CLIMATE CHANGE IMPACTS ON FLORIDA

WHAT IS CLIMATE CHANGE?

The earth's climate is changing because of excess carbon dioxide pollution in the atmosphere, generated when fossil fuels like coal, oil, and natural gas are burned. This extra carbon traps more heat, like a greenhouse, which explains why 2000 to 2009 was the hottest decade ever recorded and there have been over 400 consecutive months with hotter-than-average global temperatures. Modern civilization developed in a stable climate and we have built our economy and way of life accordingly. Changes to our climate means that we are facing emerging hardships and vulnerabilities as the impacts of climate change unfold.

Some impacts from climate change include extreme storms, flooding from sea level rise, heat waves, and drought. These impacts have consequences for public health, safety, the economy, the environment, and our way of life.

Fortunately, we can protect against the worst impacts by limiting carbon pollution with energy efficiency and using clean renewable energy, like solar and wind.

Florida's coastline is a global treasure, yet is immensely vulnerable to flooding and erosion, made worse by climate change.

HOW DOES CLIMATE CHANGE IMPACT FL?

It is difficult to link any one event directly to climate change, and it is important to recognize that most climate data is regional or even global in scope. However, decades of expert research and centuries of historical records can be compared with recent trends to illustrate how climate change is already impacting parts of the Southeastern United States. These impacts, combined with possible future impacts, are both cause for concern and the imperative for action.

- Some of Florida's most **treasured places** are **flooding** and **eroding** away due in part to sea level rise from climate change. Our beaches, neighborhoods, and the Everglades and Keys are at great peril from sea level rise. Coastal properties in Florida lost an estimated $5.4 billion in value from 2005 to 2017 due to flood vulnerability, which is only expected to increase in years to come. Also at risk is Florida's coastal economy, which comprises 79% of the state's economy and supports 440,000 jobs annually. Seas are projected to rise by 1 to 4 feet, but as much as 8 feet, throughout the 21st century.

- **Heritage foods** and **agriculture** are suffering because of global warming. Some seafood, such as oysters, are directly harmed by the carbon pollution absorbed into the ocean, while farmers are expected to lose more crops to heat stress, drought and unreliable winter weather, which is expected to become more frequent in a warmer world. For example, in 2007, 58 of Florida's 67 counties were declared natural disaster areas because of drought, and in recent years, major cold snaps (2007, winter 2009/10, 2010/11, 2018) cost Florida citrus and vegetable farmers millions of dollars in damage and made food more expensive for buyers.

- **Hurricanes** are getting more intense in a warmer world, tending toward heavier rain and more category 4 and 5 storms, like Hurricanes Irma and Maria in 2017. Coupled with flooding from sea level rise, the liability to our coastal communities is great. Insurance will likely continue to get more expensive as more extreme weather disasters take place.

Over the last decade, FL fossil fuel power plants emitted an average of 113 million metric tons of carbon pollution each year.

![cleanenergy.org — Southern Alliance for Clean Energy]

IT'S TIME FOR SOLUTIONS!

PROMOTE CLEAN ENERGY

Clean energy, such as solar, wind, and energy efficiency, produces no pollution and provides jobs to our economy. Studies show that the United States could easily generate 80% of its power from clean sources by 2050. Energy efficiency can dramatically reduce the amount of power we use in our homes and businesses and lower our bills. Florida has huge economic solar potential while inexpensive wind energy could be brought to Florida for affordable and reliable power. Electric vehicles are now widely available and reduce our reliance on oil. Our state policies should seek to level the playing field between clean energy and riskier fossil power plants.

OPPOSE HIGH RISK ENERGY

Some energy sources have greater risks associated with their use. Old, inefficient and dirty coal power plants must be retired to reduce levels of pollution that trigger asthma attacks and heart and lung disease, put mercury in our water, and cause climate change. Nuclear power plants don't emit carbon directly, but are extremely expensive to build, require large amounts of water to operate, generate dangerous, highly radioactive waste, and can have devastating consequences should an accident occur. Our coast is too precious to be compromised by spills from offshore drilling. Clean energy is a positive alternative to each of these risky energy sources.

TAKE ACTION TODAY!

Find & Contact Your Elected Officials
www.bit.ly/legislator-search

Support Our Work & Become a Member of SACE Today
www.cleanenergy.org/donate

Join the Southeast Coastal Climate Network
www.cleanenergy.org/seccn

CONTACT YOUR ELECTED OFFICIALS

National and state-level climate and energy policies are imperative to ensure protection from the worst impacts of climate change and to secure the benefits of clean energy. Contact your elected officials in Washington D.C. and Tallahassee and tell them we must have climate and energy policies that:

- Invest in job-creating energy efficiency and clean energy
- Limit carbon pollution   • Preserve and strengthen the Clean Air Act
- Hold polluters accountable and end fossil-fuel subsidies

References and links available on the online version of this factsheet:
http://www.cleanenergy.org/fl-climate-impacts