State of Environmental and Climate Justice in Florida A Human and Civil Rights Based Analysis



Executive Summary

There has never been a more urgent time in the collective fight against the abundance of threats, inequities, and insecurities posed by environmental and climate injustices. That urgent action is especially crucial in the state of Florida, which is one of the most vulnerable regions in the country to the impacts of climate change. Environmental and climate justice is as a much a problem of the future as it is a problem of the present. Moreover, those bearing a larger burden of risk when it comes to these dangers are overwhelmingly low-income and people of color. This report examines the countless dangers posed by environmental and climate injustices in Florida, and highlights the disparities in the burdens faced by the distinct communities versus other communities.

By utilizing a human and civil rights framing, Part I of this report analyses the human impacts of environmental pollution on:

- Air Quality Conditions
- Water Quality Conditions
- Land Quality Conditions
- Climate Impacts

Part II explores key avenues in addressing the environmental justice challenges currently facing Florida. Additionally, it suggests best practices on how to mitigate urgent environmental threats and provides suggestions on how to build upon resilience of frontline communities.

Florida's 3rd place ranking for highest CO2 emissions in the nation is a clear signal of its continued air quality problem. The vast majority of those emissions stem from electric power generation and transportation, contributing to 93.2% of Florida's total CO2 emissions. Cities like of Tampa, Miami-Dade, and Saint Petersburg have consistently failed to meet EPA air quality standards or have received



subpar air quality ratings by the American Lung Association. More often than not, there is a disproportionate number of low-income and people of color living in these cities and municipalities, putting them at a much greater risk for illnesses like emphysema, bronchitis, and lifetime asthma. Non-Latino black adolescents had the highest prevalence of current asthma as well as the highest rates of asthma emergency department visit and hospitalizations.

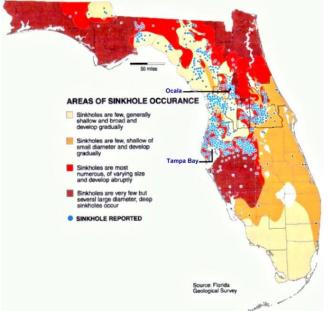
Water pollution has also stood as an impediment to environmental justice in Florida. Issues regarding the irresponsible dumping of wastes, toxins, and chemicals in and around Floridian waterbodies has



been detrimental to the local economies, public health, and biodiversity throughout the state. Industrial sources, mining sources, and energy production are the top three mercury emitting factors in a state where over one million acres of land and water has been classified as impaired by mercury. According to a study conducted by the FDEP an 86% reduction of anthropogenic mercury emissions is necessary to protect human health. The areas in which these issues are most prevalent are frequently in low-income, people of color communities particularly around the Everglades. For example, an EPA study reported "one-third of the freshwater fish sampled in Florida exceed the EPA-recommended total Hg criterion (0.3mg/kg) for human health." For those who depend on subsistence fishing to, this is especially problematic. For the Miccosukee Tribe in Tampa, who have traditionally depended on local freshwater fish for sustenance, this gravely endangers their health and livelihood. Sources of groundwater have also been at particular risk of chemical contamination, where they

provide 90% of the drinking water for Florida residents. In many cases, the safeguards and policies in place to avoid increased groundwater and surface water contamination either do not exist or have not been adequately enforced. Preserving the quality of these fresh-water bodies are not only crucial for their continued consumption, but also in preventing occurrences like sink-holes, in which Florida experiences more than any other state in the nation.

Sinkholes not only increase the risk of contaminating groundwater aquifers, they can also have serious above-ground implications. Sinkhole collapse can cause substantial damage to personal property and personal injury. In 2011, a state insurance law reform has dramatically increased the price and reduced



Florida's sinkhole region. Pricing citizens out of coverage leaves many communities in cities like Hernando, Pasco and Hillsborough with vulnerable. Brownfields also pose a significant threat to public health and safety, property values, and even social services. Brownfields are real property areas that are complicated by actual or perceived environmental contamination, hazardous wastes, or pollution. Of the 10 counties in Florida that have 10 or more Brownfields, almost all are disproportionately represented by low-income folks and people of color. These communities

are especially impacted by the irresponsible disposal of toxic wastes and the proximities of environmentally hazardous facilities.

The effects of climate change also exhibit a clear and present risk to all of Florida's citizens, especially its low-income, and people of color residents. **2016 was Florida's second-warmest year in history**, narrowly falling short of the record set in 2015. Warming temperatures have also contributed to surging seas globally, with **1/3 of Florida's land in jeopardy from 27-inches of sea level rise.** Florida is particularly threatened by an increase in projected intensity of hurricanes because of increasingly warmer temperatures. Researchers project **Florida will**



experience at least two Category 5 storms a year by 2090. Additionally, warming temperatures place agriculture and sustenance fishing under unneeded stress. With 2 million Floridians already facing a shortage of local, fresh, and healthy food in Florida's food deserts, an increase in food insecurity would



be disastrous. Warming climate and ocean temperatures have also contributed to such dangers like algae blooms which have economic, public health, and biological consequences; energy burdens with higher costs to accommodate for hotter temperatures; increases in severe weather and hurricanes; and increased risk of displacement due to rising sea levels. Surging sea levels and stronger storms will result in the need for infrastructure that can withstand hurricane-force winds or protect properties from flooding. Nevertheless, in cities like Miami where the median household is spending 58% of income on housing

and transportation, this creates grave insecurities.

Despite the findings of widespread environmental injustice across the state and underdeveloped safeguards in place to protect those disproportionately impacted by climate change, there are channels for engagement. Part II illustrates the diversity of measures and opportunities that exist for individuals and communities to advance environmental justice outcomes, including success stories and recommendations on short-term mitigations and long-term solutions.

The end goal in achieving environmental justice should not be predicated on all citizens bearing an equal burden of environmental harm and insecurity. Rather, it is with this civil and social justice framing that we bring forth a new and equitable vision where all Floridians, industry, and institutions work preemptively--not preventively--to ensure safe, clean, healthy, and resilient communities in the face of environmental danger and injustice. The meaningful involvement of impacted, under-represented peoples is a requisite in the realization of that future. There is also a critical need for the rectification of injustice where it has occurred, recognition of injustice where it is ongoing, and accountability in ensuring that injustice is not allowed to thrive. **This is not a call for concern--it is a call to action.**