# CLIMATE RESILIENCE STRENGTH, COMMUNITY, & SURVIVAL

# WHAT IS CLIMATE CHANGE?

All around the world, people are noticing that the earth's sensitive balance has been thrown off. The planet is heating up, and we stand witness to glaciers melting, oceans expanding, stronger storms and changing rainfall.

Most of the global warming we are seeing today is caused by pollution from burning fossil fuels, which thickens the greenhouse gas layer and traps heat within our atmosphere.

While some natural variation does exist, we have over 2,000 years of data that shows a direct relationship between the increase in carbon dioxide and the increase in global temperature. Just in the last 20 years, we have had the 10 hottest years on record. Looking long-term, this is a very real and dangerous trend.

# HOW DOES CLIMATE CHANGE IMPACT ME?

"Some areas around where I grew up are dry when they were normally holding water." – Pete Osceola III

"I believe we are already experiencing stronger storms, extreme temperature changes during the seasons. The summer's just keep getting hotter and hotter, and with Texas freezing over I believe the storms are only going to get worse."

- Kathlyn Jo Anderson

"Flooding is really bad in parts of Broward and Miami-Dade Counties."

– Aaron Tommie



Warmer oceans and atmosphere creates stronger storms.





Rising temperatures dry out soils and vegetation, increasing the risk of wildfire



Changing rainfall patterns are giving us less rainfall overall, meaning a longer dry season for farmers and ranchers.

cardiovascular disease, respiratory

Extreme heat is a public health

issue, increasing the risk of

illness and heat stroke.

Flooding and storm surge may be a significant climate concern for Hollywood, Tampa, and Fort Pierce. Sea Level is predicted to rise 2.5 feet in the next 50 years in South Florida. This can cause salt-water intrusion and raise groundwater levels, which threatens drink water supply and reduces the soil's capacity to absorb rainfall. As we know, when we finally get rain it is a downpour, which is hard for our drainage systems to handle.

Extreme heat may be a significant climate concern for **Big Cypress**, **Brighton**, **and Immokalee**. These inland reservations have about 40-60 days each year of temperatures over 95 degrees, which is considered extreme heat. That number will double by midcentury, and by the end of the century, residents will have to deal with extreme heat for half the year!

Climate Impacts



## WHAT DO WE KNOW?

**We cannot continue to ignore climate change.** Just last year, the US had 22 weather and climate disasters that each cost more than \$1 billion dollars in damage. People out west suffered a major drought and heatwave, and California had the most active wildfire year on record. In the mid-west, tornadoes and derechos downed power lines, damaged houses and flattened crops. Here in the southeast, a record 12 tropical storms made landfall, and forecasters had to turn to the Greek alphabet because they ran out of names on the list. In total, these 22 events cost \$95 Billion in damages.

**We must look to the future.** As we see 1 in a 100 year and 1 in a 1,000 year storms happing in our communities every few years, we know we cannot continue to set standards that use historic trends to build our homes and buildings. These assumptions are no are no longer realistic, and new criteria is needed to plan our communities into the future. Raising design standards will protect assets, revenue, and most importantly, lives.





**Climate change is a force multiplier.** Because it exacerbates weather, inequality, and all other environmental and social issues, climate change is not just one problem - it is a thousand problems. The global changes we are seeing have deeply personal and local impacts, and we must all work together to identify solutions and build climate resilience into not only our infrastructure, but also our social fabric and daily lives.





#### Tribal Members are most concerned about:

Loss of Traditional Plants, Rising Energy Costs/Unreliable Service, and Extreme Heat & Cold.

A THE REAL PROPERTY OF THE REA

## WHAT DO WE DO ABOUT IT?

In 2020, the Seminole Tribe of Florida launched a Climate Resiliency Program to understand and address the multiple risks climate change poses to the Tribe's land, property, and people. The program's goals are to:

- · Coordinate research on the immediate and long-term impacts of climate change,
- Engage with Tribal members to inform program development, and
- Provide recommendations to leadership on how to protect the assets of the Seminole Tribe and build greater resilience for the entire community.

## Our first step is to collectively develop a Climate Action Plan.

Tribal members will be at the **heart** of goal setting and prioritization of actions. This is a vital process of relationship building and visioning that will guide subsequent action and investment, and all are welcome to join in the conversation!

The Seminole Tribe of Florida can become a leader in climate change planning for Tribal nations around the world, by promoting climate resiliency strategies that utilize both western-based science and traditional ecological knowledge. Together, we can protect future generations, repair a broken system of relationships, and heal the land and ecosystems we depend on.

HERITAGE AND ENVIRONMENT RESOURCES OFFICE



### For more information, and to get involved, reach out to:

Jill Horwitz - STOF Climate Resiliency Officer: jillhorwitz@semtribe.com Cody Motlow - STOF Sustainability Coordinator: codymotlow@semtribe.com