

**Testimony of Mustafa Santiago Ali**  
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**Before the House Committee on Science, Space, and Technology**  
**Hearing: “Sweltering in Place: COVID-19, Extreme Heat, and Environmental**  
*Justice”*

**Tuesday, July 14, 2020**

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Chairwoman Johnson, Ranking Member Lucas and Members of the Committee, on behalf of the National Wildlife Federation, our 52 state and territorial affiliates, more than 6 million members, and environmental justice communities and advocates around the country, thank you for the honor of testifying before you today.

Today’s hearing is taking place during a pivotal moment for our society. People from across all ages, racial backgrounds, economic statuses, abilities, and more, are coming together to stand up against injustices that are so deeply embedded in our democracy. Whether we’re talking about the elevated exposure and health-related discrepancies from pollution, climate change, COVID-19, or police brutality—people are connecting the dots and becoming aware of the disproportionate impact on people of color and low-income communities.

Our country is built upon a historical foundation of, “Separate and Unequal” and it continues today in the form of sacrifice zones in both the urban and rural context. *Plessy v. Ferguson* and *Brown v. Board of Education* attempted to move us forward toward equity and justice but we continue to fall short. Wealthier white communities have benefitted from protections and resources that have allowed many of their communities to thrive. Communities of color, lower wealth communities and Indigenous peoples have had to deal with the disinvestment and lack of protections that have often left them in survival mode. We now find ourselves on the precipice of change where millions are demanding change.

This awakening is correlated with the evolving understanding of institutional and systematic racism that has played a critical role in the social structures prevalent today. Racial segregation and redlining practices that were backed by government entities have had a long-lasting impact on the concentration of Black and Brown people. Communities of color were historically disinvested, which made them susceptible to the placement of toxic industries that have polluted air, land, and water. According to published annual estimates on behalf of the EPA’s EJSCREEN, African-American and Latinx communities face a significantly higher environmental hazard exposure when compared to majority-White communities.<sup>1</sup>

As a result, these frontline communities suffer from chronic medical conditions: heart, liver, kidney and lung disease, as well as cancers. Further, these chronic medical conditions make

people more susceptible to the coronavirus and heat-related illnesses (including heat exhaustion and strokes).<sup>ii</sup>

Almost 3 million Americans have been infected with the coronavirus and approximately 130,000 have died.<sup>iii</sup> We see these elevated rates of infections and deaths in places that have a long history of serving as pollution dumping grounds, like Trenton, New Jersey, Cancer Alley in Louisiana, and Chicago's south side. African-Americans make up only 13% of the country's population, but they make up almost a third of COVID-19 related deaths. And these numbers continue to rise.

Communities of color across our nation are overburdened by the burning of fossil fuels, which is a significant driver in the climate crisis. That has resulted in a 2 degree (F) increase in global average surface temperatures since the pre-industrial era.<sup>iv</sup> The majority of these fossil fuel facilities are located in lower wealth, communities of color, and on Indigenous lands. Every year we continue to surpass the number of days of record-breaking hot temperatures and as heat waves intensify and increase in frequency, the air in frontline communities becomes stagnant and can better trap emitted pollutants, resulting in an increase of air pollution exposure.<sup>v</sup>

The Urban Heat Island (UHI) effect also exacerbates rising temperatures. On average, temperatures in an urban center can vary between 1.8 – 5.4 degrees (F) warmer than rural areas.<sup>vi</sup> And as our technology continues to evolve to underscore the impact of UHIs, we have significant gaps in monitoring exact temperatures and understanding ways to better mitigate its effects.

Urban areas can present unique challenges with extreme heat, but often the solutions are the same as those in other areas, such as tree cover. For example, Chicago is home to a longstanding urban forestry program that has documented impacts on reducing air pollution and reducing energy bills.<sup>vii</sup> In fact, the U.S. Forest Service estimates that trees in the Chicago region remove about 18,080 tons of air pollution per year (\$137 million/year) and help reduce annual residential energy costs by \$44.0 million/year.<sup>viii</sup>

We've seen the detrimental impacts of environmental and climate injustices play out in 1995 when Chicago experienced an intense heat wave over a span of 3 days that killed more than 700 people.<sup>ix</sup> Most of the deaths were among majority-Black and low-income neighborhoods such as Englewood, Fuller Park, and Roseland.

It was also in Chicago where one of the first environmental justice heroes arose—Mrs. Hazel M. Johnson. Mrs. Johnson dedicated her life to uncovering the connection between high cancer rates in Chicago's south side and exposure to toxic pollution sites. She, along with several environmental justice leaders, were instrumental in urging President Clinton to sign the Environmental Justice Executive Order, a foundational directive that made federal agencies responsible for addressing environmental injustices among minority and low-income populations.

COVID-19 will prove to be an obstacle for countless communities that have invested time and resources to develop health action plans to reach and protect vulnerable residents from extreme heat.<sup>x</sup> These plans often include surveillance systems and outreach methods to ensure that

populations that are more susceptible to heat-related health issues are provided with adequate information and resources to ensure their well-being. These systems have shifted to monitor and address COVID-19, which has created a significant gap in the ability of communities to simultaneously address extreme heat. Physical distancing requirements also creates further difficulties when considering health action plans that involve the use of cooling centers. And in most rural communities, these plans and access to cooling centers are largely absent.

To make matters worse, several low-income communities are undergoing energy injustices and don't have the financial means or employment security to keep their utilities on. We've heard from countless community leaders and government officials about utility shutoffs in our virtual Environmental Justice Roundtables that the National Wildlife Federation and other national partners have hosted. Time and again, this energy burden are mainly attributed to the lack of adequate and energy efficient housing.

During my time at the Environmental Protection Agency, we had an active interagency working group that facilitated collaboration and the development of holistic solutions to support frontline communities. Together, we were able to craft forward-thinking policies, which included the implementation of the Emergency Efficiency and Conservation Block Grant Program at the Department of Energy. The program provided \$3.2 billion to local governments, Indigenous tribes, and territories to improve energy efficiency, which lowered energy bills and simultaneously reduced carbon emissions.<sup>xi</sup> If reinstated and fully funded, this program could result in an average of 35,000 jobs over the next five years.

Unfortunately, instead of building off the existing programs and working groups, the Trump Administration is taking drastic steps backwards. Even amid the coronavirus pandemic, the Trump administration has diligently weakened U.S. environmental protections, which have significant impacts on climate change and public health. Rollbacks include the Clean Car Rule and standards on mercury and air toxics. Overall, the current administration has rolled back more than 60 environmental regulations and it's instituting an Executive Order to weaken the National Environmental Policy Act.<sup>xiii</sup> Each of these current actions overburden vulnerable communities and make them more susceptible to health-related conditions that can be lethal.

These rollbacks play out in neighborhoods like Southwest Detroit where 1.6 million pounds of hazardous pollution is released each year from billowing smokestacks above schoolyards and day care centers, as they live in the shadow of the Marathon refinery. Exposure to these emissions places the residents at a greater risk for the coronavirus and future pandemics. We know this from the recently released Harvard study which highlighted the fact that a small increase in long-term exposure to PM<sub>2.5</sub> leads to an 8 percent increase in the COVID-19 death rates.

These considerations must factor into the federal government's response to coronavirus and extreme heat, especially as we're now seeing a debate about reopening schools under these alarming circumstances.

When we address climate change and its impacts, such as extreme heat, we have the ability to simultaneously address environmental injustices. If we invest strategically to improve our air,

water, toxic waste cleanup, affordable housing and energy assistance, we could simultaneously create a cleaner and healthier environment for all and help realize the creation of more than 300,000 jobs annually over the next 5 years.<sup>xiii</sup> We can do this through several avenues.

First, we must move forward with a just and equitable transition from fossil fuels and ensure that no one is left behind. By centering communities of color, rural communities, and our most vulnerable in that transition, we will be able to mitigate climate change impacts and ensure fossil-fuel dependent communities have a path forward with sustainable, good-paying jobs. Building new renewable energy is cheaper than running existing coal plants as prices become more affordable every year. By 2025, almost every existing coal plant in the United States will cost more to operate than building replacement wind and solar.

Nearly 335,000 people work in the solar industry and more than 111,000 work in the wind industry, compared to 211,000 working in coal mining or other fossil fuel extraction. Clean energy employment grew 3.6% in 2018, adding 110,000 net new jobs, which accounted for 4.2% of all jobs added nationally in 2018.<sup>xiv</sup>

With the development of this new economy we must ensure that our most vulnerable communities whom have been impacted by fossil fuel pollution, the devastating effects of COVID-19 and climate change, can fully benefit from new job opportunities. When we advance clean energy tax credits and energy efficiency grants, we should be sure to prioritize investment in fossil-fuel dependent communities. Not only would that get the most carbon abatement per federal dollar spent, it would also speed investment to areas needing well-paying jobs and help reverse a toxic pollution legacy.

Second, projects that restore natural systems also create jobs. Restore America's Estuaries reports that coastal restoration "can create more than 30 jobs for each million dollars invested" which is "more than twice as many jobs as the oil and gas and road construction industries combined."

In Louisiana, a proposed \$72 million project to restore a 30,000-acre expanse of degraded marsh near downtown New Orleans known as the Central Wetlands Unit would create 689 jobs (280 direct jobs and 400 indirect and induced jobs) over the project's life. Implementation of the entire \$25 billion of restoration in Louisiana's Master Plan over the next fifty years would multiply those jobs hundreds of times over. In Florida, restoration of the Everglades will produce more than 442,000 jobs over the next 50 years and almost 23,000 short- to mid-term jobs for the actual restoration work. Restoring the Everglades is also predicted to produce a return of four dollars for each dollar invested.

Restoring our natural resources and expanding outdoor recreation would also help us address the impacts of extreme heat and climate change on vulnerable communities and wildlife. Many wildlife species, including brook trout in the East and various trout (brown, rainbow and native cutthroat and bull trout) and whitefish in West are very susceptible to temperature spikes. Temperature spikes also can cause disease and parasite outbreaks. Four years ago, the Yellowstone River had to be shutdown to fishing because the river warmed resulting in fish die offs. These events are happening more and more frequently, and have a devastating impact on

local businesses and the nearly \$800 billion outdoor economy. Beyond just short-term extreme heat events, when we consider the cumulative of impacts of increased air and water temperatures, as well as drought frequency and duration, we're facing the reshuffling of entire communities and wildlife populations.<sup>xv</sup>

Lastly, we must work diligently to reinstate a 21st-century version of the Civilian Conservation Corps.<sup>xvi</sup> The Corps could be an instrumental path forward to both creating jobs and transforming our environment for the benefit of wildlife and people, and it should prioritize inclusion of disadvantaged youth who can be inspired to begin careers in conservation. First institutionalized under President Roosevelt during a time of similar economic insecurity, the Corps was instrumental in planting more than 3 billion trees, building hundreds of parks and wildlife refuges, and completing thousands of miles of trails and roads.<sup>xvii</sup> Today, more than 12,000 species, including wildlife, fish, and plants need conservation. Our forests, parks, and refuges face billions in maintenance backlogs. Strategic investments in natural solutions can mitigate the severity of extreme weather events provoked by climate change. And a recent study found that restoration jobs support 33 jobs per \$1 million of investment, which can stimulate our economy and create work force development opportunities.

These are just a few examples of how change can happen when we support community driven solutions that help our people, our planet, and our economies.

The National Wildlife Federation has recently released several helpful resources, including reports on the Protective Value of Nature, Extreme Heat, and our Natural Climate Solutions policy platform, all of which are attached to this testimony.

I look forward to answering your questions, continuing this important conversation, and working with you to develop legislative solutions. Thank you.

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<sup>i</sup> <https://rhg.com/research/a-just-green-recovery/>

<sup>ii</sup> <https://www.cdc.gov/disasters/extremeheat/medical.html#:~:text=They%20may%20be%20taking%20medications,to%20retai n%20more%20body%20heat.>

<sup>iii</sup> <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

<sup>iv</sup> <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

<sup>v</sup> <https://www.ncdc.noaa.gov/news/impact-weather-and-climate-extremes-air-and-water-quality#:~:text=According%20to%20the%20scientists%2C%20heat,in%20increases%20in%20surface%20ozone.&text=One%20t ype%20of%20cold%20wave%20also%20allows%20air%20pollution%20to%20accumulate.>

<sup>vi</sup> <https://www.epa.gov/heatislands>

<sup>vii</sup> <https://www.chicago.gov/city/en/depts/streets/provdrs/forestry/news/2019/april/city-of-chicago-announces-plan-to-plant-nearly-4-500-new-trees-t.html>

<sup>viii</sup> [https://www.itreetools.org/documents/312/Chicago\\_Region\\_rb\\_nrs84.pdf](https://www.itreetools.org/documents/312/Chicago_Region_rb_nrs84.pdf)

<sup>ix</sup> <https://www.chicagomag.com/Chicago-Magazine/July-2015/1995-Chicago-heat-wave/>

<sup>x</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7255271/>

<sup>xi</sup> <https://www.americanprogress.org/issues/green/news/2020/06/29/486959/extreme-heat-covid-19-pandemic-amplifies-racial-economic-inequities/>

<sup>xii</sup> <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html?mtrref=undefined&gwh=2A1B0CE283244FDAD1B96D9B17E8B0A0&gwt=pay&assetType=REGIWALL>

<sup>xiii</sup> <https://rhg.com/research/a-just-green-recovery/>

<sup>xiv</sup> <https://www.forbes.com/sites/energyinnovation/2019/04/22/renewable-energy-job-boom-creating-economic-opportunity-as-coal-industry-slumps/#2ec7c7c43665>

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<sup>xv</sup> <https://e360.yale.edu/features/with-temperatures-rising-can-animals-survive-the-heat-stress#:~:text=A%20growing%20number%20of%20studies,major%20factor%20in%20future%20extinctions.>

<sup>xvi</sup> <https://www.nytimes.com/2020/05/18/opinion/coronavirus-unemployment-youth.html>

<sup>xvii</sup> <https://www.nytimes.com/2020/05/18/opinion/coronavirus-unemployment-youth.html>