

# Engaging in Climate Justice in the US to Protect and Empower Vulnerable Populations

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## *Introduction*

Hurricane season is hitting the United States with unusual force this year. Hurricane Harvey has proven to be one of the most destructive storms in our nation's history. Texas and Louisiana—especially the city of Houston—have had to cope with devastating flooding, and now face the challenge of recovering from the storm. The storm has already claimed at least 70 lives, and tens of thousands have been displaced.<sup>1</sup> Hurricane Irma, too, has been historic, with thousands who have had to evacuate and millions still without power. Everyone affected by these massive storms struggle to rebuild their homes and livelihoods, but some communities will be affected more deeply than others.

It should be noted that, although climate change may not be solely to blame for the severity of these storms, we can be relatively sure that it made them worse – and we can expect that this trend will continue. For Hurricane Harvey, the sea level in the Gulf of Mexico was about half a foot higher (in part to due climate, and in part due to oil drilling) and sea surfaces temperatures in the region were nearly 1°F higher than in past decades. Warmer temperatures contribute to greater atmospheric moisture, creating conditions that are more favorable to heavier rain and flooding. Considering these simple factors, there should be no doubt that climate change is making storms far worse.<sup>2</sup>

Extreme weather events, exacerbated by climate change, will continue to pose a challenge to all. However, disadvantaged and vulnerable populations are hit hardest by climate change. Scientists and researchers around the world, including the Intergovernmental Panel on Climate Change (IPCC), the World Health Organization (WHO), and others, report that human risk will vary greatly. Communities living in coastal areas, ageing populations, the elderly, low-income communities – these groups will feel the greatest impact of climate change. The major challenge is that, in general, wealthy populations have the resources to better adapt to the changes the climate brings, whether it's erratic weather patterns or the spread of infectious diseases, while disadvantaged populations do not have this safety net.<sup>3</sup>

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With any extreme weather event, we can expect that disadvantaged groups – people of color, women, and low-income communities – will have the hardest time responding. We saw the particularly long-lasting and devastating effects of Hurricane Katrina,<sup>4</sup> and this was true in the more recent Hurricane Sandy.<sup>5</sup> This has been true of every environmental challenge: whether it’s superfund sites impacting low income communities, an oil spill impacting indigenous groups, or water scarcity impacting rural farmers. This should be no surprise, as these groups have the fewest resources at their fingertips, but this does not have to be the norm.

It is essential for our country to adopt efforts to mitigate climate change, but it is also imperative that climate adaptation methods integrate environmental and climate justice ideals. Strategies for this can include policies to protect vulnerable groups, and increased education and engagement. As with any truly effective strategy, adaptation plans should also be tailored to the needs of the specific community, and allow local stakeholders the opportunity to contribute to the planning and implementation process. Such efforts will help reduce the damaging effects of a changing climate and would help strengthen our recovery efforts.

## *History of Climate Justice*

Climate justice, which seeks to protect human rights while addressing climate change challenges, shares a foundation with environmental justice. In the United States, the environmental justice movement began somewhere around the 1960s, running parallel with the Civil Rights movement. The Memphis Sanitation Strike is cited by the Environmental Protection Agency (EPA) as being the first organized effort,<sup>6</sup> when after the death of two colleagues, black sanitation workers in Memphis went on strike to demand better pay and working conditions.<sup>7</sup> Later, in the 1980s, communities in Warren County, North Carolina – a region that was predominantly poor, rural, and black – protested the placement of a toxic waste site in their community.<sup>8</sup> While unsuccessful, this marked another major milestone in the movement, bringing attention to previously unaddressed issues.

Such events, and others to follow, helped unify groups that felt threatened by harmful environmental conditions. And indeed, these groups were often a target of environmental injustice. For example, a 1983 study by the General Accounting Office revealed that three out of the four

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hazardous waste landfills in eight southeastern states were in majority-black communities. About a quarter of the population in each of the four locations had incomes below the poverty level, indication an undeniable trend disadvantaged areas.<sup>9</sup>

From the Congressional Black Caucus to the Indigenous Environmental Network, groups would begin to band together to advocate for their rights to clean water, safe environmental conditions, and public health, putting increasing pressure on the government to address the environmental risk faced by minority populations. Finally, in 1992, the EPA's Environmental Equity Workgroup produced a comprehensive report confirming that minority groups did in fact bear a greater burden when it came to environmental risks. The report verified that "[t]he evidence indicates that racial minority and low-income populations are disproportionately exposed to lead, selected air pollutants, hazardous waste facilities, contaminated fish tissue and agricultural pesticides in the workplace."<sup>10</sup>

The Natural Resources Defense Council explains why this is particularly impactful. Certainly, landfills or factories must be placed somewhere, and many communities would not welcome such an addition. However, it is far easier to introduce potentially hazardous developments into low-income minority communities than in middle to upper class, white communities. They explain that, "[p]oor communities and communities of color usually lacked connections to decision makers on zoning boards or city councils that could protect their interests. Often, they could not afford to hire the technical and legal expertise they'd need to fight a siting. They often lacked access to information about how their new "neighbor's" pollution would affect people's health."<sup>11</sup>

Incidents of environmental injustice have persisted through to today, such as in the recent conflict over PCB disposal in Chicago, and overlaps significantly with climate concerns.<sup>12</sup> While climate change doesn't intentionally target of minority or low-income groups, these populations often lack the resources needed to brace themselves or respond to weather changes. We have already seen the overwhelming difficulty minority populations in New Orleans faced when recovering from Hurricane Katrina. There are many cases in which both climate and environmental justice intersect, such as with mountaintop removal in Appalachia, where the extraction process for this fossil fuel contaminates local drinking water and has been linked to increased rates of pulmonary diseases and

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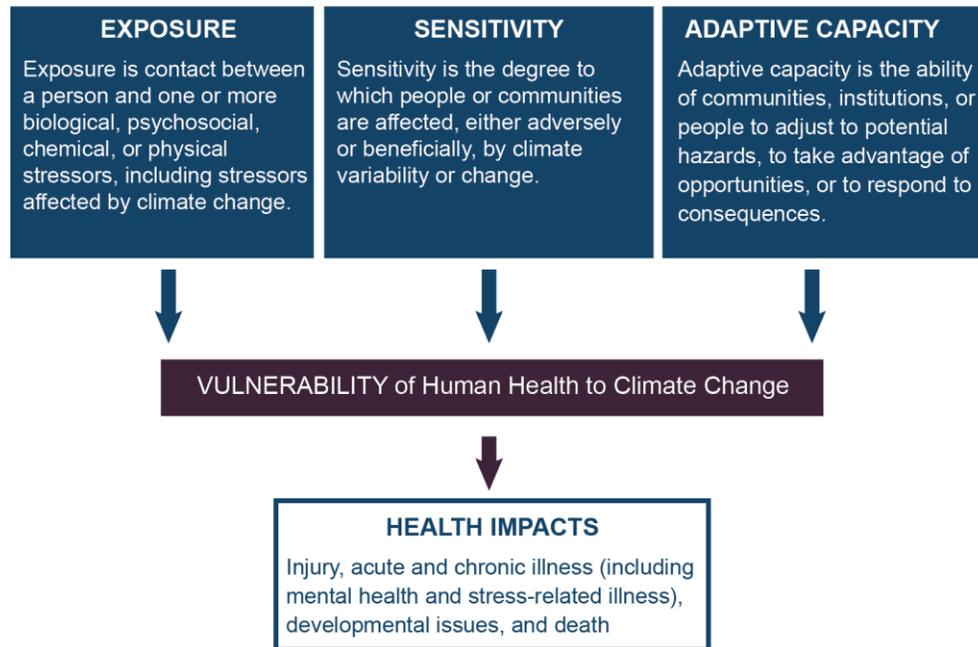
other health concerns.<sup>13</sup> Many issues intersect around climate justice, which is why it should be so integral to addressing climate change.

## ***Climate Change Impact on Low-Income and Minority Groups***

Today, climate justice should be at the forefront of our strategies when combatting climate change. History in the United States has shown us that certain groups bear a greater burden when facing environmental risks, and we know today that this is true also when dealing with climate change. In 2016, the US Global Change Research Program, a research effort comprised of government agencies including the Department of Defense, the Department of Energy, and NASA released a comprehensive report entitled “The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment.” This report developed a framework to determine vulnerability to climate change and its health impacts, and identified many populations of concern. These groups include “those with low income, some communities of color, immigrant groups (including those with limited English proficiency), Indigenous peoples, children and pregnant women, older adults, vulnerable occupational groups, persons with disabilities, and persons with preexisting or chronic medical conditions.”<sup>14</sup> Climate related-stressors, including extreme weather events like heat waves and hurricanes or the increase of vector-borne diseases, will be more likely to impact these groups. Additional climate change-driven impacts, such as changes to food and water security, would also be of particular concern to these groups.

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## Determinants of Vulnerability



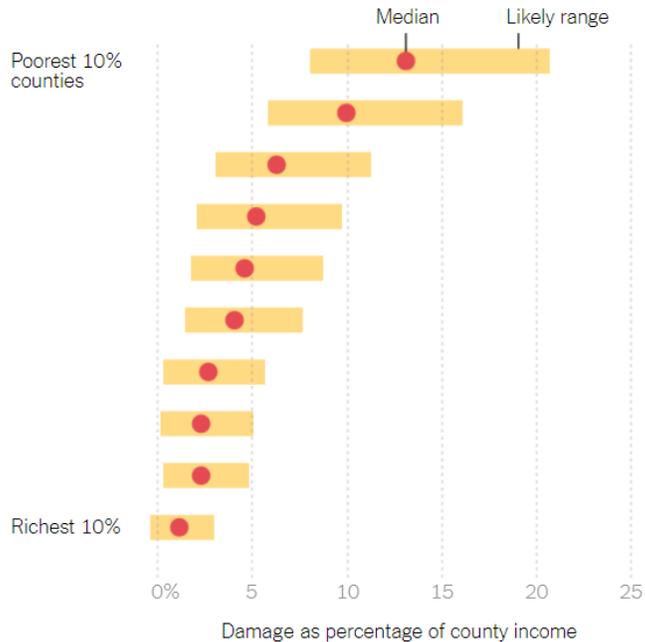
*The above chart, taken from the USGCRP report, shows key determinants of vulnerability. Low-income and minority groups tend to exhibit high exposure and sensitivity to climate change, while having less adaptive capacity to respond.*

A study published in the journal *Science* noted that not all regions in the United States would be equally affected by climate change. Overall, the report projects that each degree Celsius of warming could cost the United State 1.2% of its gross domestic product.<sup>15</sup> Southern states, particularly in the southeast, would experience greater temperature increases than in other parts of the country. This report notes that this will drive economic damage, but that the poorest regions will see the most impact, explaining that “climate change tends to increase pre-existing inequality.”<sup>16</sup> This can be seen in the chart below:

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### Rising Temperatures May Exacerbate Inequality

Counties grouped by income per person.



*The New York Times reported on the economic inequality that rising temperatures, driven by climate change, are projected to worsen.<sup>17</sup>*

One report, supported by the Annenberg Foundation, The Energy Foundation, and the William and Flora Hewlett Foundation, delved into the challenges California will face, much of which can be projected to the rest of the country. Extreme weather events, like heat waves and drought, are expected to be more common as climate change progresses. Low-income and minority groups in California are at higher risk for heat exposure due to socio-economic factors like a lack of access to air conditioning units. Additionally, these vulnerable groups tend to live in neighborhoods with fewer trees and more concrete and heat-trapping surfaces.<sup>18</sup> Not only are there greater health risks, but low-income families already spend a higher portion of their income on basic needs like food, energy, and shelter.<sup>19</sup> If these groups already have more limited economic resources on hand, they will bear a greater burden when facing the projected decrease in agricultural productivity and recovering from extreme weather events.

Driving further inequality will bring greater suffering to impacted groups, and certainly weaken our country on the whole. However, merely understanding the importance of the unequal impact of

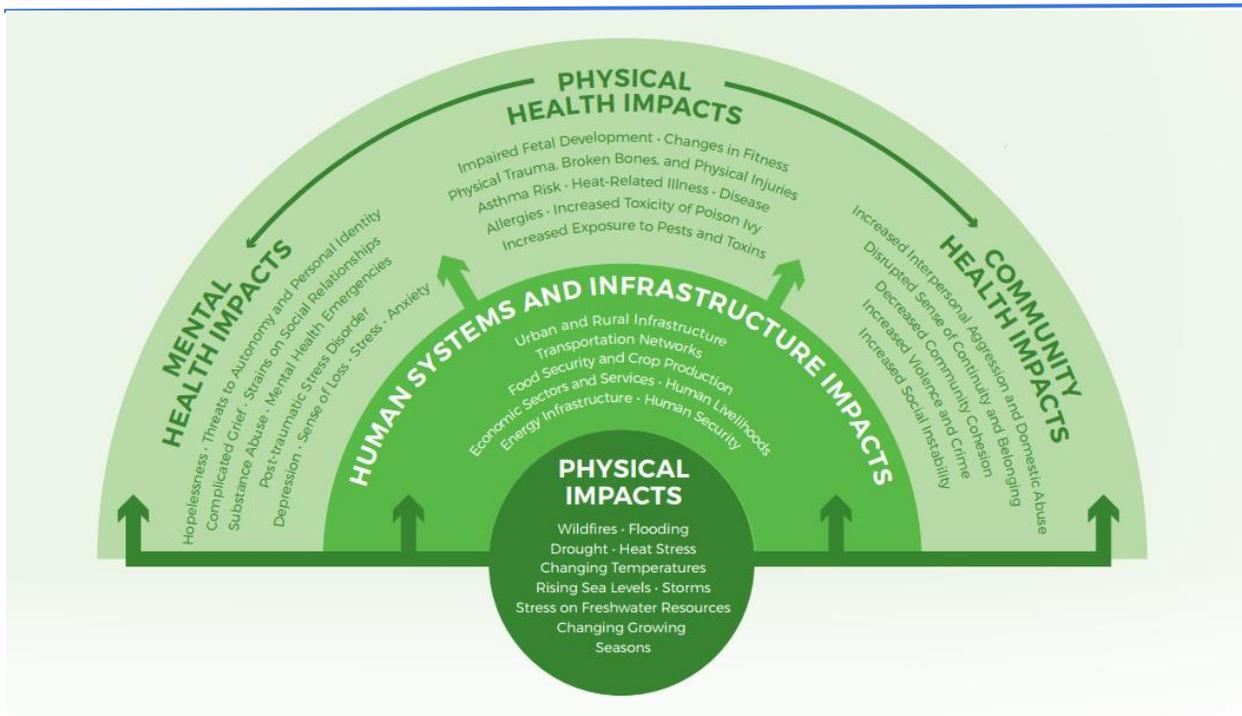
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climate change is not sufficient. We need to embrace policies that will strengthen these efforts, and we must empower disadvantaged and vulnerable groups. Unfortunately, we face a challenging political landscape at the federal level, so we must turn to local-level policies and independent groups to succeed.

## *How the US Can Embrace Climate Justice*

The first step in appropriately combatting the unequal impact of climate change is to engage political agencies in the conversation and encourage them to acknowledge that this is a concern. While it seems that we might not be able to rely on federal policy, we must continue efforts to encourage political leaders to acknowledge that human-driven climate change is real and deserves our attention. That way we can work together to make progress towards safeguarding our country against the likely detrimental effects of a warming climate. We should maintain funding for programs in the Environmental Protection Agency which work to draw attention to the underserved, while also encouraging more research to better understand how to cope with expected changes.

Perhaps more than ever before, it will be vital to craft climate adaptation policies that specifically support vulnerable populations. The City of Boston, for example, has developed a new city-wide initiative, Imagine Boston 2030, to address climate risks, improve infrastructure, drive inclusive growth, and improve quality of life for all groups.<sup>20</sup> As a coastal city, Boston faces a range of climate change related challenges, including sea level rise, extreme weather events, increased average temperatures, and urban heat island effects.<sup>21</sup> Their climate readiness plan includes many important components that any plan should replicate – from staying apprised of climate change projections, to educating and engaging groups from all sectors, to investing in infrastructure to combat climate risks. City officials are well-aware that minority groups are at greater risk and have introduced a resiliency plan with components focused on climate, transportation, education, and other issues to help close the gaps between minority groups and more advantaged communities. Simple strategies to achieving equity include creating a more connected community with accessible public transportation, expanding sustainable infrastructure, and collaborating with local groups. Such key steps embody climate justice and should be replicated across the country.



*Infographic from Resilient Boston: An Equitable and Connected City shows the many ways how climate change can impact communities. Low-income and minority groups will feel these impacts more strongly.*

As with any justice issue, it is also vital to educate vulnerable groups and empower them to take action. For example, the director of the NAACP Environmental and Climate Justice Program noted that members often do not connect climate change with the traditional civil rights agenda.<sup>22</sup> As we’ve seen, minority groups are indeed very often at higher risk for environmental hazards and climate change-driven disasters, and it’s important to show how these intersect with other justice issues, like food security and public health. One author explains this, especially in a response to the effects of Hurricane Harvey, “It can’t be that certain segments of the black advocacy community already focused on climate justice are the only ones leading this discussion—all of us need to lead it.”<sup>23</sup> Educating marginalized groups enhances their ability to advocate for their needs, which could help improve the flow of resources to those in need. It enhances the argument for climate justice on a larger scale, and the more that are engaged in the conversation, the stronger the result.

We have all the resources we need to engage in climate justice to protect vulnerable groups, and to ensure that they do not face a higher risk when climate change-driven weather events come their

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way. Adopting policies that will improve living conditions for disadvantaged populations can help reduce inequality, thereby reducing the burden of recovering from climate risks. Simple strategies like engaging more groups in conversations about climate change or educating citizens and lawmakers on the impacts of climate change in their communities can be profoundly beneficial. That way, events like Hurricanes Katrina and Harvey won't leave such lasting damaging effects on our economy and communities. Low-income and minority groups won't be left behind. Expected challenges like frequent heatwaves or displacement from sea-level rise won't disproportionately affect vulnerable groups, but rather all communities can be equally prepared to adapt and respond to climate change.

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## Notes

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