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## THE COST OF ENVIRONMENTAL INJUSTICE

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By Kira Joyner

# BACKGROUND

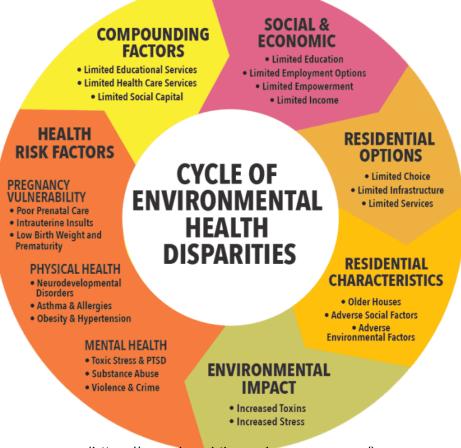
The foundations of the Environmental Justice movement rest on the notion that access to a clean and safe environment is a fundamental human right. All of Georgia's communities feel climate change's effects (https://www.savannahnow.com/story/opinion/2022/04/12/fight-climate-change-and-support-environmental-justice-georgia/7278238001/). Yet, communities of color and low-income households are disproportionately affected (http://172.173.160.73/knowledge-base1/a-history-of-environmental-justice-in-georgia/) since their neighborhoods are more likely to endure increased pollution levels, floods, and energy expenses (http://172.173.160.73/wp-

content/uploads/2021/11/2012\_GreenLaw\_PatternsofPollution.pdf).

Many environmental injustices in Georgia are caused by racial and economic differences, and it is everyone's responsibility to make sure that these historical judgments do not dictate the future and health of communities. To recognize the injustices and take deliberate action to correct them, environmental justice must remain at the forefront of environmentalism.

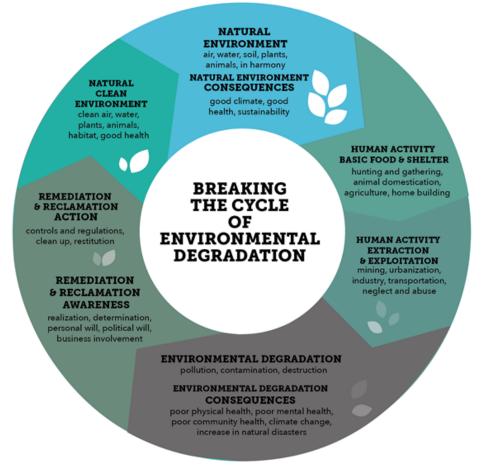
In the state of Georgia, there exists a long history of economic segregation and redlining (https://sustainability.emory.edu/environmental-justice-july-blog-series-blog-3/). Redlining was advocated in the 1930s by the Federal Housing Administration and the Home Owners Loan Corporation, who declared minority districts to be risky places to invest and refused bank loans, mortgages, and insurance in such areas. These and other discriminatory practices mean that these segregated neighborhoods are closer to industrial zones. These spaces have frequently turned into disposal grounds for toxic garbage produced elsewhere, whether it is coal ash, mine tailings, or asphalt shingles (https://www.eealliance.org/about-env-justice.html). The people inhabiting these areas have long been utilized as statistics and demographics to support grants and government programs, but rarely receive the associated benefits.

Pollutants and toxic wastes have a long-term harmful impact on individual health with a wide range of hazards. Exposure to environmental particulates has been associated with a higher risk of morbidity and mortality from a variety of illnesses, including cancer, organ abnormalities, and other chronic disorder (https://health.gov/healthypeople/objectives-and-data/browse-objectives/environmental-health)s. Because of exposure to higher levels of pollution, communities of color are more prone to experience premature death. Pregnant women and children are more susceptible to the effects of this exposure. Increased exposure to environmental pollutants commonly contributes to or worsens adverse health conditions in children, such as obesity, hypertension, diabetes, and improper neurodevelopment (https://bencrump.com/environmental-justice-lawyer/who-is-affected-by-environmental-injustice/). These are exacerbated by limited educational and healthcare resources and lead to intergenerational poverty and the persistence of health disparities that are described as a Cycle of Environmental Health Disparities (https://www.breakthecycleprogram.org/).



(https://www.breakthecycleprogram.org/)

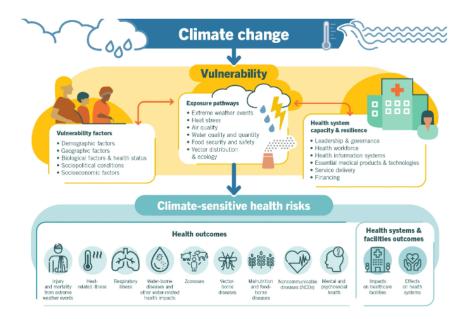
Different varieties of interventions will be necessary to aid in this issue from the industrial aspect and an increase in public awareness takes priority.



### (https://www.breakthecycleprogram.org/)

# THE COST OF ENVIRONMENTAL INEQUALITIES ADDS UP...

Environmental inequality imposes a heavy financial burden on individuals including a lifetime of poor health, lost wages, and in extreme cases the loss of life. These individual burdens add up to a high societal cost and overburdened healthcare systems. The greatest threat to human health in the world now is climate change. Air pollution, sickness, severe weather, evictions, food insecurity, and stress on mental health are only a few of the negative effects that are already having a negative influence on people's health. As a civilization, we depend on healthy ecosystems to provide us with fresh water, clean air, medicines, and reliable access to food. Sickness is reduced when the environment is stabilized and yet loss of biodiversity is occurring at an unprecedented rate, which has an effect on human health globally and raises the danger of new infectious diseases (https://cdn.who.int/media/docs/default-source/climate-change/fast-facts-on-climate-and-health.pdf?sfvrsn=157ecd81\_5).



The cycle keeps repeating. Poor health leads to lower incomes. Lower incomes mean that individuals may postpone or forego critical medical care when health plans do not have adequate networks because they are forced to use more contracted healthcare providers than they have access to, which causes delays and requires them to travel great distances. Which further lowers their earning potential.

Large, intricate infrastructures for shipping, transportation, and energy exist in Georgia, much of it along the state's 100 miles of coastline. The climate in which they operate could change, resulting in higher temperatures, more precipitation, and sea level rise, which could have a serious negative impact on Georgia's economy

(http://cier.umd.edu/climateadaptation/Georgia%20Economic%20Impacts%20of%20Climate%20Change. pdf). As severe weather takes a toll on our infrastructure budgets for the public sector will be severely strained. Furthering the blow to already overburdened communities.

### Heat is more deadly than any other weather-related hazard

(https://www.savannahnow.com/story/opinion/2022/04/12/fight-climate-change-and-supportenvironmental-justice-georgia/7278238001/). 2022 was the 6th hottest year in US recorded history and the last 9 years were the 9 warmest. Heat has adverse effects in both urban and rural settings. In urban areas, heat islands, which are worst in low-income areas with little greenery have worse air quality, again having adverse health and economic effects. In rural areas, especially agricultural zones, crop yields are extremely vulnerable to climate change because agriculture is directly and highly dependent on the temperature and daily weather. In 2020, Georgia's Agriculture Sector contributed \$69.4B and 352,000 jobs to the economy (https://caed.uga.edu/content/dam/caes-subsite/caed/publications/agsnapshots/2022CAEDAgSnapshotsWeb.pdf). Higher than-average temperatures and more severe storms will take a toll on this sector of Georgia's economy. For example, just this year (2023), severe weather events had an adverse affect on the Georgia peach crop (https://www.ajc.com/news/georgiapeaches-might-be-hard-to-find-this-year-heres-why/YNXH4AU2UBCW5P447Y2YJ4KPBA/). Georgia's pursuit of economic reforms during the previous ten years resulted in outstanding economic development, capital inflow, and investments. Yet, this development did not lead to stronger environmental governance or natural resource management

(https://openknowledge.worldbank.org/entities/publication/f899963e-7bba-5409-8b51-706992813d2a). When the proper corrective actions are not taken, the people of Georgia pay the real price. Georgian policy and decision-makers are now paying more attention to environmental policies as we all come to realize that sustainable development involves a fundamental change in policies that propel the systemic transformation of production, consumption, and behavioral patterns. The effectiveness of current policies and tools to lessen demands on natural resources and safeguard public health from poor ecological quality needs to be improved.

## SOLUTIONS

Addressing Environmental Injustices has been a part of the United States' official policy since the 1990s when the Clinton Administration began to address concerns over the unfair effects of pollution on certain communities. The Biden Administration has established the White House Environmental Justice Advisory Council (https://www.epa.gov/environmentaljustice/white-house-environmental-justice-advisory-council).

Today, we have many systems in place that are working hard to maintain and improve public health for all Georgians. There are various active efforts used to investigate, evaluate and eliminate environmental conditions that are considered harmful.

Georgians are ready for environmental justice, clean water and air, less expensive electricity, and jobs that can support a family. Investments in clean energy have the potential to generate inclusivity among people, more specifically for businesses as it poses an opportunity for new small enterprises and startups in communities of color (https://www.savannahnow.com/story/opinion/2022/04/12/fight-climate-change-and-support-environmental-justice-georgia/7278238001/). Although historically communities of color have received the least funding for resilient infrastructure and sustainable energy technology, just last year the Biden administration committed to providing underserved communities 40% of the benefits of infrastructure and climate investment (https://www.savannahnow.com/story/opinion/2022/04/12/fight-climate-change-and-support-environmental-justice-georgia/7278238001/). Senators Jon Ossoff and Raphael Warnock are urging their Senate colleagues to approve the \$550 billion in climate and job investments that the U.S. House of Representatives has proposed to follow the president's example and prioritize action on climate change and environmental justice. These kinds of sustainable energy initiatives will benefit Georgia's economy. Over the next five years, they would generate close to 110,000 new jobs in Georgia.

Job creation and responsible development that considers the genuine environmental impact. Beyond the EV factories and solar businesses in the state, other changes are happening in multiple industries around Georgia. Medical students are learning about the health effects of climate change, and medical

researchers are supporting and directing studies that address the link between poor social and economic conditions and harmful environmental variables and health. Local colleges are mapping Atlanta's hottest neighborhoods, and doing other research to develop a better understanding of the connection between social and economic adversity and the prevalence and seriousness of negative health consequences. Researchers, public services, and community organizations are promoting and creating initiatives and plans that would enhance children's health in neighborhoods with precarious conditions. Military installations are testing more efficient air conditioners. And stores are finding ways to use less plastic.

When all people have a seat at the table during decision-making, everyone benefits. This issue requires a collective effort to address many of the ongoing issues that continue to affect and endanger the lives of Georgians. To ensure that the "green economy" has positive benefits for all Georgians, Georgia must consider all costs of development (human, health, environmental, and economic) when making decisions. Research has shown that with good planning everyone wins (economy, health, etc).

Updated on April 14, 2023

### ABOUT THE AUTHOR



### AMY SHARMA

Amy Sharma, PhD, is Executive Director of Science for Georgia. Dr. Sharma has worked in many aspects of the engineering field: Product Management at Predikto, spearheading the development of the big data vertical and managing a \$1M annual Independent Research and Development (IRAD) program at GTRI, working as an Assistant Professor in Medical Physics at the University of Western Australia, working as an Assistant Program Manager for the National Science Foundation, receiving political and outreach training as a AAAS Science and Technology Policy Fellow, obtaining a PhD in Biomedical Engineering at Duke University, and designing hardware logic for advanced server microprocessors at IBM. Dr Sharma enjoys difficult challenges, jobs with overly long titles, communicating scientific and technical ideas to non-scientists, brewing her own beer, and smoking various foods.

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