espoo, Finland

The students engaging in this project were mostly the final year undergraduate students in the field of STEM (Science, Technology, Engineering and Mathematics) at Aalto University, Finland. Students were enrolled in the English language course “Communicating Technology,” which introduces written and oral communication principles and strategies that are applicable to professional and academic purposes. Students are expected to apply these strategies and elements in oral presentations and writing to present information clearly to a non-expert audience. The class was taught by Dr. Nicole Ivarsson-Keng. <https://www.aalto.fi/en>



# Drought in Kevo Natural Park

Hermann Lohi, Aalto University



*Figure 1: Gaskkamuš Njaggaleapmi, Utsjoki, Kevo. Photographer: Hermann Lohi*

I come from Southern Lapland, a city of Rovaniemi, and I've always been fascinated by Lapland's nature. Along the years, I've been hiking and enjoying the nature all over it; from the northernmost parts of Finnish Lapland to the most Eastern and Western parts of it. Especially I've enjoyed the waters of Lapland: The barren shores of tranquil lakes, the streams of wide rivers, and the crystal-clear water of fell brooks. Lapland is especially famous for the latter: brooks with such clean water that it is completely potable. These have even been a source of clean water for Lappish people for centuries, and still today, they serve the thousands of hikers and campers around Lapland. Pictured here and throughout the essay, is the natural park of Kevo, in Utsjoki, Northern Lapland, which I visited a year ago. The lake in the picture, Gaskkamuš Njaggaleapmi, is one of the most beautiful ones I have ever visited.



*Figure 2: A fell brook in Kevo. Photographer: Saana Lohi*

Here we have an image of a fell brook, photographed by my wife Saana. This, I think, is a perfect image to convey the feeling of Lapland's nature. The tinkle of a brook in calm, modest surroundings is the perfect way to calm your nerves. This, as are many other gifts of nature, is facing environmental threats today.



*Figure 3: Effects of drought. Photographer: Hermann Lohi*

This is a pond in the same natural park in Kevo. As we can see, the pond is almost

completely dried. The summer we visited the natural park had been exceptionally warm and had seen one of the longest periods of temperature continuously being at least 25 degrees Celsius (77 F) in the daytime in Lapland. This was clearly seen in Kevo. Before the hike, the official natural park sites reminded the hikers to carry more water than usual, since many of the brooks had dried. Kevo natural park does not have any running water or wells: the only sources of potable water are the brooks. Fortunately, they are exceptionally plentiful here, so we didn't run into problems regarding drinking water. We did, however, cross many, many dried brooks that were marked on a map, and probably many more which were unmapped.



*Figure 4: A pond in Kevo. Photographer: Saana Lohi*

In the picture, there is another pond that dried significantly in the summer. The effect is not as big as in the smaller pond, since this is a much larger one, but the amount of water dried is probably much more in this one. The primary cause of the droughts is, of course, unusually high temperatures caused mostly by climate warming. That is a global issue, affecting every single country, but it also causes a plethora of local issues. The threat here is not a major one, compared to more extreme cases in many other places, but it is something that I have personally seen and something that is important for me.

*Civil engineering student at Aalto University. I come from Rovaniemi, Lapland, and currently trying my best to survive in a bigger city. I like hiking and reading.*

# Water as Part of Identity

Kaisa Takala, Aalto University

In Finland, water is more than just a natural resource – it is a part of our culture. The thousands of lakes and rivers in Finland are a part of all four seasons, and they even influence the hobbies people spend their free time doing. Moreover, water is a vital resource for the most well-known Finnish traditions, including saunas and ice dipping, which are an essential part of Finnish identity.



*Tampere, Finland, January 14th, 2025, photo: Kaisa Takala*

The photo above shows a frozen lake next to a public sauna in Tampere, Finland. For Finns, sauna is not only a place to wash themselves, but also to relax and forget everything else. Combining sauna with a dip in the freezing water is a tradition that may seem strange to foreigners, but it is deeply a part of our culture. Exposing ourselves to these extreme temperatures feels liberating, since it wakes the body and clears the mind. For me, ice dipping after the heat of sauna creates a sense of resilience and determination. Ice dipping also reflects how Finns adapt to the changing seasons by transforming cold winters into new methods for well-being. However, climate change makes the winters warmer year by year, so having frozen lakes for the whole wintertime is not always guaranteed.



*Lapland, Finland, June 17th, 2025, photo: Kaisa Takala*

The second photo represents a common Finnish hobby, orienteering in the forest. Orienteering is a sport where water is always present, as ponds and ditches can be used as important landmarks for identifying the location of checkpoints. Sometimes water is an obstacle, as wet swamps might be frustrating to cross, and slippery stones can be dangerous to walk on without proper orienteering shoes. However, water-related landmarks are easy to spot from the orienteering map due to their blue color, which helps orienteers navigate through forests even in challenging terrains. This has taught me to respect water as both a challenge and an efficient guide. It also makes me think about the responsibilities that the organizers of orienteering events have, since they have to make sure to protect these environments and ensure that the ecosystems of the water areas remain sustainable.



*Pyynikki, Tampere, Finland, September 20th, 2025, photo: Kaisa Takala*

The third photo shows an example of a public swimming hall, which are common in Finland. Public swimming pools can be seen as a way to improve people's health and promote an active lifestyle for all. Cities fund these swimming halls to ensure that swimming stays relatively cheap for citizens and therefore enables exercise opportunities for everyone. Accessible swimming opportunities are also essential for the national Finnish curriculum: swimming lessons held in swimming halls are mandatory for children, so that everyone has adequate swimming skills after elementary school. In addition, many parents encourage their children to attend swimming schools, where they often learn to swim even before starting first grade. I also did, and being in contact with water from such a young age has definitely shaped how comfortable I feel in water today. That makes me feel grateful for both my parents and the Finnish society for having access to safe and clean swimming pools all year round.

*Collector of simple joys*

# When Water Shapes the Way of Life

Fanny Forsman, Aalto University

I spent much of my childhood in the Finnish archipelago, more specifically on an island called Replot. Surrounded by water, one could not avoid its influence on daily life and identity. Some of its beauty is, however, now under threat as climate change raises water temperatures.



*Picture 1: Boats were once the main form of transportation. This is me out at sea, several years ago. The picture was taken by Pierre Forsman in Replot, Finland (date unknown).*

Replot was for a long time separated from the mainland, meaning that boat was the main form of transportation. Picture 1 is from when I was little, on the way home by boat from my grandparents' house. The sea always brings back good memories and boating used to be one of my favourite things. By then, boats were no longer the primary way of transportation, but still a viable option. Today, boats are owned by almost every family on the island, as there are places that cannot be reached in any other way.

Water and sea offer a great variety of nourishment, which is why the fishing industry used to be one of the main employers on Replot. Many of my relatives were fishermen and some worked with the manufacture of fishing gear, such as nets. A ferry connection to the island was established in 1952 and a bridge was built in 1997, making it easier to travel over to the neighboring city of Vaasa [1]. This is the bridge seen in picture number two. The connection

allowed more people to find work on the mainland, meaning that the fishing industry diminished.

Today, many like myself go out to sea to relax or to catch fish for leisure. Considering the time spent at sea, learning to swim was a crucial part of my childhood. I'm thankful for the availability of clean water I had growing up. In recent summers, the quality of water has worsened due to rising temperatures. Algae thrive in these conditions, affecting both water quality and marine species negatively. It could additionally mean loss of many fish species, impacting the fishing industry, which remains important to Replot and its economy.



**Picture 2:** *The Replot Bridge, connecting the island to the mainland, used to be the longest bridge of Finland until 2025 when a longer bridge was built in Helsinki. Picture taken by Fanny Forsman in 2022*



**Picture 3:** Snow-covered ice in January 2024, captured by Fanny Forsman

Fishing doesn't necessarily end in the wintertime, when the sea gets coated with a layer of ice. The ice serves as a bridge itself, allowing walking, skiing, ice skating and multiple other forms of movement over the sea. It also allows animals, like wolves and deer to travel between the landmasses. Picture 3 shows the ice- and snow-covered sea, marked by footsteps of both humans and animals who have departed from the shore. Global warming has, however, made the winters milder and ice thickness thinner, meaning that moving on ice is becoming even more dangerous and limits doing so for both animals and people.

The archipelago holds a special place in my heart, and I could hardly imagine living someplace without access to sea and water. My hope for the future is that coming generations also get to experience swimming in healthy water, fishing out at sea and doing activities on ice like me in my childhood.

References:

[1] "Replot kyrkbys historia" [online]. Available:  
<https://www.korsholmsskargard.fi/index.php?toCID=139&sprak=swe>

*My name is Fanny Forsman and I'm majoring in Civil Engineering at Aalto University. Nature has always been important to me and I am hoping to one day tackle some of the environmental issues through my future career in construction.*

# The Shifting Shoreline

Alvin Ekelund, Aalto University



*High water at the shoreline in Nauvo, Finnish Archipelago. Photo: Alvin Ekelund, October 2025.*

The Finnish Archipelago is most often peaceful, with a steady rhythm of wind and sea. Yet in October this year, a strong southwest storm raised the water several tens of centimeters above its normal level. Trees standing safely on dry land normally were suddenly surrounded by water, and the shore where I had walked the day before was gone.

For people living or spending time by the sea, these shifts are part of everyday life. The coastline is never fully fixed, it breathes with the weather. What surprised me was not the storm itself but how fast the change happened and how visible it became. Within hours, the landscape had rearranged itself.



*Stormwater collecting by the shore. Photo: Alvin Ekelund, October 2025.*

Near our Sauna, water flowed over the grass and gathered in small pools. The blue rain barrel, normally half empty, almost overflowed with rainwater. The old well (behind the blue barrel) was partially in water. It was a small but clear reminder that everything at the shoreline is connected: rain, groundwater, and the sea meet in one system.



*Boathouse during the storm, Nauvo. Photo: Alvin Ekelund, October 2025.*

The boathouse stood firmly, but the water nearly reached its floor. Built decades ago, it has endured countless autumn storms, yet seeing the waves reach so high felt unusual. These buildings are part of the archipelago's rhythm: they are placed low and built light because they are meant to live with the water, not fight it.

When the wind calmed, the sea slowly withdrew. The shore reappeared almost unchanged, but branches and seaweed were left tangled along the waterline, forming a quiet record of how far the sea had advanced. Watching that shift made me think about how this same movement is happening elsewhere on a much larger scale.

Around the world, coastlines are slowly being redrawn as sea levels rise. The changes here in the Baltic are often counterbalanced by land uplift. Yet globally, the direction is one-way. The sea is advancing, sometimes by a few millimeters a year, but with effects that accumulate over decades. In many regions, water is now reaching places once thought safe: farmland turning saline, harbors requiring new infrastructure, and low-lying neighborhoods facing permanent flooding. These are gradual transformations rather than sudden events, but they carry the same logic I saw that day in Nauvo. Water extends its reach quietly, without urgency, yet with persistence that leaves little room for reversal.

Standing by the boathouse, it was difficult to imagine that slow change while everything around me seemed still. But the momentary flooding offered a glimpse of what such a future might look like, familiar places redefined by just a small shift in level. What was temporary in this case is already permanent somewhere else.



*The shoreline in calm weather, Nauvo, Finnish Archipelago. Photo: Alvin Ekelund, December 2024.*

Reference: <https://sealevel.nasa.gov/understanding-sea-level/key-indicators/global-mean->

[sea-level/?utm\\_source=chatgpt.com](#)

*Industrial Engineering & Management student at Aalto University. I like sports and technology.*

# The Journey of Becoming Water Itself

Humans are said to be sixty percent water. But do we ever possess the marvelous skills water does or at least learn its lessons in our lives ?



To a four year old Bengali boy, this bridge was something of a big weird abnormality. Since how could it comfortably hold the weight of tens of thousands of vehicles everyday while looking so fragile and only made from straight lines.

But beyond this paradox, what truly amazed this little boy were the glowing reflections of the bridge lights on the Hooghly river surface. In fact, he was so curious that once while on the bank, he jumped into the river to try to catch the glowing lights. But alas, he didn't know how to swim and was later saved by his parents.

*This is the famous Howrah bridge, placed above the Hooghly river in Kolkata, West Bengal (India). Photo was taken by Aditya Mukherjee, sometime in 2011.*

But then his parents thought of enrolling him into a nearby river swimming club instead of a normal swimming pool since it's much harder to swim in the harsh river currents, especially at the young age of four years old.

This would later sculpt the following years of the kid since when he realized he absolutely hated to swim in areas where he couldn't see anything, he promised himself that he would live to see each and every corner of the world before being blinded by age, body, or mentality.



Two years later, the boy still had an amateur sense of exploration and would often get lost from his parents due to running off to check out new areas and places.

While traveling in Europe, he encountered Rotterdam's Nieuwe Maas, linking curiosity of the eyes to curiosity of the brain.

The reason why the Nieuwe Maas river induced curiosity was due to the fact that it was once the lifeline and cradle of the new Rotterdam city after World War 2 bombings, due to letting major shipping containers carry humanitarian aid.

*This is a picture of the Nieuwe Maas river in front of the Witte Huis building in Rotterdam, Netherlands. Picture was taken by Aditya Mukherjee, sometime in 2013.*



*This is a picture of the Sindh river flowing near the “Zero Point” in Sonmarg, Kashmir (India). Picture was taken by Aditya Mukherjee, sometime in 2021.*

The four year old little boy had now grown up to be a teen of fourteen years old and was mature enough to perfectly answer the age old question “Do you like the beach more or the mountains more ?” He would confidently reply “Both” as he had now seen true beauty of both mountains and oceans.

Even though he was old enough to be expected to not do any stupid things, he had an immaculate urge to just dip in the near zero Celsius cold water and swim along the course of the river like an enormous real life water slide.

But when exploring the mountains, he came to know of his second promise to himself. It was to never settle in one place as he envied the birds and wanted to fly down the tall mountains and never land down.



*This is a picture of sunset viewed from the Suomenlinna sea fortress, in the Gulf of Finland. Photo was taken by Aditya Mukherjee, on 16<sup>th</sup> October, 2025.*

The boy then started to realize the marvelous nature of water, as it had made him become like water itself; ever-flowing, balanced and ever-adapting. And thus, to protect his and humanity's identity, he must protect the waterways from pollution.

**“Flow like water” – ‘The Vagabond’ Miyamoto Musashi, The Book of Five Rings**

*Student of BSc in Quantum Technology at Aalto University. Really not much to say as I got a lecture starting in 5 minutes so thank you and have a nice day/week/weekend lol*

# Positives and Negatives of the Waters Close to Me

Susanna Uitto, Aalto University

I have always loved large natural bodies of water, since they bring a sort of perspective to life with their size and power to influence things like the weather. The place where I live has a stream flowing through the courtyard, and I think it's very pretty, especially in the spring, when the melting snow fills the stream with fresh water. You can see a picture of the stream below. It's quite a nice addition to the courtyard, even if it's autumn now and the nature surrounding it is a bit more barren.



*October 31<sup>st</sup>, 2025. Espoo, Finland. Taken by Susanna Uitto*

My university campus is very close to the Baltic Sea, and as someone who has grown up only around lakes, it's a nice change. There's a photo of the sea below, showcasing its beauty and serenity during a summer sunset. The sea, even if it looks similar, is very different to the lakes I know since the waves, and wind, are usually a lot more powerful. The sea is lovely, and I've spent many good summer days boating and swimming on the coast.



*July 9<sup>th</sup>, 2025. Espoo, Finland. Taken by Susanna Uitto*

The beauty in these water bodies is often dampened when you look a bit closer. The stream has trash, either floating in it or stuck to the bottom, or the water is murky and has soapy residue, which you can also see in the first picture, floating on the top from catchment areas surrounding the stream. The seashore has either trash or cyanobacteria floating near the shore during the summer, as you can see in the photo below. The cyanobacteria are poisonous, so you can't swim when these large blooms get carried from the open sea onto the coast during the summer.



*June 28<sup>th</sup>, 2025. Espoo, Finland. Taken by Tapio Häivä (hs.fi)*

Fresh, clean water is something Finns are so accustomed to that we sometimes forget that our actions do affect their health. Large amounts of cyanobacteria, like in the photo above, is a very grim example of human influence in the Baltic Sea, since human activity in the Baltic Sea has made its growth explode. Physical and chemical waste also ends up in our waters due to people not knowing or not caring about the impacts of littering and polluting. This waste causes eutrophication and does harm to the environment and wildlife. Educating people and holding companies accountable on the harmful effects of littering and polluting helps our waters stay healthy, so that generations to come can also enjoy clean waters like we do.

Sources:

<https://www.hs.fi/pkseutu/art-2000010528852.html>

*I'm a civil engineering student from Aalto University. In my free time I love reading, swimming and hanging out with my friends. I also love nature, and I'm happy to live in a place where it's respected.*

# History of Regulations on Nutrient Discharges into the Baltic Sea

Nikola Borissov, Aalto University

This essay will discuss the environmental policies Finland has employed to deal with the serious problem of eutrophication (algal bloom) in the Baltic Sea. Governmental policies and regulation regarding water discharge are the most impactful in that regard. Such regulations emerged in the sixties. Let us focus on the success story of Helsinki first.

Back then sludge filtration was handled in many facilities and only 25% was purified (in Finland as a whole) before entering the sea. But due to the new regulations they had to be replaced with modern, centralized systems. Suomenoja Wastewater Treatment Plant (WWTP) in Espoo was the first step in that direction but the plant still operated alongside 11 others. It removed nitrogen(N) and phosphorus(P) (the main factors contributing to algal bloom) using mechanical, chemical and biological technologies. This WWTP however, was still insufficient and it was not until 1994 when a centralized system with a bigger plant as its engine called-Viikinmäki- was designed. [1,2,3]

It processed more than 100 million cubic meters of wastewater annually, removing about 95% of solids and phosphorus and 50% of nitrogen — impressive figures for that time. The plant was built as an environmental project. However, it requires constant heat (36–37°C) and significant electricity to power pumps and centrifuges. This would have made it very unsustainable if it weren't for the collection of biogas (in this case 65% methane and 35% CO<sub>2</sub>) which allowed the WWTP to produce its own heat and 65% of the necessary electricity. [2]

These two facilities functioned together and kept being upgraded until 2023 when Blominmäki WWTP was finished. It almost completely replaced the outdated Suomenoja and is currently working alongside Viikinmäki. Due to modern technologies the two stations are able to remove 98% of phosphorus and 90% of nitrogen from the water. Even with this high efficiency, new optimization technologies are still being developed. Two examples are the “*Nitrogen and phosphorus harvesting from liquid waste using membrane*” [5] and the “Digital twin” [4].

The results of the efforts of Helsinki to minimize its nutrient (nitrogen and phosphorus) load are perfectly reflected in the fact that I couldn't find any signs of eutrophication. In my search I only found traces of the old sewage system which is not currently in use. That is what the pictures below depict - clean water near a powerplant and abandoned pipes that used to pump unpurified water into the sea.



*Hanasaari Power Plant Coodinates 60.17872 24.96752  
Photo by Nikola Borissov*



*Hanasaari Power Plant Coordinates 60.16460 24.87601  
Photo by Nikola Borissov*

This is not unique to Helsinki; other urban regions show similar efforts to prevent the issue of eutrophication. This is however where the good news ends. A large share of the N&P load of the country is carried through rivers and the amount of riverine contaminant has barely decreased, if at all since 1995. Furthermore the 2013 goals for annual reduction of 118 000t N and 15 200t P could not be realistically met by the 2021 deadline. In spite of the reduction in the paper and pulp

industries some rivers' N&P load even increased. This is largely due to the usage of more or more potent fertilizers in agricultural activities. [6]

To conclude, Finland's environmental efforts have been great especially considering the high standards that the country set for itself. But they have not accounted for all the factors contributing to the problem of eutrophication and the government should consider redistributing funds in such a way as to address riverine "contamination" in the Baltic Sea.

These are not strict citations but rather sources. I have shown more or less where the information in each paragraph is found for simplicity.

1-[The most powerful wastewater treatment plant in the Nordic countries built on MuniFin's green finance](#)

2-[Water Management in Helsinki](#)

3- [Finland projects](#)

4-[Development of a digital twin for carbon neutrality](#)

5-[Nitrogen and phosphorus harvesting from liquid waste using membrane](#)

6-[Nutrient export from Finnish rivers into the Baltic Sea has not decreased despite water protection measures](#)

*I am a Quantum Technology student at Aalto university, from Bulgaria. And I believe properly targeted policies are as vital as new technologies for solving any given global crisis.*

# Tshwane University of Technology Pretoria, South Africa

In South Africa, the photo essay assignment was completed by students pursuing a Diploma in Environmental Science at the Tshwane University of Technology, in Pretoria. These students are mainly from outlying rural provinces where the dominant languages are sePedi, Tswana, Tshivenda, Shangaan and Zulu. The assignment allows for acknowledgement of Indigenous Knowledge and is designed for enhancing awareness on water issues in an urban and rural setting while also improving communication skills in English. The classes were taught by Dr Catherine Dzerefos. <https://www.tut.ac.za/>



# Crisis of Water Pollution and Its Impact on Health and Dignity in South Africa, Particularly on Vulnerable Communities

Naniki Maria Succes, Tshwane University of Technology



*Figure 1: A well-captured picture showing a concrete drainage ditch built stronger to prevent floods, called Lion bridge, filled with stagnant, polluted water, plastic bottles, plastic bags, located at Stanza Bopape Street (Church Street), Arcadia, Pretoria, 0001, on 23 July 2025, 12:51 p.m. It is the oldest existing bridge over the Apies River and replaced an older bridge called Arcadia Bridge [Photographer: Mononela Naniki].*

This image underscores how water pollution is an environmental crisis, a public health emergency, and a violation of dignity, particularly affecting vulnerable communities in South Africa. Plastic pollution impacts our lives by contaminating our water supplies, leading to health risks in my community. I hope for a future where our environment is no longer choked by plastic waste, communities are clean, and healthy people do not suffer because of where they are born. I need people to know that when you are poor, it doesn't mean you must suffer, so this image is a call to my audience to improve our waste disposal practices, support green infrastructure, and create more sustainable urban and rural environments.



*Figure 2: A picture showing agricultural activities that lead to water pollution as they use fertilisers, taking place in Ga-Mothombeki village, Modjadjiskloof, Limpopo province in South Africa on 10 August 2025(12:25 pm). The coordinate of the place is given by 23,53701° S, 30,37721°E [Photographer: Mononela Naniki].*

This picture simply means that what we put on the land eventually ends up in our water, it is not about blaming farmers, but it is about creating systems that support both food production and environmental health. This image relates to the topic as it shows how hidden sources of water pollution, like agricultural runoff, can become a visible crisis in the lives of the poor. It impacts me not just because of what it shows, but because of what it means for people and our planet's future. Pushes me to ask hard questions as women fetch water from contaminated rivers, and families get sick from diseases that are 100% preventable with clean water. I hope for a future where this image becomes a symbol of what we have overcome, not what we have ignored, where clean water is guaranteed for every human being, regardless of where they live. I want my audience to see not just water coming from

agriculture, but the urgent need for clean water, because protecting water is protecting life and human dignity.



*Figure 3: A well-captured photograph showing the overflowing of sewage that contains wastewater from households and businesses near a mall called Sunny Park, located around the corner of Steve Biko Street and Robert Sobukwe Street in Sunnyside, Pretoria, 0002, on 23 July 2025, 1:10 pm [photographer: Mononela Naniki].*

Burst pipes are leaking, causing water to surface and pool near people's houses, and this is a symptom of systemic neglect. It sends a message that certain areas or communities around us are being overlooked. This image is not just about burst pipes of sewage, but it is

a symbol of the broader crisis facing South Africa, which includes water pollution and failing infrastructure that intersect to harm the health and dignity of the most vulnerable. When sewage overflows, this can be a sign that drinking water might be unsafe, and children could get sick from playing near contaminated areas. I hope every person in South Africa, regardless of being poor or rich, has access to safe and reliable sanitation. Audience must know that clean environments must become a right, not a privilege.

*I am Naniki and a student of environmental science of TUT. I like to do everything with self confidence.*

# Living with Water Challenges in Hammanskraal

Leeane Shilaluke, Tshwane University of Technology

Growing up in Hammanskraal, water has always been part of my daily life, but it has also been one of our biggest struggles. The photo below shows people lining up to collect water from a single communal tap. This is a normal scene in my community because clean, safe drinking water is not always available in our homes. In 2023, Hammanskraal experienced a cholera outbreak linked to poor water treatment (Evans, 2023). This crisis showed how serious the water problem has become.

This issue matters to me personally because it affects my family every day. We often wake up early to fetch water, sometimes standing in long queues for hours. At home, we store water in buckets and drums just in case the taps run dry. These experiences have changed how we live – from how we cook and clean to how much water we use.

Water shortages also harm the environment around us. Some nearby rivers are polluted with waste, making them unsafe for people, animals, and plants. When there's no clean water, diseases like cholera spread quickly, putting everyone's health at risk. It's painful knowing that something as essential as water can bring sickness instead of life.

Despite these challenges, I remain hopeful for change. I dream of a future where every household in Hammanskraal has access to safe, running water. I believe that with better wastewater treatment plants, regular water testing, and stronger community awareness, this problem can be solved.

Through this photo essay, I want students in the USA and Finland to understand that water is not just a resource – it is life itself. Many communities in South Africa still struggle daily for clean water. I hope sharing my experience will create awareness and encourage solutions for water safety and sustainability worldwide



Figure 1: Community members collecting water from a communal tap in Hammanskraal, South Africa (Photo: Muvhumbie 19 July 2025)



Figure 2 Polluted river with visible waste near Hammanskraal, making it unsafe for use (Photo: Muvhumbie , 20 July 2025).



*Figure 3 Water delivery truck distributing water to residents during shortages (Photo: Muvhumbie Vee, 21 July 2025)*

*Environmental enthusiast from South Africa. I enjoy expressing my thoughts through creative writing and exploring ideas that inspire positive change . I love exploring the outdoors, observing plants and animals, and learning how everything in the environment connects.*

# Water in My Life and Environment

Modipa Rethabile, Tshwane University of Technology

## Background

Lions Bridge it's a well-known historical site, which was designed by Sytze Weirda, later opened by President Kruger in 1894. The bridge is famous for its large, sculpted lion statues at either end, which give it its name. It is found in Pretoria, Arcadia, Church Street. It spans the Apies River and connects the southern part of Pretoria to the city centre. The lion statues are a prominent feature, and the bridge itself is considered an important architectural landmark in the city.

I believe that initially when the bridge was built, it was well-maintained and it was in a good condition, the water was clean, there were no papers, plastics and all the dirt that has been thrown into the bridge. Due to neglect the bridge ended up being in the state that is found in today, the aging infrastructure, the dirty river because of the things that are thrown into the river and on the ground where they end up floating into the river.

*Images showing the current state of Lions Bridge, looking at the river conditions. Modipa Rethabile. Location: Church street, Pretoria, Arcadia (Lions Bridge). 28/07/2025*



The conditions of the Lions Bridge are not good and are disappointing, looking at:

1. **Water Quality and Ecosystems:** Looking at the bridge's conditions, this could affect the surrounding ecosystems. A deteriorating bridge might release contaminants into the water, plants, and even affecting the quality of drinking water downstream.
2. **Climate change:** The trash that is thrown into the river and getting compacted will cause climate change because of the greenhouse gases that will be released from the trash to the atmosphere, thus cause hot temperatures than normal.
  - The pictures' relation to the topic is because of the state of pictures are, aging infrastructure was being used without constant monitoring hence it can be in a similar condition to the one we had a falling bridge due to the negligence of its caretakers.
  - Its impact on my life is me relying on this bridge for traveling, its condition directly affects my safety. A deteriorating bridge poses a risk of accidents, whether it's a small fall, structural collapse, or simply getting stuck in traffic due to repairs or closures.
  - My hope is, I likely hope that Lions Bridge will be restored in a way that respects both its historical significance and the principles of environmental sustainability. This means using green materials, sustainable construction practices, and climate-adaptive strategies to ensure the bridge lasts for decades without further harming the environment.
  - I would like my audience to know that there was an environmental degradation: When bridges deteriorate, they can cause runoff, pollution and habitat disruption. Rusting metal, decaying concrete and chemicals can leach into the surrounding water or soil and harming ecosystems. A bridge in poor condition can accelerate erosion in rivers or shorelines, leading to greater habitat destruction.

*I appreciate the engagement with students from other countries, because that grew an interest in me to know more on how people from other countries live and we can learn to keep our land clean as they do.*

# Water scarcity in South Africa and what impacts it has on human life (water the main source of living.)

Sethole Khohlisane Aaminah, Tshwane University of Technology



*Picture 1: This image shows how people in South Africa fetch water, taken by Sethole Khohlisane on the 9<sup>th</sup> of August 2025 at Botlokwa village in Limpopo*

Where I am from we use this method to fetch water for our daily needs. This method of fetching water is very hard because we must fetch water at a far place and the number of tanks used to store the water is small and can't sustain everyone in the community. I hope that the municipality will provide more water tanks. I want my audience to know that in some place there is lack of infrastructure.



*Picture 2: This image shows how lack of infrastructure and unequal access to water affect people and was taken by Sethole Khohlisane on the 18 April 2025 around Pretoria.*

In water-scarce communities, many people place buckets, bowls, or large jars at the roof gutter to allow water to fill them. This is a terrible experience because there is a lot of dirt, which in my case led to one of my neighbors being admitted for drinking contaminated water. People are forced to collect multiple containers from an informal source rather than getting water from a convenient tap in their homes. I hope for the government to help the community in building water infrastructure.



*Picture 3: An image of water being polluted by people near the surrounding area, shot on the 3<sup>rd</sup> of April 2025 by Sethole Khohlisane around Pretoria Marabastard .*

Though it is known that in South Africa we are facing water problems other thing that contributes to the problem is water pollution. The polluted state of the water is adirect form of water scarcity. Water scarcity isn't just about lack of water but also about lack of usable water. I hope that we could fight water pollution . My audience should know that though the water is flowing but due to it being pollutant is of no use.



*Picture: 4 This is an image of a water well taken at Kwa-Zulu-Natal by Nkosenhle Mthethwa on the 23 of July 2025. This shows how people in the rural side of KZN at Nongoma village fetch their water.*

A well can be very helpful in providing water and the water is much more clean than the ones from boreholes, but the problem we are facing is that the as much water is drawn from the well it lowers the water tables and can cause other water wells to dry up, and in many cases wells are connected to the streams and rivers thus too much drainage will cause the streams to lose flows and this will have a bad impact on the animal. My wish is that people less water from the well to avoid it being dry.Wells helps in emergencies.



*Figure 5: This image shows a tap that has been dry for a few days and it also shows that the tap is not in a good shape, shot by Sethole Khohlisane around 9<sup>th</sup> August 2025 at Botlokwa village in Limpopo.*

Since we live in a rural area and must travel a considerable distance to obtain water for our daily needs, the presence of a local tap in my community is crucial. It is difficult to survive in the community because of the tap's issues with water shortages; we can go up to a week without seeing a drop of water. The fact that taps are outside shows that water is scarce. I hope for a future where this image becomes a part of history not a contemporary reality.

*Dynamite comes in small packages meaning a person despite being small or unimposing, can possess great power, energy, or impact.*

# Pollution in the Apies River, Pretoria

Nelisiwe Leburu, Tshwane University of Technology



*Portion of a polluted part of the Apies River having pollutants such as plastic and general waste, Pretoria 0002, Stanza Bopape Street 10 August 2025, Photographer: Nelisiwe Leburu*



*10 AUGUST 2025, Photographer: Nelisiwe Leburu*



10 AUGUST 2025, *Photographer: Nelisiwe Leburu*

I took these photos while standing on a bridge over the Apies River in Pretoria. The first thing that caught my eye was the colour of the water, it looked dark and dirty, with foam floating in some parts including smell. Along the banks rubbish is scattered everywhere. There are plastic bottles, wrappers, and other waste tangled in the weeds. Some small plants are growing in cracks of the concrete walls, which shows how little maintenance this area gets.

These pictures say a lot about how we treat our rivers. The Apies River is part of Pretoria's history and runs through the city, but it looks more like a drain than a natural water source. Instead of fresh, clean water, it carries litter, stormwater, and probably waste from nearby areas. I pass by this river often and I notice that more and more rubbish is building up. It's hard to accept that this place was once healthy. When I see it like this it makes me realize how much water we take for granted.

For me it's not just about the environment, it's also about health. If this pollution continues, it could lead to outbreaks of waterborne diseases like cholera. We've already seen what happened in Hammanskraal, and I wouldn't want that to happen in Pretoria or somewhere else.

I think we need to start seeing rivers as valuable, not dumping sites. Cleaning up the Apies River would need teamwork from the government, local businesses, and the community. Simple things like putting more bins in public spaces, organizing regular clean-up day, and teaching people about the impact of littering could make a big difference. Schools could also give lessons or projects about looking after our water sources, so young people grow up understanding how important it is. Reporting illegal dumping, could also add up to a big improvement over time.

With these photos, I want people to see what's really happening to our rivers. Even if someone doesn't live here, they should know that water pollution affects everyone in some way. If we keep polluting, we all lose, but if we protect our rivers, we can make our cities healthier, more

beautiful, and better for future generations. I hope people who see these photos will feel motivated to take part in cleaning campaigns or at least make sure their rubbish never ends up in rivers.

*I am Nelisiwe Leburu, a dedicated student who values education, growth, and creativity. I'm passionate about making a difference through my studies and inspiring others to believe in their potential. My goal is to contribute positively to my community and the world around me.*

# Polluted Water in the City of Pretoria in Tshwane

Molopa Ramothwala, Tshwane University of Technology



*Picture by :Molopa. This is a picture of a polluted water dumped in ZEILER street in Pretoria West (In Pretoria , Gauteng, South Africa*

When heavy rains fall, the blocked stream quickly overflows .Instead of channelling stormwater away, it spills dirty, foul-smelling water onto the street. This dumped water has been turned into a dumping area by people who live in the residence and the ones doing businesses near that pond. And its very risky because young children living in that area can play in that pond and get hurt ,because they dump many things in there and some of them might be harmful like broken bottles ,and many more harmful objects.



*Picture by : Molopa . This is a picture of flowing water on the river at ZEILER street in Pretoria West.(In Pretoria ,Gauteng, South Africa*

Beyond the immediate nuisance, the pollution here poses serious environmental risks. Waste and toxins from the dumped materials are carried downstream into larger water systems like the Apies River and Bon Accord Dam, both of which feed into local water



(Picture by Molopa)

Despite community outcry and pressure on the city of Tshwane , interventions have so far been temporary. The municipality has deployed teams to clear blockages and installed a large bin in hopes of discouraging dumping, but the

hub of the issue remains unresolved-waste continues to reaccumulate , exacerbated by nearby street mechanics and low enforcement of by-laws.



(Picture by: Molopa)

Here`s another picture capturing the water way along ZEILER street Pretoria West( Petoria, Gauteng, South Africa). It illustrate how the canal has become clogged with litter and debris, significantly impeding the flow of water.

This neglected drainage channel has become a serious environmental and public health concern. Residents in the area report seeing everything from plastic, cardboard and rotten food to nappies, broken electronics and even dead animals lining the banks and blocking the flow-turning the canal into a disturbing dumping ground rather than a functioning waterway.

The consequences are especially pronounced during heavy rainfall. The blockage causes the water to overflow from the canal, releasing foul-smelling, debris-laden floodwaters onto adjacent roads. These conditions endanger both vehicles and pedestrains, compromise road safety, and even damage local

infrastructure. As one resident remarked , when it rained cars could not pass properly, with splashed, dirty water and broken bottles turning everyday movement into hazardous activity.

Long-term neglect has seem this canal devolve into a hotspot for crime. Overgrown grass and silted water offer hiding spots for criminals, while the unsanitary conditions create a breeding ground for disease. One resident-alongstanding local in the area lamented that despite repeated complaints to metro authorities, clean up efforts remain superficial and the dumping continues unabated.



## Water in My Life and Environment

Protecting clean canals from the rising of the rising tide of water pollution.

Melissa A Dlaku, Tshwane  
University of Technology

## Pollution in the Walkerspruit Canal: Effects on Water Life and Solutions

The Walkerspruit Canal is in Sunnyside, Pretoria, South Africa. Today, it has become very polluted and is causing serious environmental problems. Tests done on the canal water it has been found five times that there are high levels of harmful metals such as palladium (Pd), cadmium (Cd), and zinc (Zn). These metals are dangerous to both water animals and humans.

Even a small amount of cadmium or zinc can be harmful. Cadmium builds up in fish and frogs, causing kidney problems, bone damage, and trouble with reproduction. Zinc is okay in very small amounts, but too much can stop important body processes in water animals and slow their growth. Palladium, although not well-studied in water, can harm how cells make energy and cause stress in fish and other creatures.

These metals are found in the canal because of:

- Illegal dumping of rubbish
- Chemicals from factories
- Poor waste control, especially when city workers go on strike and trash isn't collected
- Pollution that fly into the canals

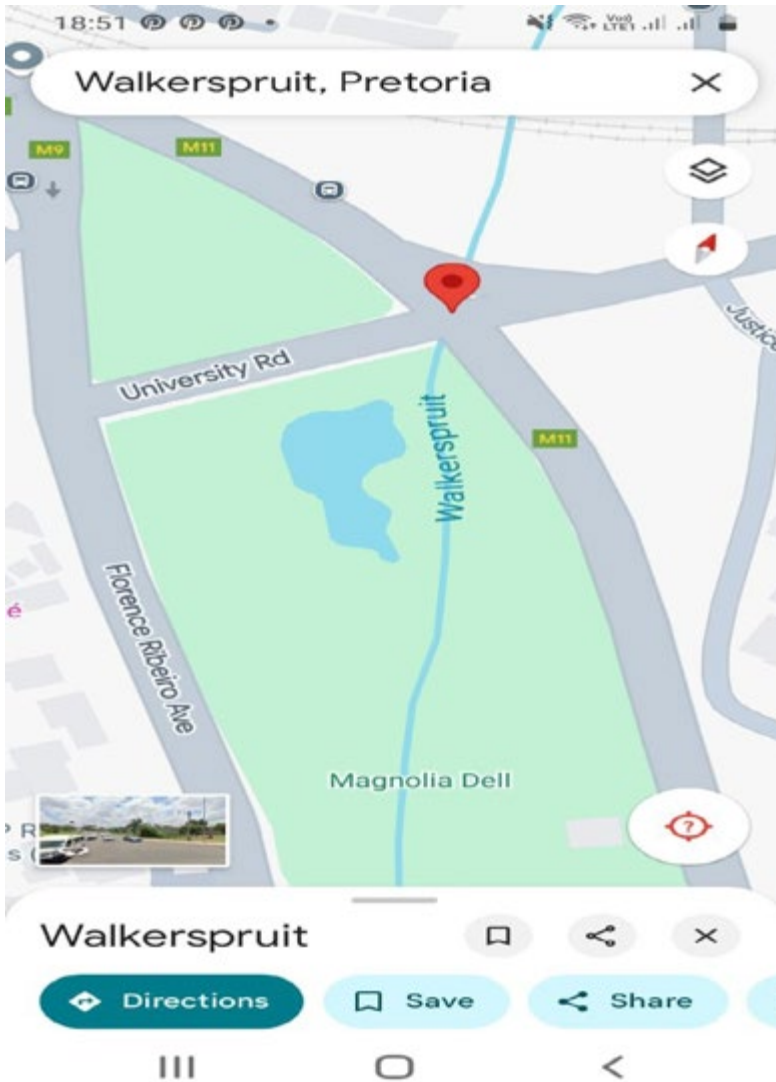
During these times, some buildings even threw their waste straight into the canal (Rekord, 2023). The canal's water animals are suffering. The dirty mud at the bottom of the canal also kills small animals that live there and stops nutrients from cycling, which can lead to the death of the whole ecosystem. Humans are also at risk. People who bath with the water especially the homeless or collect water from the canal can be harmed. Cadmium in water has been linked to tai-itai disease a painful bone sickness first found in Japan. Too much zinc can make people feel sick or weak, and palladium might cause allergies or breathing problems.

### How to Fix the Problem

Some groups have already started helping. A volunteer group called ASEZ WAO has done clean-up projects to remove trash and teach people about the problem (ShowMe Pretoria, 2023). But more needs to be done:

- Check water quality often to catch pollution early
- Build natural filters or wetland areas to clean the water
- Enforce laws about where people and factories can dump waste
- Teach communities how to take care of their environment
- Work with universities and the city to design systems that stop polluted water from reaching the canal

In short, the Walkerspruit Canal shows how urban pollution can hurt nature. We must all work together to protect water life from metal pollution, because this is a global issue, not just a local one.



*Figure 1: It shows a map to the walkers spruit bridge it is found in Pretoria. The Walker Spruit in Waterkloof and Nieuw Muckleneuk, winds its way down to Magnolia Dell and Sunnyside and confluences with the Apies River at Lions Bridge in Stanza Bopape(Church) Street. 8 August 2024 (photo: Melissa A Dlaku)*



*Figure 2: The picture shows a clear pollution around the water flow river of the Walkers Spruit river. This cause unpleasant smell and may cause waterborne diseases to the students living around and Muapa Naga police station workers. Taken in Sunnyside 32 Steve Biko road 5 August 2024. (photo: Melissa A Dlaku)*



*Figure 3: A canal chocked with plastic waste and dirt threatning the environment and animals. The contaminants flows down the Walkers spruit river, blocking the drainage system of the canal too much accumulation of plastic, papers and sweets . Taken 6 August 2025,(Photo: Melissa A Dlaku)*



*Figure 4: The Walker Spruit river binds with the Apies river in Lions Bridge. This is clearly a run off from the waste of the city down to the canal causing water pollution. The water pollution is carried through out from Sunnyside down to Arcadia it doesn't get any better. A canal beauty lost, overwhelmed by humanity's neglect Taken on the 10<sup>th</sup> of August , 2025. (Photo: Melissa A Dlaku)*



*Figure 5: Maybe if the grass that gets cut by the side of the road and the rubbish gets picked up, and more bins are distributed maybe things could be better. It is clear plastic waste and dirt suffocate the environment. This is the surrounding of the Lions Bridge. Taken 10 August 2025(photo: Melissa A Dlaku)*

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Rekord. (2023). Volunteers gather to clean Walkerspruit. \[online] Available at: [https://www.citizen.co.za/rekord/news-headlines/2023/11/12/volunteers-gather-to-clean-walkerspruit](https://www.citizen.co.za/rekord/news-headlines/2023/11/12/volunteers-gather-to-clean-walkerspruit) \[Accessed 7 Aug. 2025].

ShowMe Pretoria. (2023). Cleanup Initiative at Walkerspruit Canal and Surround. \[online] Available at: [https://showme.co.za/pretoria/showme-cares/environmentconservation/cleanup-initiative-at-walkerspruit-canal-and-surround](https://showme.co.za/pretoria/showme-cares/environmentconservation/cleanup-initiative-at-walkerspruit-canal-and-surround) \[Accessed 7 Aug. 2025].

# Water in My Life and Environment

Masedi MR, Tshwane University of Technology

## Water Pollution

One of the major problems in my area, which is significantly increasing year by year, is water pollution. Researchers have reportedly found that approximately 46% of the water in the county is polluted due to the manufacturing of goods, industrial activities, and other sources that discharge water into the public environment ([tinyurl.com/35w4ufet](https://tinyurl.com/35w4ufet)).

In this assignment, the main idea is to evaluate what causes water pollution in the environment.



*This is an example of water pollution from the Apies River, which shows the waste disposed of by the community into the river as it flows through, along with the waste. Captured on 27 July 2025, the river that flows along 4 Rissik St, Sunnyside, Pretoria, in South Africa. [Photo by: MASEDI MR]*



*One of the examples of waste from the disposal of water being polluted by companies along the roadside, where they dispose of their water mixed with waste from substances and chemicals. Captured on 27 July 2025, the Apies River from the bridge on 357 Jeff Masemola St, Pretoria Central, Pretoria, 0002, South Africa. [Photo by: MASEDI MR]*

What I have realized is that this causes us as human beings to inhale polluted air, as this waste begins to form bacteria when it mixes with water. This is not good for me and for everyone in the environment. It is becoming clear that it affects our immune system, and as time passes, it may lead to breathing difficulties. And it causes stress when thinking about the future generation, which will be too costly for them to live in a clean environment, as we damage the one they are also supposed to live in.

This correlates with the topic, as the littering of waste is disposed of into the river, causing water pollution. The combination of waste and water causes various diseases that harm the environment. Visually, the consequences of various human activities and natural processes that contaminate water bodies make them unsafe for human use and harmful to the environment.

Water pollution leads to health issues and disruption to the food chain, diseases like cholera and typhoid, and also affects recreational activities and tourists due to the unhealthy conditions in the environment. Water pollution disrupts ecosystems and ultimately affects the availability of food and resources for us humans. It can lead to a variety of illnesses, contaminate our drinking water and food sources, and disrupt ecosystems.

I hope that in the future, people will be able to see the importance of water and minimize polluting water by dumping waste into the rivers, as it affects the water, aquatic animals, and even other animals, as they depend on this water. It is a source of life, even though we don't drink it directly, it sustains the trees and animals we eat, without realizing that they depend on the water we pollute every time.

We must stand together as a nation to defend and protect our health and that of the upcoming generation. For us to live in a better environment and for everyone to be proud. We must do it now and save our health and our upcoming generation.

*Am Mmatlou, a first year student in Tshwane University of Technology studying Environmental science.*

# Water Pollution

Mapoulo Kgothatso, Tshwane University of Technology



*South Africa, Johannesburg Vanderbijlpark, 09 August 2025 taken by Mapoulo K  
Concrete lined channel filled with water and significant amounts of litter and debris.*

This picture shows an undeveloped area which may be neglected one. This means that 90% of pollution it is caused by neglect of people who don't know the consequences that comes with dirty. It has also affected the trees around as some of them are dry it might be because of the detrimental things that the rubbish contained.

## Relation of the topic.

This image relates to the topic as it shows a polluted waterway .There are contamination and neglect Water contains trash, debris, murky, water which suggest that water is polluted. Even the water has change its colour to greenish it might because of the chemicals which shows huge signs of pollutions.

## How does it impact life.

Contaminated water may lead to public health issues for communities without good water sanitation as some are going to you for household purpose. Which it can leads to waterborne disease, Cholera and many more. It also affects life of plants as it contains chemicals that can kill sensitive plants.

## Hope for the future.

Improved waste management to stop trash and debris getting into the waterway. Waste water treatment to prevent pollution before it gets discharge in the environment. Community engagement for maintaining a clean environment as its everyone's job to take care of environment.

## Message to the audience

Polluted water put humans and animals' life in danger. The polluted water is near where people live and that raises many questions as why are these ignorant. They must know that this can affect their lives and their quality of life.

## Air Pollution



Fire-Related pollution taken at Gauteng Olievenhoutbosch Seroto st on 06 August 2025 by Mapoulo K

This picture to me it means somebody is polluting the air as they burn rubbish that may contain dangerous hazard that can harm other people who are living around. This also means that day by day air is being polluted in different ways.

## Relation of the topic.

This relate to a topic as this picture shows smoke which can affect somebodies' vision and cause respiratory problems for people with severe conditions. The smoke can be detrimental to any living organism around and climate.

## How does this impact life.

The fire can contain VOCs which can reacts with other pollutants and forms ground level ozone and other harmful compounds. The incomplete combustion of rubbish can produce CO which can cause headaches and dizziness or death in high concentration.

## Hope for the future.

Expanding renewable energy source can really improve air quality and reduce reliance on papers and coals. This can be achieved through investment, solar and wind power.

## Message to the audience

We must use renewable source so that we can avoid polluting air. As polluted air is dangerous for ones health.

## Potable Water Provision



*Drinking water in a cup, picture taken by Mapoulo K at Pretoria central ,105 Madiba street on 10 August 2025*

## Meaning of the picture

Everyone must have access to potable water as know that water is a need and we must always stay hydrated.

## Relation of the topic

Water is a need in everyone's life so we must stop polluting water in order for everyone to have access to clean water. Clean water maintain healthy life style and it is good for our health.

## Hope for the future

Everyone must have portable water and use water responsibly so as it is important for our health. We must continue staying hydrated as water in one of the best medicine in the world.

## Message for the audience

Lets continue to stay hydrated n healthy.

*Water is life and every citizen must have access to clean water and every citizen must make sure that they do not pollute our environment.*

# Ripple Effects

Kanegelo, Tshwane University of Technology



*Figure 1 Polluted river in Pretoria, Arcadia, South Africa, named the Apies River, 25 July 2025 (By: Kgaphola.K). The river is overflowing with plastic waste and other pollutants, posing a health hazard to the residents.*

The image holds significant meaning for me as it highlights the impact of human activities on our environment. Actions such as littering and burning fossil fuels contribute to climate change and water pollution, which adversely affect both our rivers and the lives of the people who rely on them. These activities diminish the aesthetic appeal of our surroundings and pose serious health risks, leading to diseases such as waterborne illnesses, cholera, and asthma among residents. As one of the residents in South Africa, I have seen the impacts of water pollution on our environment and our people. This issue is very personal to me since I have witnessed communities struggling to get access to clean water and sanitation.

Water is an essential resource for life; without it, life cannot exist. Unfortunately, floods can pollute river water, rendering it murky and brown, which diminishes the recreational value of the area over time and adversely impacts the local economy. As residents, we ultimately bear the cost of obtaining clean, drinkable water.

Despite the river's pollution, it remains vital for providing water to the community, as its flow contributes to the nearest dam. I believe the City of Tshwane municipality should implement cleaning programs aimed at removing litter and debris from the river. Such initiatives would not only enhance water quality but also reduce the need for extensive water treatment, leading to lower costs overall.

Water serves as a vital conduit for life. When managed properly, the river can offer irrigation for farmers and enhance the environment, making it greener and more appealing. It is an integral part of my daily surroundings, providing a tangible reminder of water's essential role in our lives. However, pollution and unpleasant odors can lead to health issues, illustrating the river's complex impact on my life.

During the rainy season, floods can wreak havoc on infrastructure and homes situated near the river. Consequently, during the dry season, residents—especially those in informal settlements—often face challenges in accessing an adequate water supply due to scarcity, as they lack connections to municipal sources. The Apies River also holds cultural significance; historically, it was used by indigenous peoples and continues to be part of the green corridor that runs through Pretoria. Notably, the Lion Bridge spans across it, adding to its historical importance. Water serves as a vital conduit for life. When managed properly, the river can offer irrigation for farmers and enhance the environment, making it greener and more appealing. It is an integral part of my daily surroundings, providing a tangible reminder of water's essential role in our lives. However, pollution and unpleasant odors can lead to health issues.



*Figure 2 Trees and trash accumulating in the Apies River, Pretoria, Arcadia, 25 July 2025( By: Kanegelo Kgaphola)*

The images illustrate the neglect of the river, highlighting a lack of efforts by individuals to clean it, as well as a failure on the part of the municipality to trim or properly maintain the trees, which results in leaves polluting the water. This situation calls for urgent action to protect the Apies River, ensuring that future generations have access to clean water. It is essential to adopt sustainable management practices, and the government should implement stricter regulations to make littering illegal.

*I'm Kanegelo, I'm a very curious, enthusiastic person. very kind and bubbly person. I'm passionate and willing to learn about the environment and other technologies*

# Causes of Water Pollution Around Pretoria

Gift Lekala, Tshwane University of Technology

Water pollution is the most pressing environmental issues facing in Pretoria today. As the country is already facing water scarcity, the contamination of water resources has significant implications for human health, economic development and ecological sustainability. Water pollution arises from poor sanitation infrastructure, littering and industrial waste.

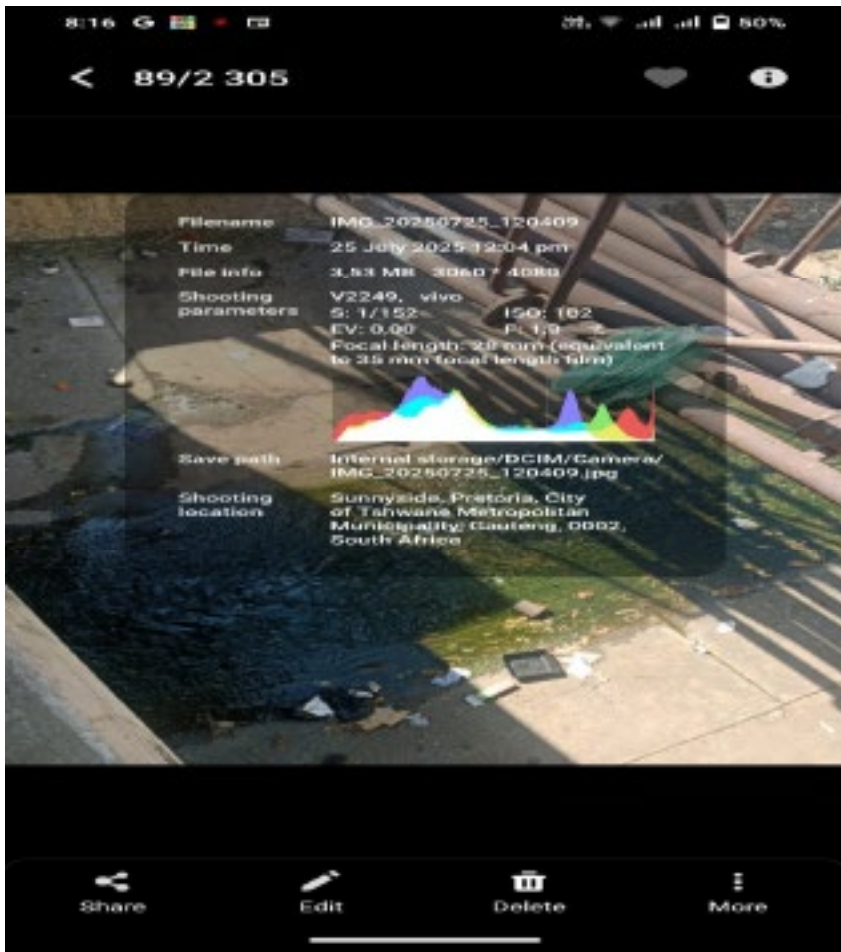
I saw a photograph of people gathered at a collapsed bridge in the state of Guerrero in Mexico on the 30<sup>th</sup> September 2024 after the passing of a devastating hurricane John. I feel triggered about how much infrastructure did Hurricane John ruined before it started weakening and dissipating. It is a tragic for the government of Mexico will have to repair the chaos nature caused to them. Thousands of people lost their homes which is technically painful and agricultural land was affected .

The relation of the picture with the topic is straight forward as hurricanes are mostly one of the causes of water pollution. After the hurricane there was increase in risk of waterborne disease as stagnant pools of water ,a direct impact of heavy rainfall and flooding created ideal breeding grounds for mosquitos and other illness vectors. This increase waterborne illnesses like cholera and dengue fever .Mexico's coastal areas particularly in Guerrero and Oaxaca were already dealing with water scarcity and access to clean water.

I hope the government and communities develop and expand technologies for safe and efficient wastewater treatment enabling reuse for irrigation and energy production . There must be investments in developing climate-resilient water sources through managed aquifer recharge ,rain water harvesting and exploring deeper ground water reserves. Researching the uses of natural products and their application in synthesising nanoparticles for water purification ,offering cost effective solutions . Implement comprehensive communication strategies to educate the public about current and negative impacts of water pollution .

The images below shows different river channels in Pretoria severely polluted which is affecting to the communities living close by and potentially impacting aquatic life. Stagnant, polluted water and accumulated trash Along the banks can create breeding grounds for pests and leads to unpleasant odors . Polluted water damages the ecosystem as chemical pollution, thermal pollution from increased water temperature and eutrophication severely disrupt aquatic ecosystems.

I want the people to know the dangers and outcomes of water pollution and littering .Change cannot be made be one person but if we work together we can overcome everything we want .





# Water In My Life And Environment

Kelebogile Jane, Tshwane University of Technology



As most people know, water is a basic human right that every person ought to have for as long as they live but what happens when the right is violated? Well, unfortunately for most people living in South Africa, clean water is an issue that it should not be. Water issues in South Africa are not limited to water scarcity but rather water pollution has also become a reality that is continuously growing in South Africa. Thus, in this analysis we'll be focusing on water issues affecting the surrounding area of the Walkerspruit river flowing through Sunnyside- Pretoria. We will be looking into the effects of this issue, what this particular water issue looks like and how people in the local area live through this water problem.



*08/08/2025- Water pollution at a local water landmark by Kelebogile Jane*

The Walkerspruit River is a tributary of the Apies River, flowing from Waterkloof and Nieuw Muckleneuk, through the eastern suburbs, including Magnolia Dell, and Sunnyside, before joining the Apies River near the Lion's Bridge in Stanza Bopape (present-day Church Street). The spruit was named after Surveyor Arthur Hamilton Walker. The stream was canalized between Pretorius and Jorissen streets in the 1930s. The Walkerspruit in the picture is found in the Gauteng province in Pretoria, Sunnyside in between Riverside residency and Maupana-Naga police station.

The landmark is polluted by community members, directly and indirectly, as some of the rubbish is blown over to the site by weather conditions (wind). This simply describes to me how people can be so careless of their actions on the surroundings in which they live. The pollution of the Walkerspruit River is not just an environmental concern—it's also a community problem. For me, it means watching a natural feature in my area lose its beauty, safety, and value. This river should be a clean, life-giving part of Sunnyside, but instead, it has become a reminder of how human activities can harm nature.



08/08/2025- Trash blown into the Walkerspruit by wind and littering by Kelebogile Jane



The rubbish in the picture is a water issue where foreign substances to the water are littered there. I'm impacted as the decomposition of the rubbish produces a bad smell that is unpleasant and is harmful to my respiratory system. The rubbish also blocks the flow of water which, in due time as more rubbish is thrown into this landmark, flooding will occur. A polluted river affects the quality of nearby water sources, harms wildlife, and creates unpleasant living conditions. It also discourages people from enjoying the space for leisure or community activities. The river's poor state impacts the environment I live in and can contribute to health risks and a less vibrant community.



*08/08/2025- As being part of a community of Sunnyside it is all local's responsibility to care and look after our natural surroundings. Image by Kelebogile Jane*

For better living conditions, I believe an initiative will have to be done to promote healthy habits such as picking up litter. I hope for a future where the Walkerspruit River is restored to a clean, healthy state—where water is clear, wildlife can thrive, and the community can enjoy it safely. This can be achieved through better waste management, regular clean-up projects, and stricter enforcement against pollution. A greener, cleaner future is possible if we all take responsibility for protecting the water around us. I hope a cleaner area around the landmark will be achieved.



*How a clean walkerspruit should look like. By Kelebogile Jane*



*An illustration of how the river looks as it flows, but it is not as clean as it looks- a difference has to be made still by Kelebogile Jane*

*My name is Kelebogile Jane, and I am an Environmental Science student. I am doing Environmental Management and I am passionate about the environment in which we live in.*



UNIVERSITY OF  
**LOUISVILLE**

**A!**  
Aalto University



Tshwane University  
of Technology  
*We empower people*

# Water in my Life and Environment

Karabo Moeng, Tshwane University of Technology



Aim: To investigate the causes, impacts, and solutions to water pollution in urban environments, focusing on household water contamination, polluted road potholes, and waste-clogged waterways.



*Church Street ,Pretoria,South Africa, Taken on the 07/08/2025*

Beneath the bridge on Church Street, Pretoria, water flows beneath a blanket of waste-plastic bags, food wrappers, and discarded containers drifting alongside green algae. What should be a life-giving stream has become a carrier of pollution, suffocating aquatic life and spreading unseen dangers. The algae's overgrowth signals nutrient pollution, while the litter blocks sunlight and disrupts the ecosystem. Each piece of trash tells a story of human neglect, travelling downstream to affect communities and wildlife alike. This is more than an eyesore-it's a warning that polluted water threatens health, destroys biodiversity, and silently erodes the balance of nature we all depend on.



*The picture was taken at Limpopo in Polokwane central on the 26/05/2025 in South Africa*

## People Getting Polluted Water in Their Household

In many households, pollution doesn't always come from the streets or factories—it can flow straight from the tap. People unknowingly consume contaminated water that carries harmful bacteria, chemicals, or heavy metals, putting their health at serious risk. Polluted household water can cause illnesses such as diarrhoea, skin irritations, and even long-term diseases affecting vital organs. Often, the water appears discoloured or has an unusual smell, yet due to lack of resources, people are forced to use it for cooking, drinking, and cleaning. This silent intrusion of pollution into homes is an invisible danger that quietly undermines well-being.

### Solutions to the Problem

Solving household water pollution starts with both community action and individual responsibility. Water should be regularly tested to detect harmful substances early, while local

authorities must improve infrastructure to prevent contaminants from entering supply systems. Simple solutions like boiling water, using water filters, or adding safe purification tablets can reduce health risks. On a larger scale, educating communities about proper waste disposal and the dangers of polluting water sources helps prevent the problem at its root. When clean water is prioritized through joint efforts, homes become safer, healthier, and free from the hidden threat of household water pollution.



Polluted water in a road pothole is more than just a nuisance—it's a small but dangerous environmental hazard. These stagnant pools often collect rainwater mixed with oil leaks from cars, chemicals from road surfaces, and litter from the surrounding area. Over time, they become breeding grounds for mosquitoes and bacteria, posing health risks to nearby communities. When vehicles drive through, the contaminated water splashes onto sidewalks and into storm drains, spreading pollution further. Potholes holding dirty water are not just a sign of poor road maintenance—they are a reminder that even small, neglected spaces can contribute to larger public health and environmental problems.

*If you want it you can get it*

# Water in My Life and Environment: The Crisis in Hammanskraal

S. Marakalla, Tshwane University of Technology



*A dry and cracked section of the Apies River near Hammanskraal, taken on 5 July 2025 by Lebogang Mokoena. (Photo: L. Mokoena)*

This image captures the stark reality of water scarcity in Hammanskraal. The riverbed is bone-dry, with deep cracks where water once flowed. To me, this symbolizes not only the effects of climate change but also decades of failed infrastructure maintenance. The Apies River used to provide a vital water source, but now it reflects the environmental cost of neglect. It relates directly to the topic because it shows the visible impact of poor water management, and for those of us living nearby, it reminds us that our access to clean water is not guaranteed.



*Community members collecting water from a tanker in Temba, Hammanskraal, on 6 July 2025. (Photo: L. Mokoena)*

People line up with buckets and bottles as a water truck slowly dispenses water. This is a common sight in Hammanskraal, especially after the 2023 cholera outbreak. For me, this image is personal—I have stood in this very line. The experience is humiliating and stressful, but it shows how people adapt and support each other even in crisis. It reflects the human side of the water issue, where every drop matters and dignity is tested daily.



*A sign outside a school in Hammanskraal reading “Boil all water before use,” photographed on 7 July 2025. (Photo: L. Mokoena)*

This sign stands as a warning and a symbol of fear. Schools, clinics, and homes are constantly on alert due to unsafe water. This connects directly to the cholera outbreak of 2023, where over 20 people lost their lives. As a student, I worry not just about my grades but about whether my water is safe. The water issue impacts education, health, and trust in public services. It is a daily, invisible threat.



*A polluted wastewater treatment facility near the Tshwane border, photographed on 9 July 2025. (Photo: L. Mokoena)*

Overflowing sewage and broken machinery reveal why Hammanskraal’s water is so unsafe. This facility, like many others, is underfunded and neglected. Evans (2023) referred to this crisis as “the ears of the hippopotamus”—a surface glimpse of a deeper, national failure in wastewater management. This photo shows where it starts: at the source of contamination. If this isn’t fixed, the cycle will repeat.



*Children playing near a leaking municipal pipe in Suurman Village, Hammanskraal, on 10 July 2025. (Photo: L. Mokoena)*

This photo gives me mixed feelings. On one hand, it’s joyful—kids laughing and splashing. On the other, it’s dangerous. They’re exposed to untreated water flowing into the street. This image represents both resilience and risk. For the future, I hope

we will see investment in clean water infrastructure so that children can play safely and families can trust their taps.

## Conclusion

Through these images, I want people to understand that access to water in South Africa is not just an environmental issue—it's political, economic, and deeply personal. The water crisis in Hammanskraal reflects a larger national failure that affects lives daily. We don't need sympathy—we need awareness, pressure for accountability, and long-term solutions that restore dignity and health to our communities.

*Spread love and kindness wherever you go*

# Water scarcity in South Africa

Andiswa Nene, Tshwane University of Technology

Imagine waking up early in the morning—not to take a warm shower or brush your teeth at the bathroom sink—but to walk 2–3 kilometres with a heavy bucket just to collect water from a shared community tap or even a river. That is the daily reality for many people in my area, especially in rural parts of South Africa like the Eastern Cape and KwaZulu-Natal.



*Figure 1: The river of Pretoria central. On August, 12, 2024 by Nene AM.*

Long queues and shuffling with potential violence for access of clean water at the designated areas of distribution became the order of the day for the working masses. The crisis affected the working-class children education, the working-class working environment, its social life, health facilities with a looming potential paroxysm of diseases because of lack of clean water. Functionality of sanitation system is threatening and is posing risks of a spread threatening life diseases such as dysentery and loss of hygiene in homes and at the workplace.



*Figure 2: River of Masiphumelele informal settlement located in Johannesburg, South Africa, on August, 11, 2024. Mhlanga EA.*

The situation is indicative of life destruction by the rotten toxic system of capitalism. It has subjected the working class and the toiling masses to the gallows of drought death while capitalists, having amassed wealth unto themselves through forced removals, dispossessions, exploitation and the alienation of the working class of its produce, can buy themselves out of the situation.



*Figure 3: Water scarcity in SA also result in drought which impacts peoples lives in many negative ways. On KwaZulu-Natal SA August, 12, 2024 by Jacob ZT.*



*Figure 4: Emalahleni river which is not in a good condition for supplying water to nearest areas, on August, 11,2024.*

According to the WFTU news they state that water connects us all—nurturing life, adding beauty to our landscapes, and reflecting shifts in our environment and culture across the globe. Which is true.



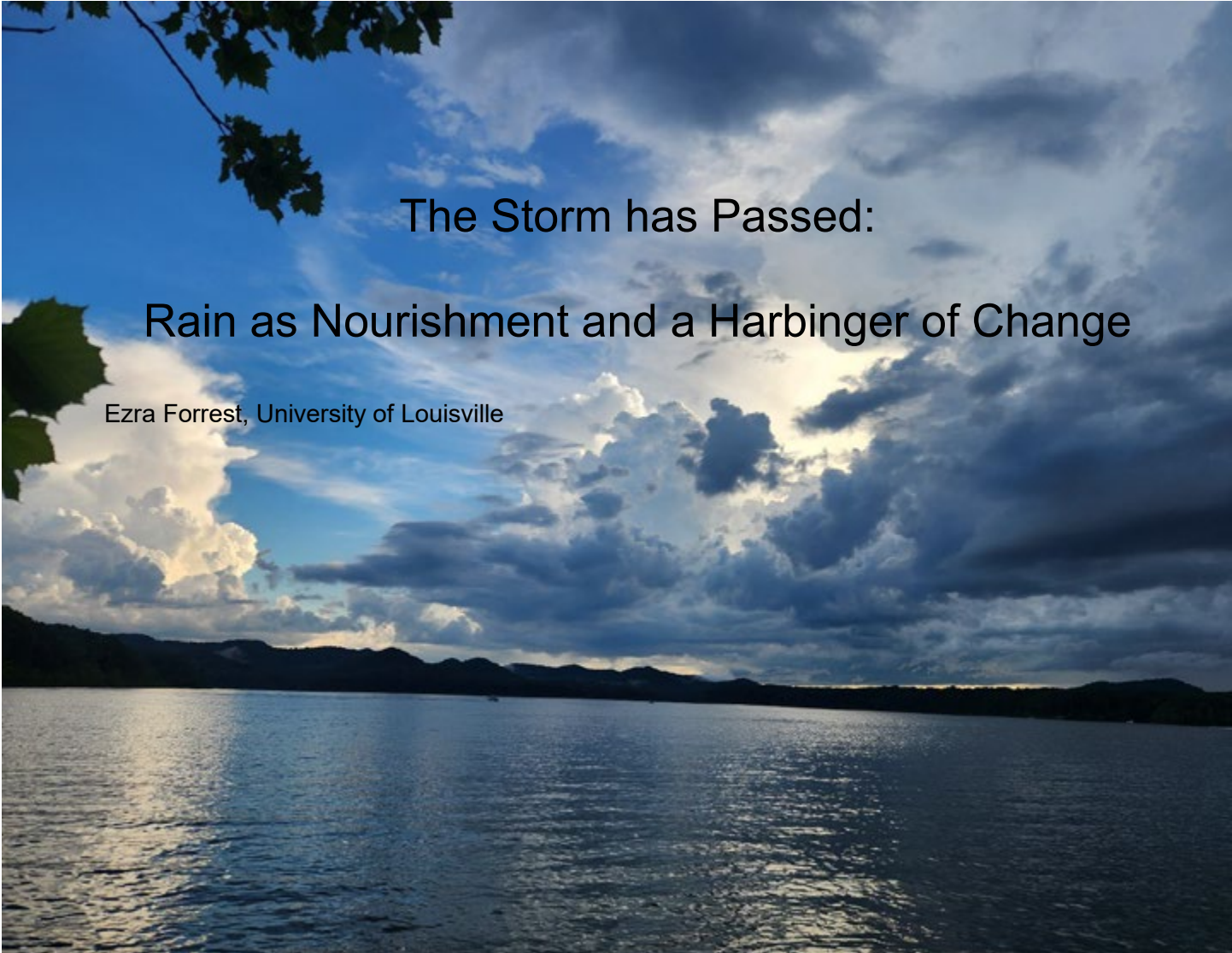
*Figure 5: Water is the essential of life and connection of every living organism. July,30,2023 by Cathy Elizabeth (abstracted on Google).*

*I'm an environmental science student passionate about understanding how natural system work and finding sustainable solutions to protect our planet.*

# University of Louisville, Louisville, USA

The students from the University of Louisville involved in the Ripple Effects International project were English Majors taking upper-level courses in “Digital and Visual Composition” and “Texts and Technology.” Both courses involved explorations of multimodal composing and reading and exploring the ways that material conditions and culture shape those literacy practices. The students in the courses were from all three undergraduate major concentrations – Creative Writing, Literature, and Professional and Public Writing. The courses were taught by Dr. Bronwyn Williams <https://bronwyntwilliams.com/>. The University of Louisville is an urban university located in the the largest city in the state of Kentucky. The University has a total enrollment of about 25,000 students.





The Storm has Passed:  
Rain as Nourishment and a Harbinger of Change

Ezra Forrest, University of Louisville

*Storm Rolling in Over Cave Run Lake. Morehead, KY. Taken by Ezra Forrest July 26, 2025.*



*Raindrop on Grass. Louisville, KY.*

*Water Pooled in Leaf. Cherokee Park, Louisville, KY.  
Taken by Ezra Forrest September 22, 2025.*





*Creek Flowing After Heavy Rain. Cherokee Park, Louisville, KY.  
Taken by Ezra Forrest September 22, 2025.*



*Cup and Pouch Floating in Creek.  
Cherokee Park, Louisville, KY.  
Taken By Ezra Forrest  
September 22, 2025.*



*Bottle Floating in Creek. Cherokee Park,  
Louisville, KY. Taken by Ezra Forrest,  
September 22, 2025.*



*Still Creek Disturbed After Rain. Cherokee Park, Louisville, KY.*

Petrichor lingers in the air and mud squishes underfoot. The rain has come and went, leaving only water in its wake. Water that acts as lifeblood for the world. It doesn't only benefit us humans, hydration is just as essential for Earth as it is for you and me. Rain is one of the rawest examples of water not only as a cleansing agent, but as a harbinger of change. It gives the world life while it transforms the environment. But where does it all begin?

The sun shines bright overhead and the day is young, full of opportunities. Animals and people move without a care while, high above, everything starts to change. Storm clouds roll in, and the world evolves. The sun is dimmed—hidden behind the clouds—casting everything in glowing light. The sky is at war with itself; feathery clouds being overtaken by the darkness of the storm creeping its way across the land. It's an ambush. Before long, the heavy clouds release their burdens, showering the world. People often take cover at this point but stay with me. Let the water drip onto skin, soaking clothes and weighing down hair. Each drop is a moment of change. Animals run for cover while plants seem to brighten as their roots begin to drink, long and heavy, leaves glistening as water flows down their faces. The storm breathes life into the world if only we slow down enough to see it. It may seem like a nice day ruined as thunder rumbles above, but the day is far from over.

Eventually, the rain ceases, and the world quiets. In the aftermath of the storm, beauty blooms. Look around and really see what has been left. Water pools, forming puddles anywhere it can. Fallen leaves become swimming pools for small bugs. Get even closer and see the drops hanging out on blades of grass, a hydration party that allows for new growth. Even on a small scale, water changes the environment. No matter how heavy the rainfall, once it has exhausted itself, drops will be left behind. When separate from the storm, these small drops don't seem consequential. One drop isn't going to cause much damage or change—it takes more than one to cause a downpour—but each drop does enhance the beauty of nature. There's a new shine outside as water glistens off plants and adds depth to the color of the world. Grass seems greener, the ground is darker, and the pops of color from various flowers and leaves are intense. Water cleansed the world, bringing everything into sharp relief.

Now, keep looking close, but zoom out and see the bigger picture. After a storm, creeks and streams start to flow faster. They're rejuvenated by the rain and banks are swallowed by the flowing water. It's loud again as water rushes over rocks, the sound a storm of its own. Here, water functions as blood as it travels through the veins of the world. It reaches the roots of trees and other essential plants while providing hydration and habitat for various animals. Small islands can even form as the water reshapes the land. Fallen leaves are pulled along the currents being deposited in places they would've never reached alone, spreading nutrients throughout the area. Sadly, that is not all that can be seen floating atop the creek. Often, a storm will wash litter into water sources that may have otherwise went untainted. Styrofoam cups, glass bottles, and aluminum pouches are also winding through the stream. Because of the higher water levels, this trash often goes by faster than a person can catch them. It serves as a stark reminder that everything we as people throw out has an impact on the environment. After rain, there is no hiding the scars we leave behind just by living our daily lives.

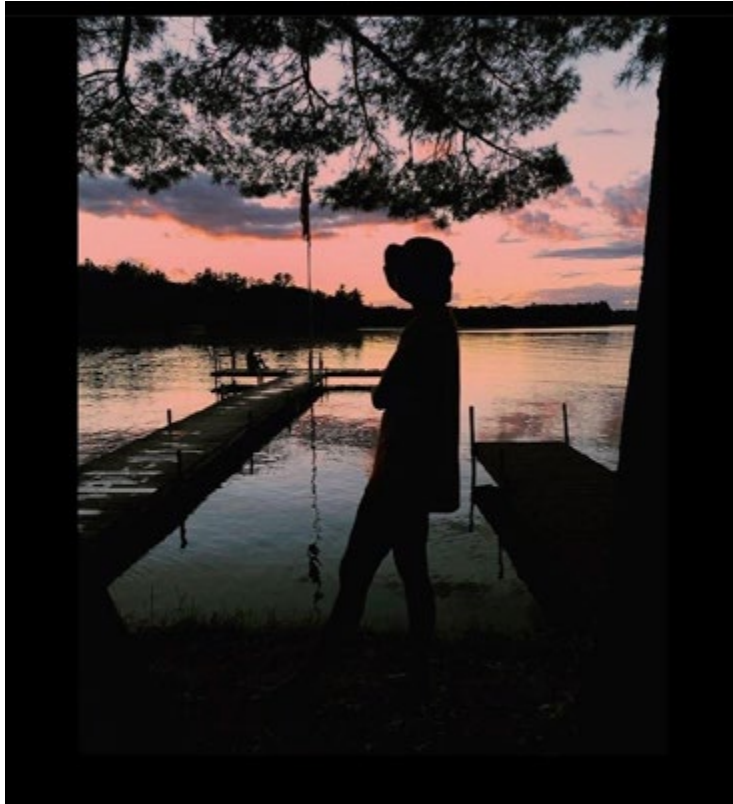
In some places, water creates movement. However, even just a few feet away, the same creek will be still after a storm. The water is calm, and the sounds of animals and insects chime back in. Fish swim through the still waters, crawdads emerge from their rocks, snakes glide along the surface, and turtles rise for air. Squirrels pause their scavenging for a drink. The storm filled the creek, bringing life of all kinds together. We, as living beings, are connected through water. Even here where it's still, the effects of the rain are noticeable. The bank is muddy where the water rose before settling and the trees are bright green as drops rain from their leaves as far as the eye can see.

Petrichor lingers in the air—the smell of wet Earth after a storm—and the world is new again.

*I'm a creative writing and humanities double major, currently studying at the University of Louisville. I'm an avid reader and a writer who is trying to get in the swing of things. I have a book review published in Issue 23 of the local literary journal Miracle Monocle. More of my work will be out there soon!*

# Sailing Through Life

Olivia Stone, University of Louisville



Stone, Lac Du Flambeau, Wisconsin - July 2020

*“There’s lots of those friendly people.  
They’re showing me ways to go.  
But I never want to lose their inspiration.*

*Time for a cool change.  
I know that it’s time for a cool change.*

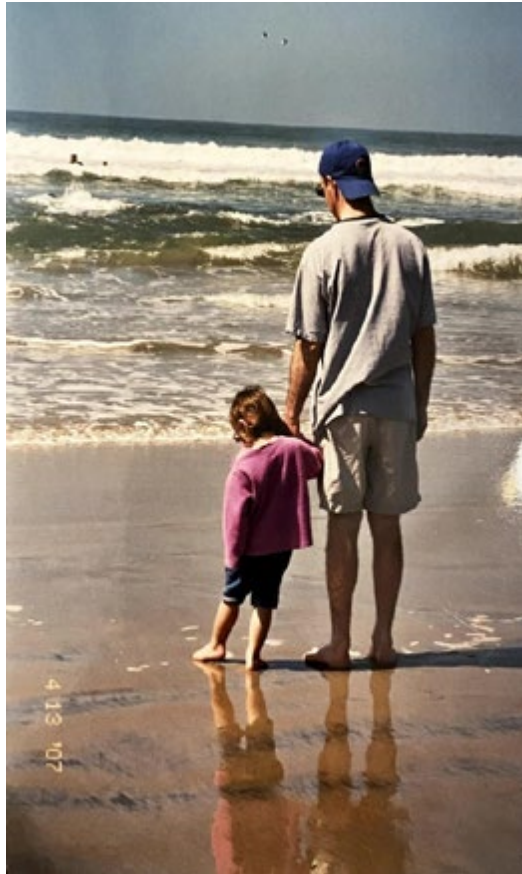
*And now that my life is so prearranged.  
I know it’s time for a cool change.*

*Well, I was born in the sign of water.  
And it’s there that I feel my best.”*

- Little River Band

Growing up traveling in my parents’ Honda CRV, the radio constantly whistled with the hmm of the 70’s. The song, “Cool Changes,” by Little River Band is the beat of my childhood. Growing

up with the theme of the song "sailing on the water alone," didn't mean much to me, but now as I have sailed through so many phases in my life, the song represents how the sense of water has shaped me into who I am today.



Stone, San Diego, California, April 2007

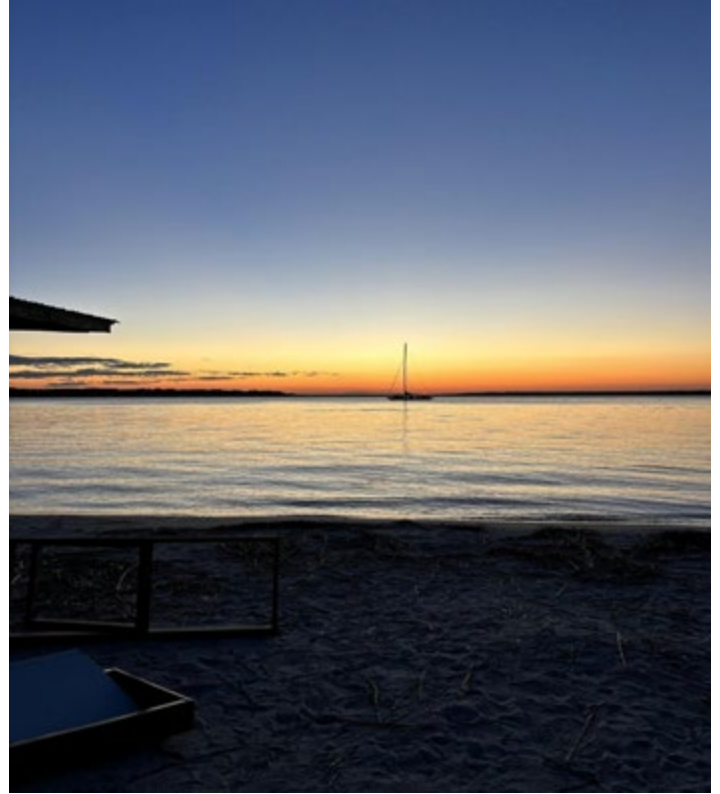
Water is the thread that ties my identity together, and here is where it all began. In the summer of 2007, on the Pacific Ocean, is where my feet met land and sea for the first time. I gripped my dad's hand as we shared this memory together.

Now looking back at the photo seventeen years later, I like to imagine that the reflections in the sand are versions of us today, older, wiser, and still connected. As I navigate life solo, I know in times of need there will always be a helping hand to guide me to the shore. And in that memory, I'm reminded that I never walk alone.

*"It's kind of a special feeling."*



Stone - Maui, Hawaii - June 2022  
June 2024



Stone - Hilton Head, North Carolina -  
June 2024

As I have traveled across pods, lakes, and oceans, water always brings me to reflection. Born a Pisces, a water sign, I carry a lot of compassion, intuition, and emotional depth. All aspects that have led me to the shore of these places.

Stone - Sorrento, Italy - September 2024

Stone - Positano, Italy - November 2024



In Hawaii, I found my compassion for the land. I learned that truly connecting with the world begins with respecting its cultures. In North Carolina sunsets, I found my intuition sailing in front of me. Leading me in the right direction. And on the coast of Italy, I challenged my emotional depth. Living solo abroad for a semester showed me who I can become. On the Mediterranean Sea, is where I saw my younger self again. The adventurous, loving, and carefree child I once was, is someone who I became again.

*“Now that my life is so prearranged.”*



Stone - Lac Du Flambeau, Wisconsin - August 2023

The lake always leads me home. It's the place that has built me every summer of my life. The home that has always had a seat for me. In the water is where I first learned to swim, and water ski. It is where I learned the importance of love. The love of family, past and present, the love of the water and all surrounding it, and the love for evolving.

I believe water holds memories. In the lake, I see a girl in her enormously pink fluffy hat, that is too big for her tiny head, and her contagious laugh, ascending into the water in the same canoe she has sailed across life with. In every change, every shore, every reflection, water has carried me back to myself.

*"Well, I was born in the sign of water, and it's there where I feel my best."*



Stone - Lac Du Flambeau, Wisconsin - June 2007

*Olivia Stone is a student at the University of Louisville studying Writing and Communications. As a writer, she explores the moments that shape us, guiding readers along the personal voyage she calls, "Sailing Through Life." She uses song lyrics and personal photos to capture emotion and memory.*

# Drowning in Information

Kiera Clements, University of Louisville

There's a tranquility in nature that can't be found anywhere else. When you connect with it, it's as if there's not a single bad thing in the world. The birds chirping, the leaves rustling, and the light reflecting off the still water. I think I've had some of my best ideas in nature. It helps calm me down—quiets the loud overthinking voice in my head and lets my anxieties float away. When I need a break, I always know where I can go. Personally, I love to find a big body of water, sit down, and meditate next to it. As I've gotten older, the need to do so seems to grow and grow.



*A leaf floating in still water; Turkey Run Park; September 14<sup>th</sup>, 2025; Kiera Clements*

They always say, “Don’t grow up too fast! Being an adult is not as fun as it seems!” And while they’re correct, nobody ever explained to me the crushing weight of politics and how it plays a role in every part of society. Climate change, war, housing and food prices, if your school has enough money to go on a field trip, etc. Everything, big and small. And with the influx of information that the internet and social media provide, it’s overwhelming. It’s nearly impossible to go a single day without hearing about something horrible happening, whether it’s in your backyard or the other side of the globe. I’ve found it to be anxiety-inducing. I’ve also found that *not* being informed scares me more.



*Splash; Turkey Run Park; September 14<sup>th</sup>, 2025; Kiera Clements*

It's as if you're stuck in a rip current, caught between knowledge and ignorance. You have to escape to one side or you won't make it, and the pressure you feel to make a choice is overbearing. Generally, I think the internet is a net positive. It doesn't stop people from having corrupt politics, but it allows us to do something about it. It's easier to organize protests, charities, and fundraisers because of the internet. As a generation, we're able to be much more informed than those before us. However, knowledge and ignorance shouldn't be our only two options, especially when today's social media algorithms are pushed by engagement, clickbait, and advertisements. You click on a post, and the next twenty are all about that topic. I'm deeply invested in the genocide in Palestine, so I choose to seek out information on it, but it's emotionally draining. You scroll your timeline or news feed, and it's just tragedy after tragedy. Or worse, you get psychologically damaging explicit photos/videos in between pop culture posts and pictures of your friends and family. It seems to never stop. It feels like a dam broke somewhere along the way, and the news we're consuming is going to drown us.



*Rushing water; Pacific Coast Highway by Big Sur, California; July 8<sup>th</sup>, 2025; Kiera Clements*

I'm still figuring this out myself, so I don't have all the answers, but I know that if we continue to bombard ourselves with the horrors of life, it will fracture our mental health. You have to take breaks and limit how much you're seeing. It's hard. I know that life isn't fair, but I still have an innate sense of justice. When the UPS plane crashed in early November, I felt so horrible. I couldn't peel my eyes away from the television. I felt responsible simply because I worked there, even though I sit at a computer and my shift hadn't even started. To ease this feeling, I donated to every single GoFundMe I could find. I don't make a lot of money, but it was the least I could do. Those people all needed that money more than me, in my eyes. Was this financially responsible? Probably not. Did it ease my soul a bit? Yes. That's what I struggle with the most. All I want to do is help, but it's impossible to help everyone and keep yourself afloat in the process when you're just a 25-year-old college student working part-time.



*Ripples; Turkey Run Park; September 14<sup>th</sup>, 2025; Kiera Clements*

With all this in mind, I think we need to take a moment to reflect and find new ways to interact with the news. It's hard to balance being aware and being happy. It's not an issue that you plan on encountering when you're a kid. I think one way that helps is limiting your time on certain apps. It's also important to have conversations with people in your life. I've found that getting someone else's perspective can be grounding. The internet has a lot of reactionary opinions on it, and with AI, a lot of what you're reading isn't even a human's opinion anymore. There's also nothing wrong with taking weekends off and finding sources with quick summaries of what happened while you were off the grid. But you have to take care of yourself.

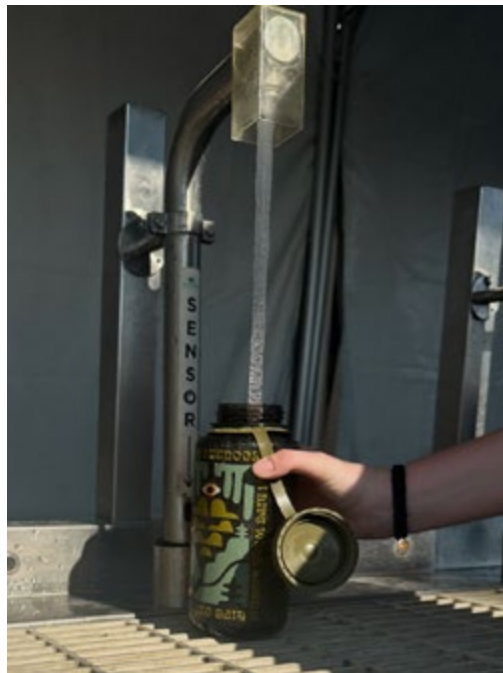
*I am a college English student who focuses a lot of their work on social issues. I wrote this personal essay to reflect the turbulent times we're experiencing right now, the role that social media plays in it, and how it subsequently affects our mental health. The photos of water are used to portray an emotional state, paired with the written paragraphs.*

# Water, Water All Around

Kaf Warner, University of Louisville

Imagine, you're at a concert or maybe a festival or maybe having a picnic at the park. In any case, it's too hot! The sun is beating down on you, ray after ray, only broken up by a passing cloud. It's miserable. Sweat beads and pools along your neck and down into your clothes; you're only two hours into your day and you already need a shower. The venue has free water to drink<sup>1</sup>, but to turn this day around people are going to need a serious shower and some shade. Your family grouchy and slow, no one wants to keep begins to darken, the suddenly, *rain*. Now of is drooping which may annoyance to sprout in in the crowd, probably *whoop*, and now the everyone was sweltering brought in a blessedly most of the crowd's that something to cheer

As the rain picks start to seethe and covered to watch the begins to devolve the themselves into pop-up church's undercroft. And, themselves to a soggy picnic? Plans have changed. The rain thickens and begins to come down in force. Your sweat has been washed away but now your hair is left clinging to you in limp strands. Riding out the rain is worth it to see the headliner or to win one more round of ring toss. No umbrellas allowed at the concert is a bummer, but fortunately for those of you enjoying the festival, a kind stranger offers to walk you to the next booth you're trying to get to. You bundle



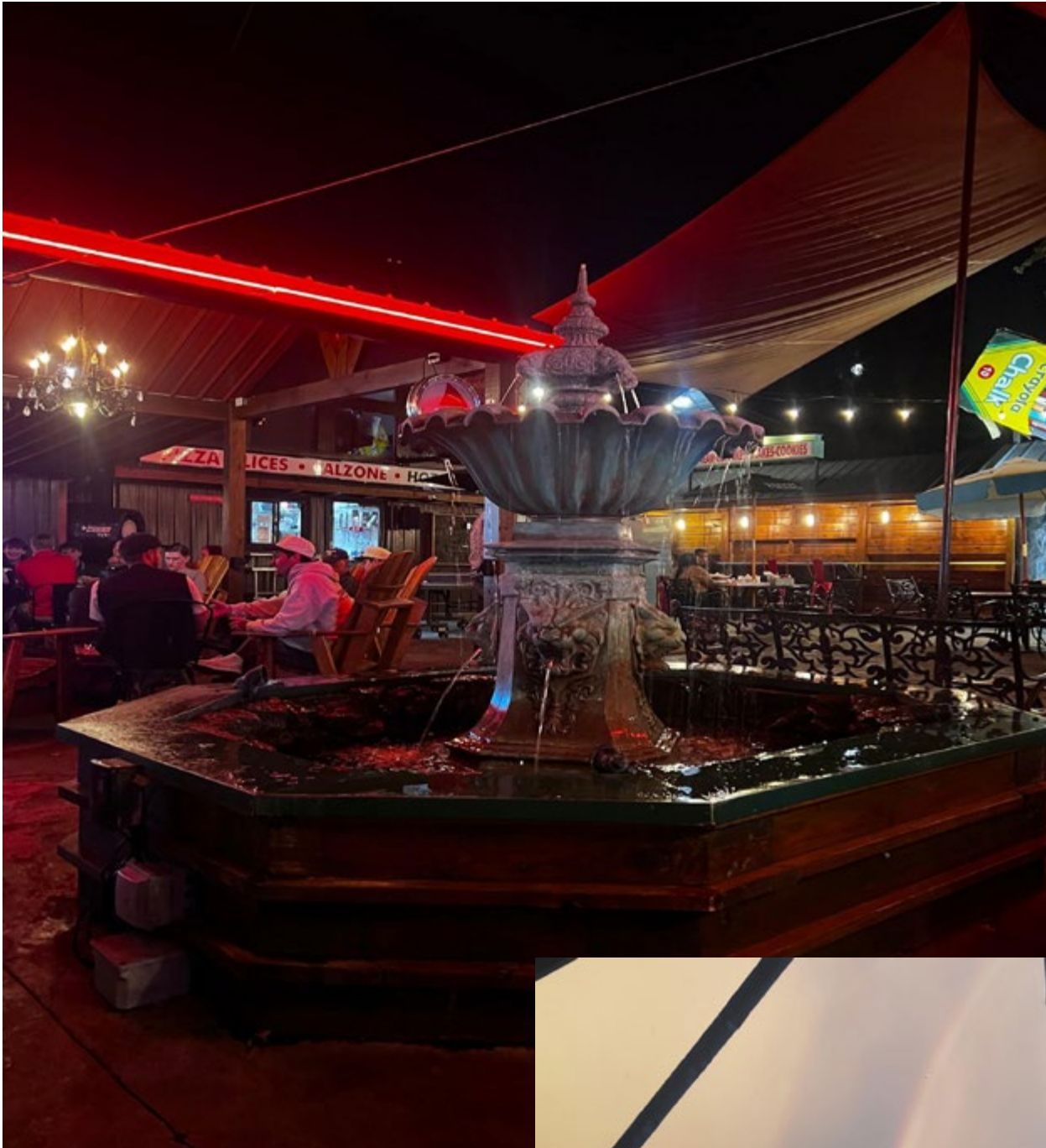
or friends are becoming harping on about the heat; going. That is until the sky clouds flatten up, and, course, your styled-up hair cause even more you. But then, that one guy bald or shirtless, lets out a crowd is cheering! You see, their day away; the rain has cool breeze and hosed off locker-room stench. Isn't for?

up though the concert goes squirm to find someplace show from. The festival same as people try to cram bars or pack into the really, who is subjugating

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<sup>1</sup> Image taken by Kate Warner on 12 September 2025 at Bourbon and Beyond

under their umbrella, walk to the booth, and now you're offering to buy them in a round of



roulette. You've made a new friend!

As the day goes on, the rain finally trickles out. As the sun sets, the crowd goes up in a murmur. Cameras and phones fly up to capture what everyone is pointing at: a



rainbow<sup>2</sup>. Now, a once damp and disquieted crowd has transformed into a group of onlookers, enjoying the same rainbow, all crammed into the same concert or festival or picnic shelter (or theme-park line).

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The necessity of water makes it so that it is an undeniably great tool. Drinking, bathing, travelling, water guns, swimming, slip and slides, garden sprinklers are all made possible through water. Water filtration is now equally important as it allows us to reuse water in a cycle of ways. Louisville has one of the best water filtration systems in the United States, yet Louisville's population in the West End often struggle to afford or even obtain clean drinking water. It's no surprise then that an uproar around Louisville has started to halt the construction of a data center in the West End, as it will nearly eliminate affordable access to potable water.

Would Waterfront Wednesdays here in Louisville exist without water? Dedicated time and space for the Louisville community to dance, sing, dine, play, and chit-chat together is what gives life to our city. A weekly night of communal gathering could only take place at the waterfront, next to the very thing that connects us all. Humans first saw their own reflections in bodies of water, and found that there's something powerful in the way water mirrors the world back at us, giving us a new perspective. We design whole buildings with brilliant light schemes



to reflect back at us. We pave pavilions with spaces to lounge by our rivers and lakes and oceans all together, sharing the same evening breeze and laughing loudly amongst ourselves<sup>3</sup>.

Water tends to be the ultimate connector; it's a universal human need. Humans have always been fascinated by water, something we cherish endlessly. Water has long and forever been a life source, but it also can become a cleanser through religion, a spectacle with huge

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<sup>2</sup> Image taken by Kate Warner on 6 September at Universal's Haunted Horror Nights

<sup>3</sup> Image taken by Kate Warner on 15 May 2025 in Lyon, France

fountains<sup>4</sup> and dazzling lights, and a treasured and fought-after commodity when natural sources are polluted.

Since water is such a necessary resource to humankind, we began by building our homes to cities to countries along whichever waterways we physically could. Booming trade ports created some of the most notable cities of our age: Alexandria, Shanghai, New York, Venice, Rotterdam, Cape Town, and this trend continues. Humans build around water as a way to connect with one another, not just locally but globally. These waterways become lauded and celebrated amongst humans and turned into symbols of our culture—like Fontaine Bartholdi<sup>5</sup>. Trading with one another throws us into a global



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<sup>4</sup> Image taken by Kate Warner on 8 September 2025 at Hauck's Corner

<sup>5</sup> Image taken by Kate Warner on 12 May 2025 in Lyon, France

age where colonization, cultural exchange, and industrialization change our course forever.

Water has been hefted up by society and transformed into a cultural deity, one which divides us geographically so that we can come together in our differences to enjoy the first drops of dew or a sunset over the ocean horizon. As the commodification and pollution of water occurs, it is important to remember, reflect, and cherish the moments wherein water has brought people together in solidarity, in joy and fun, in oceans and rivers, in times of flood, and in times of peaceful glass-of-wine-in-the-jacuzzi evenings. The ways that humans use water *matter*, especially when access to clean drinking water isn't a practiced inalienable right, when bodies of water to fish in are privatized and polluted. By celebrating the ways in which water draws community together, I hope readers will be more inclined to fight for universal access to clean drinking water and protection of waterways and their inhabitants. As always, prioritize building community, not moats!



*Kaf is pursuing their undergraduate degrees in Creative Writing and French at the University of Louisville, and hopes to become an editor in the future! Their other work can be found in Miracle Monocle as well as a forthcoming thesis on the queer gaze and comics through UofL. Kaf is a hater of pollution and a lover of all things Batman, horror short story anthologies, and writing silly poems!*

# Water in Recreation

Emily Priddy, University of Louisville

## About

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As a middle-class resident of the United States, I have been privileged enough to not often worry about necessities, to the extent that these necessities can go ignored. Water, the universal source of life and good health, can be taken for granted so frequently that it becomes a central point in our recreational activities without much reflection or consideration. Below, I have selected photos in times of personal celebration and relaxation, showing how many citizens of the United States—including myself—have such frequent access to clean water that it incorporates itself into our leisure. While these moments are deeply appreciated, the relevance of water is often shamefully ignored.

## Cats in Contemplation



*September 12<sup>th</sup>, 2025 | Louisville, KY | Taken by E. Priddy*

My cats are first introduced to a fishbowl, filled with water and battery-operated toys. It is an underappreciated act to provide our pets with clean drinking water— even more-so when it can be used to entertain them. Of course, their entertainment did not last for long upon realizing that the fish weren't edible.

Any other day, watching them play with a toy like this would be rather ordinary. When I consider the true value of water, however, I cannot begin to grasp what life might be like without these fleeting, fun-fueled moments. It is a true privilege to use water amply.

## Angling up North



*August 6<sup>th</sup>, 2025 | Casco, ME | Taken by E. Priddy*

My boyfriend, Matt, is seen fishing on our brief trip to Maine. As a long-time fisherman, this was a must—though he did not catch as much as we both anticipated. For my first time up north, I was astounded by the scenery and the number of bodies of water,

beautifully calm and untouched. While impressed, it took a period of reflection to consider the value of the water's cleanliness. While this should be a standard, that is not always the case.

Rather than feeling bitter over our lack of fish caught, I wish that we would have taken a quiet moment to appreciate that, just once.

## Birthday Celebrations



*September 14<sup>th</sup>, 2025 | Louisville, KY | Taken by E. Priddy*

For my partner's birthday, we attended a sumptuous steak and seafood restaurant (that was a bit financially out of our league as college students). Our waitress left a full carafe of chilled water for us to refill our glasses whenever we desired.

At every restaurant, water is an expectation— clean, cold, refreshing. It is a standard amidst the surrounding luxuries at a place like this. I question how often a full carafe goes ignored, thoughtlessly awaited.

## Happily Streaming Along



*August 6<sup>th</sup>, 2023 | Fisherville, KY | Taken by E. Priddy*

I was previously tasked with ‘dog-sitting’ for my parents’ neighbors—with the mention of their pool finally built, my entire family took it upon themselves to join me. Pictured is my sister and the neighbor’s dog, who was happy to have both company and assistance on the float.

Pools are perhaps one of the few water-related luxuries that are never an afterthought, as someone who despises the heat. It is still astounding to me, however, to be privileged enough to enjoy such a thing. To live in a place where the heat is not always dreadful, for it makes way for special activities.

## Dusk on the Lake



*August 10<sup>th</sup>, 2025 | Shelbyville, KY | Taken by E. Priddy*

Days on the lake can be hot and grueling, yet we look forward to them for their hours of leisure. Sunbathing, sandwiches and chips, reapplied sunscreen— a lake day has entire attributes attached to it. On this day, it was so hot that the fish sought comfort at the very bottom of the lake. We couldn't catch a single one, but the view compensated for it. It was a picturesque sight, with the sunset reflecting upon the spotless water.

Days on the lake are always family oriented. They are tiring in a way that you learn to enjoy. Water is the centerpiece of these days, but it is expected. It may be beautiful, yes, but we *know* it will be beautiful. We anticipate the cleanliness and the ease of the day.

While I cannot shake these expected feelings, I can still learn to appreciate that I have them. Water in recreation is one of life's rarest gifts.

*I am a Secondary English major and I have lived in Louisville, KY all of my life. I learned a lot from this project, and think that there is so much value in learning from the experiences of people around the world.*

# A Creek in a Plain City

Natalie Mudd, University of Louisville



The toad pictured here is found all over Kentucky. One of my earliest memories deals with these toads. I was a twig in height and in weight, treading through a drainage run with water gushing up to my thighs.

In that run-off water I caught eyes with the fattest toad I'd ever seen sitting on one side of the rapid. We made eye contact. It jumped in. I jumped after, drenching myself and catching the toad. Immediately after I held it, pet it in my lap, then left them on the perch they'd stared me down.

Seeing the toad pictured take a hop in the mud I swooped down and caught them too, with more ease than the first. They gave me a grumpy glare and I was, briefly, very happy. Louisville waters could be more than I'd realized.

I lived in Appalachia as a youth. It's a mountainous terrain known for its economically disadvantaged community and beautiful wildlife. I remember little more fondly than the animals there. It made me lament living in Louisville, even though critters like this shiner are all around us here.

This shiner was perhaps the most abundant at the site. It is incredibly small and I caught it with a net, intended for the water bugs I'd hoped to catch. When I'd finally caught them I was so thrilled; the silver shine of their scales outside the water was wonderful.

Only in recollection some months after this outing can I see Appalachia the same way I see this fish. I loathed my childhood for many reasons. Many of us do. But Appalachia, contained in-itself, is beautiful. My loathing was the water that made this fish unimpressive. Only removed from the water could I see the fish more than the parts that surrounded it.



*Bigeye Shiner\*. 09/14/25, Natalie Mudd.*



*Unidentified Tree with roots spreading into the water. 09/14/25, Natalie Mudd*

I s'pose what came to me was only a feeling of nostalgia. The feeling was good, but what was important, the observation, followed. I'd trapped myself in this idea that the location I lived in was without wilderness to enjoy. Of course, hikes are nice. Seeing a toad or cool caterpillar during one is even better. But it isn't the Florida everglades, it isn't the Amazon, it isn't the Sahara. It's Louisville Kentucky.

Because of the time spent adoring these small animals, I was able to release with them this self-imprisoning idea. It's not "Louisville Kentucky." It's "Louisville Kentucky!" No, we don't have matabele ants, giant african bullfrogs, or flying fish. What makes an animal or place great to an individual is the act of experiencing. Louisville Kentucky, as any place great or meager, has much to experience.

The future is uncertain. Anyone who is unaware, I urge to read not only on the affects of water pollution, but also on the effect of the broader crisis of climate change and corporate responsibility for its growth. Individuals can live cleanlier. On site there was some trash littered, a vape and bottle half-buried in mud. I cannot tell you anything you wouldn't be able to read a thousand times elsewhere on this subject. But I can encourage you to observing your local environment yourself and to encourage others.



*Water Strider. 09/14/25, Natalie Mudd.*

This strider was the hardest catch. They seem to me a delightfully cute reminder as to the importance of pushing for water cleanliness now. We—all of humanity and life as we understand it—depend on water just like this water strider. Without it we don't just fail to stride.

The best action we can take against water pollution is governmental reform. Individuals pollute, yes. Corporate pollution and government permission accounts for much more than individuals ever could.

We cannot stop or significantly slow water pollution through management of our own behavior. What we can do is appreciate the beauty of the environment around us and get the word of reform in what we do, one way or

another.

The last catch of the day was this handsome crawdad. I noticed one of their antennae were shorter than the other and was quite sad. Despite the minor injury, they seemed curious of us.

The feeling of catching this crawdad was invigorating. I hadn't caught one since I was seven. They are so beautiful.

When they stared at me, something occurred to me. Working for reform isn't just the right thing to do. Every day over a hundred species disappear.



*Crawdada. 09/14/25, Natalie Mudd*

# Lifestyles with Water: Functionality and Aesthetics

Norah Langford, University of Louisville



*Hydrate*. Louisville, Kentucky. November 30, 2025. Photo by Norah Langford.



*Thirsty?* Louisville, Kentucky. September 10, 2025. Photo by Norah Langford.



*Transformation.* Louisville, Kentucky. September 9, 2025. Photo by Norah Langford.



*Captain's Quarters*. Louisville, Kentucky. August 23, 2025. Photo by Norah Langford.



*Rainy Day Traffic.* Louisville, Kentucky. September 22, 2025. Photo by Norah Langford.



*Blackacre Pond*. Louisville, Kentucky. September 7, 2025. Photo by Norah Langford.

## Photo Essay Reflection

These images reflect my experiences with water in everyday life, whether it's in a natural pond, using water to make coffee, watering plants, or experiencing the rain. I felt like it was difficult for me to choose a topic because accessibility to water in Louisville, and in my life, is an afterthought. I'm lucky and grateful to not face water scarcity, or have to worry about having clean water to drink or bathe in. Water is as natural in my lifestyle as breathing, so instead I focused on the many ways that I interact with it both functionally and aesthetically.

One thing I noticed while taking these images is that water is almost always used for functional purposes in my life. In the first photo, *Hydrated*, I am watering my Christmas Cactus plant that my grandmother gave me. I've never been too good at remembering to water plants, but this one has stayed alive for over a year. I use a spray bottle to give it a drink, which hydrates the plant and gives it life. It is my responsibility to water this plant, so I felt like including this photo not only showed a functional use of water, but also shows the importance of being proactive and attentive in my uses of it because it doesn't just affect me.

The next two images, *Thirsty?* and *Transformation* show more functional uses of water, but in a more personal way. In *Thirsty?*, my cat Slippers is drinking from the faucet in my bathtub. Each morning, she greets me as I brush my teeth and hops in the tub, waiting for me to lift up the lever that will release the excess water. When I do, she aligns herself underneath the spout and drinks, as if it's a water fountain. Although it's a strange method of drinking, the action of doing so is functional, an everyday necessity that all living things need. Just around the corner from

my bathroom, Slippers has a bowl filled with water that she drinks from, but for some reason, she's created this routine where she prefers the bathtub faucet every morning. I wanted to document this because it shows the ease with which I can access water, and how it affects not just my lifestyle, but my cat's as well. I feel like something as silly as drinking from the bathtub shows that the infrastructure in place here in Louisville allows for a higher quality of life because clean water is highly accessible.

In *Transformation*, I show the process of how I make my morning coffee each day. Using my Nespresso machine, the water stores are used to flow through the machine and blend with the espresso pod filled with coffee grounds, which creates espresso in a liquid form. I wanted to document how water is used in a process, and one that affects and enhances my life everyday. Because I'm able to make coffee in this way, I feel more awake and motivated for the day. I very well could buy packaged coffee from the store, or use a different coffee machine, but I think the Nespresso is unique because I can create a single serving of espresso instead of making an entire pot of coffee. It seems to require less water for this specific process, but still shows the easy access to it. Without water, I couldn't make coffee at all, or at least not in the way I prefer.

Moving forward, my images transition from functionality to the aesthetics of water. The image titled *Captain's Quarters* was taken at the restaurant of the same name on the Ohio River waterfront in Louisville. The sunset enhances the photo and highlights the beauty of the water through the reflection of the pink and orange hues. As it shows, many people have their boats docked, but there is even one boat in motion in this photo. The Ohio River is an integral part of Louisville, and although the state of Kentucky is landlocked, the river sometimes makes it feel like I'm living on the coast. However, although this image shows a beautiful example of the Ohio River, I find it to be quite off-putting most days because of its brown, murky water. Normally, I don't find it a pleasing body of water to look at, which creates some disdain in me for the city life, since downtown Louisville is right next to the waterfront. Although it's integrated into Louisville's culture, the lack of preservation of the river's beauty is an issue I wanted to highlight.

In *Rainy Day Traffic*, I documented the water droplets on my windshield and mirror as I was driving home from campus. At first I didn't think much about it, but then I began studying the water more as I was stuck on an exit ramp on the interstate. I began to think more about how Louisville is a unique city in that we experience all four seasons, most of which have extreme elements. We have hot summers and freezing winters, but rain is something that's a constant. After the semi-heat wave that blended summer into fall, I thought more about how grateful I was that it was raining as the seasons changed. The rain provided some relief from the extreme heat.

The final image titled *Blackacre Pond* was taken in Blackacre Nature Preserve which is about five minutes from my house in Jeffersontown. I grew up going to Blackacre for school field trips or for hikes with my family, so I recently revisited the space by myself. I took a peaceful hike through the woods and remembered this pond from when I was a kid. I remember it feeling much more magical than it did here. It almost felt like the water wasn't brown and murky, but instead a magical fairy pool. Perhaps I just had a more wild imagination when I was younger,

but I felt disappointed that the beauty of Blackacre had disappeared. I found myself asking, “What happened?” My hope is that somehow, this pond will clear up and regain some of the life and beauty to it, but truly I don’t know if it was neglected or if the murky water is a result from heavy rain mixing with lots of mud. But, I wanted to highlight a space in my life that has changed aesthetically over time.

*Norah Langford is a senior English (Creative Writing) Major and German Minor at the University of Louisville. She was born and raised in Louisville, Kentucky. After graduation in May 2026, she intends to continue honing her writing and editing skills in whatever way possible.*

# Consumerism of Water in America & Louisville's Filtration System

Samuel Dobelstein, University of Louisville

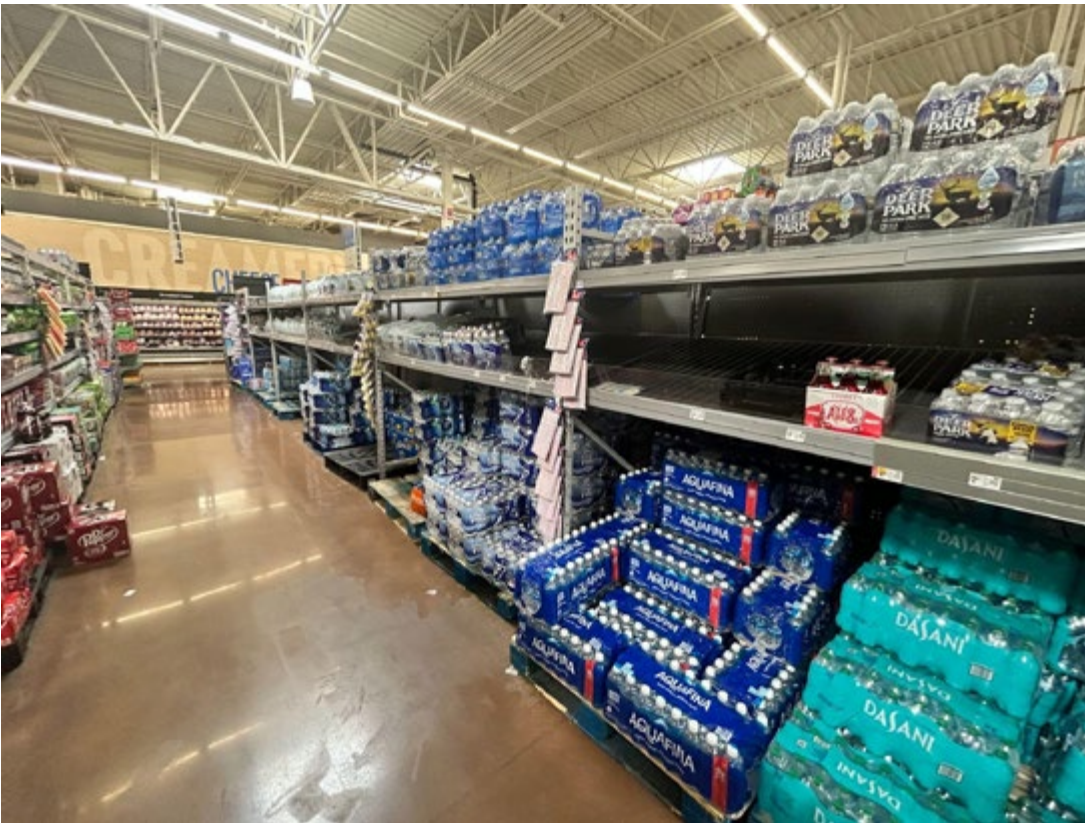
In America, we have lost sight of what water does for us. Water is seen as something we get out of the faucets in our kitchens, or something we can buy at the store. Corporations find that the commodity of water is very lucrative, even though it shouldn't be.





*Figure 1 & 2: The different selection of water bottles at my local Target store, in different styles and colors. September 14, 2025, Photo by Samuel Dobelstein.*

What one uses to hold water is a very aesthetic choice in America, many people, myself included, take for granted the abundance and luxury of water. With passing social media trends, there seems to be a new and popular water bottle seemingly every year. Everyone wants the “new” water bottle, even though they all do the same thing, the choices we make are purely aesthetic. During the Covid-19 pandemic, everyone wanted Hydroflasks (Figure 2), and starting in 2024, everyone wanted Owalas (Figure 1), with the color, style, and size being obviously of the utmost importance when picking one out. Water bottle corporations like Hydroflask and Owala thrive off of internet trends.



*Figure 3: The “Water Aisle” in my local Walmart, pallets of water for sale to buy. September 15, 2025, Photo by Samuel Dobelstein.*

In the same way, corporations like Walmart and Target have abundances of water just sitting on shelves, waiting to be bought, even though many people in Louisville have drinkable water from their taps. These corporations could donate these access water bottles, but instead, they care more about profit than helping dehydrated people in need locally and throughout the world. People in America also rationalize buying these bottles of water by pointing out the convenience of being able to toss the empty bottle away, but this leads to much more pollution and the plastic being used is very detrimental for the environment.

While looking at other photo essays in this collection, and the scenes of water in peoples’ backyard from across the world, I started to think of water in my “backyard.” Louisvillians, and Americans in general, are very lucky to have access to clean, filtered water. In Louisville, the natural filtration we have is due to Limestone deposits which filter the water. Louisville has many different filtration plants, and many no-spilling zones, where dumping any contaminants into the local water sources is illegal, in order to further protect our clean water. America should be more willing to assist with clean water for all and to devote more money into filtration. We should be willing to share the water we have with the world, without a price associated with it.



*Figure 4: The Crescent Hill Water Filtration Plant, on a sunny day. Photo from “Louisville Family Fun”*

The oldest filtration plant in Louisville is the Crescent Hill Water Filtration Plant. I remember taking trips with my family when I was younger and walking around the grounds, learning about the ways the reservoirs work, why we have them, and more. I always thought Louisville was so lucky, and I am blessed to have such great water so easily accessible.



*Figure 5: First reservoir of water held at Crescent Water Filtration Plant, full of water actively being filtered. September 19, 2025, Photo by Samuel Dobelstein.*



*Figure 6: Second reservoir of water, almost completely empty. September 19, 2025, Photo by Samuel Dobelstein.*

Figure 6 shows a water reservoir almost completely drained of water, which in most cases, is a bad thing. Luckily for us, the Crescent Hill Filtration Plant is only patching up some holes in the reservoirs, but still, this could be seen as a bad omen of things to come, if we aren't careful with our water, and how we use it. Water is very important for day to day operations of power plants, businesses, and animals, and clean water is utmost important. People should care more about the things water does for us and what we can do to ensure clean water, rather than the color of bottles that hold water for us throughout our day-to-day lives.

*Samuel Dobelstein graduated from the University of Louisville with his Bachelor of Arts in English in December 2025. Samuel is very passionate about various relationships he's made while in University, and the relationships that he is going to make in the future. Samuel enjoys spending time with friends and family, bowling, and exercising. Samuel works so hard to impress his partner, Grace, and his two cats, Kira and Declan, and they are the biggest supporters of his work.*

# Rain, As It Comes and Goes

Liam Lloydsmith, University of Louisville

*We needed this.*

As the first rumbles of thunder and first few patterings of rain drops on the leaves and roads begin to make the city aware of their presence, one can start to smell the rain clouds rolling towards the city of Louisville. It had been a few weeks (perhaps more than a few) since our city last had a bath, and the air had grown thin and dry. *We needed this*, I thought. I can't hear the other people's internal monologues as they hurry past me to get to shelter—their cars, their classrooms, their apartments—but I know they're thinking we needed it, too.



***Welcome Squatters*** *An empty pond begins to gain life again as the first drops of rain build their new home on its foundation. 9-22-25*

I've made it to my car before the heavy drops begin making their descent, and I'm thankful—I haven't packed my umbrella in a while. I wonder where it is. Tucked away, lonely, I'll bet. Thirsty. *I'll look for it when I get home*, I think as I nestle my key into the ignition. I turn it, the engine huffs, and I begin my drive home.



**Pay Close Attention** - *The world around me is a bit more chaotic, and my afternoon commute is jeopardized by slick streets and muddled vision. The splats of rain on my windshield prove to overwhelm my senses—loud, constant distractions. I'd better turn my music down.*



***Blurred Lines*** - *The heavy rain running down the glass windows distorts the world around. My apartment building peaks out in front of me; I'm almost home. I need to stay in my lane... wherever it is.*

The city—other than the drivers on edge trying to navigate the treacherous roads—seems to have taken a breath. The dry heat has taken over everyone's lives the past month or so, with the only rain coming from a short overnight thunderstorm, which teased the plants of Jefferson County. Now, the air is getting a real bath. When I arrived home, I opened my living room window. I like what rain does to the senses: it makes smells *smellier*, it makes sounds, well, *soundier*, it makes silence even more silent. My dog was happy to jump in a few puddles on our (short) walk that evening.



***Sure Footed*** - Remus is careful to walk on the leaves to the side of the soaked and muddy path. Somehow, he still manages to track mud back home.

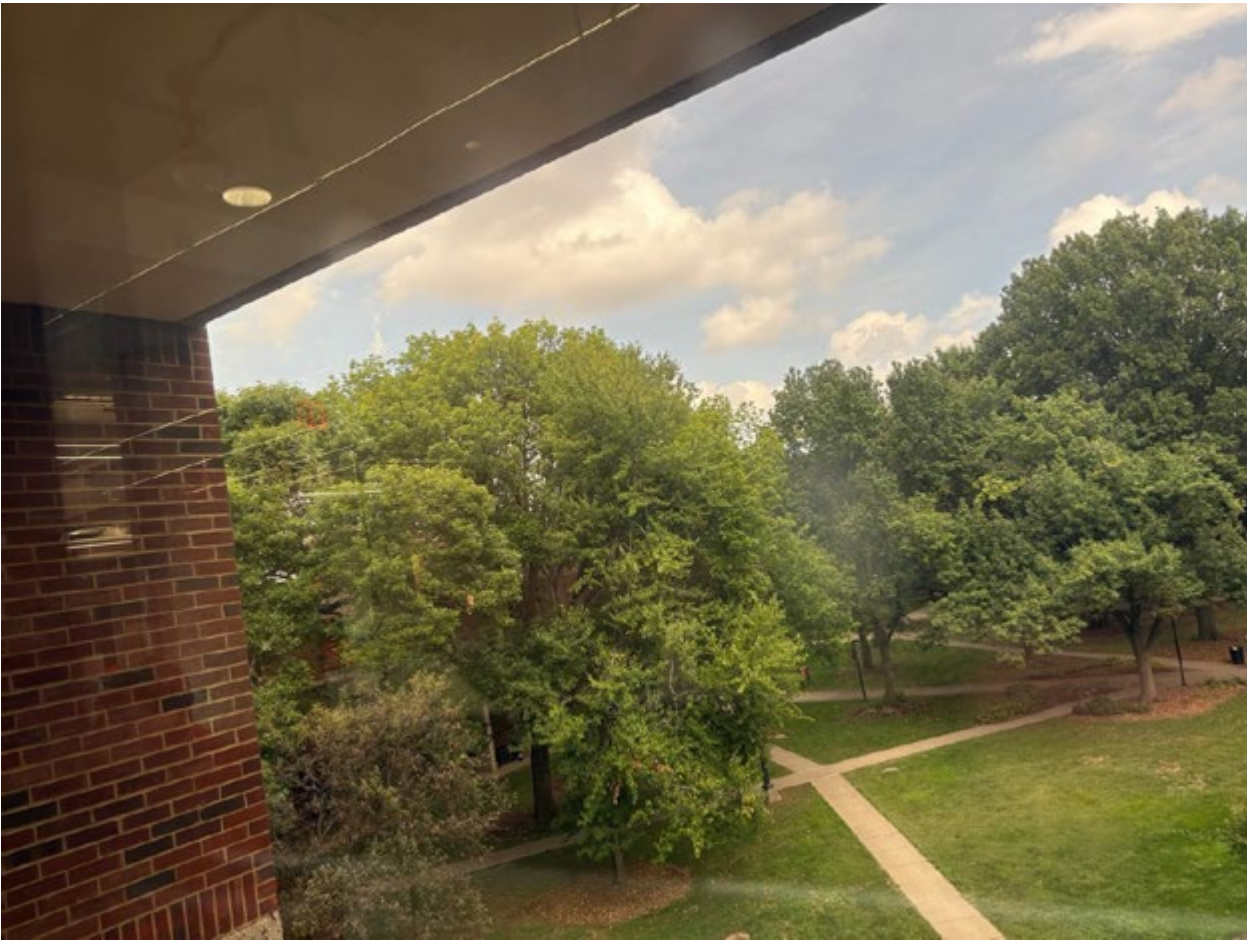
The forest behind my apartment seems to be more vibrant tonight. I can hear more and farther than usual, and Remus (pictured above) stops and perks up his ears every few steps. We walk as long as we can before the rain begins to regain its weight and we must turn back around towards home. When we arrive, the breeze from the window I opened earlier hits me immediately. The smell of the rain has completely taken over my apartment now, its work smelling much better than any can of *Febreze* could hope to provide. It's been a while since I've had to use the torn-up towel I keep in my front closet for drying Remus off, and I almost forget. He gets a few shakes in before I can wrap him up. The rain continues on, but for Remus and I,

it's time for bed. No need for any melatonin tonight. The soft, constant purr of the rain will carry me off to sleep before I can count any sheep.

The next morning, the rain has gone just as quickly as it arrived, but traces of the storm leave evidence—proof—everywhere.



***Drainage*** - As I walk to the library this morning, traces of the rain remain. A drying puddle is in my path, though only for a short time longer.



***Color Washed*** - As I finish working on this essay, I look outside the window in front of me and can't help but notice the earthy green tint in the sky and trees. The rain left its mark, bringing out the colors of the city that had begun to feel ever so distant.

*We needed that.*

*Liam Lloydsmith is a Senior at UofL pursuing a BA in English with a focus on Creative Writing. He has done editorial and review work on the literary journal Miracle Monocle, and is hoping to continue his writing education with an MFA program in the fall. Liam has a passion for film and music, and enjoys capitalizing on any opportunity to involve such passions in his writing and other academic works.*