



YOUNG PEOPLE'S POLICY PRIORITIES



Climate Justice

Image by Kat Grigg

Living in Florida, and being surrounded by the Gulf Coast and Atlantic Ocean, we know how central water is to our natural beauty, our way of life and our economy. At the same time, we know the Earth is warming, the climate is changing and the seas are rising. Global sea level increased by about a foot since the pre-Industrial days of the 1870s, and the rate is expected to accelerate due to the melting of mountain glaciers and the polar ice caps. Some experts project the sea could rise another six to 12 inches by 2030, and 14 to 34 inches by 2060. Due to our 1,000 miles of tidal coastline, Florida finds itself on the frontlines of climate change, and nowhere is that more true than South Florida.

Miami's troubles with rising sea levels starts with our topography. We are flat and low – the average elevation of Miami-Dade is just six feet above sea level. Until the 1880's, South Florida was all a swamp – the Everglades. The process of building channels and canals and making this area habitable was not an easy one. At the beginning, the people who lived here considered it too soggy, hot, mosquito-infested and vulnerable to storms and floods, and it took until 1896 for Miami to be incorporated as a city. One former Governor of Florida in the early 1900's, Napoleon Bonaparte Broward (really, that was his name) said "Water is the common enemy of the people of Florida." Now that the swamp has been drained, Miami is an awesome place to live – but the water is threatening again.

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The biggest concern for South Florida, especially Miami-Dade County, is the threat of sea level rise. It threatens to inundate the systems we built to make this place habitable, and has led to water advancing deeper and deeper into our cities. Due to warm water expansion and added volume from melting ice sheets, rising sea levels will exacerbate coastal erosion, storm surges, king tide flooding, urban flooding, as well as the impact of hurricanes. The think tank Resources for the Future says



Miami will become “the most vulnerable major coastal city in the world,” with hundreds of billions of dollars in assets in danger.

One reason we’re particularly vulnerable is that our foundation, like most of Florida, is made up of limestone, a type of rock full of holes. Limestone does not help against rising sea levels because it adds another way water can rise – from below, making building levees and barriers less effective. Further, while the water that fills up the holes in our limestone is mostly fresh water near the surface, as water advances into our County saltwater starts intruding, damaging our plants and farming systems, such as coastal mangroves and even polluting our drinking water.

Climate change is also hurting our natural protection. Our coral reefs act as a natural barrier to protect shorelines against waves and floods that help prevent loss of life, property damage, and erosion. However, increasing acidification in the ocean combined with nitrogen-rich waste spilling out of South Florida’s coastal cities makes corals more susceptible to bleaching and disease.

We don’t have to tell you climate change and sea level rise are already having an effect – you see it outside whenever it rains a little too hard. In fact, flooded streets in Miami-Dade County are becoming routine even on sunny days as King tides happen more frequently, last longer and extend farther inland. Our septic system in Miami is vulnerable, as it was not built to accommodate our current population levels. Further, oil and fertilizer from the land could be washed into our water, threatening our outdoor recreation and tourism. Not to mention, climate change also makes hurricanes and storms more intense.

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The most vulnerable to these climate effects are our poor and low-income population. Without the ability to purchase products and services or make investments to weather the challenges, this population will have the least amount of resources to cope with the crisis. Furthermore, there is an increasing concern of climate gentrification, where low-income residents are being pushed out of higher elevation zones for the purpose of redevelopment in South Florida. This results in increased market values as well as alters the character of culturally rich neighborhoods like Little Haiti and Little Havana.



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Our future under climate change is uncertain. Hal Wanless, the chairman of the University of Miami's Geological Sciences department, estimated in 2015 that South Florida as a region may only have about 50 more years of being livable. Some, like former Miami Beach Mayor Philip Levine and the Clerk of Courts of Miami-Dade County Harvey Ruvin, believe innovation and new technologies will help us adapt to rising sea levels. This challenge threatens our future, but we can meet it if we take immediate and decisive action to transform our energy and resilience systems.

Young people have been leading in making sure we do that. With the daunting reality of a declining planet, we've been raising our voices in the climate change movement. Local youth activists with groups such as GenCLEO, Sunrise Miami, Fridays for Future and Extinction Rebellion have been pushing Miami-Dade to declare a climate emergency. Fridays for Future protested for 26 weeks outside of the Miami City Hall. Young activists have been successful in having the City of Miami, Miami Beach and Coral Gables meet their first demand, to declare a Climate State of Emergency. Some local groups, such as the Sierra Club and Catalyst Miami, are pushing our County and cities to transition to 100% renewable energy by 2040.

Our local governments have taken steps to tackle the crisis. The City of Miami residents voted for a \$400 million bond deal, at least half of which has to go to protection from sea-level rise. To cope with recurrent flooding, Miami Beach has already spent \$650 million in stormwater management, including pumping seawater out of its neighborhoods because of increased tidal flooding, and has raised some of the streets several feet. This is just the start, and we must continue to figure out how best to transform our local infrastructure. We must also invest in green solutions that involve restoring our ecosystem. This includes restoring the wetlands that used to make up most of the peninsula and can absorb flooding, and investing in mangrove forests and restoring coral reef barriers on the coasts that can keep storm surge out. Some other low-lying places have tried building seawalls and having parks that double as flood absorbers and storm-surge barriers.

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Knowing the sea is rising beneath our feet and our city is on the frontlines can be scary. But there are solutions that we know work and are ready to go, and they'll help us get through and improve our lives. If we rise to the occasion, we can not only save ourselves but create millions of good, high-paying jobs and help address the economic inequalities that plague our community. We can upgrade our infrastructure, secure clean air and food, healthy food, access to nature, make our economy sustainable, and turn a catastrophe into an opportunity.

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