CLIMATE DISASTERS IN FLORIDA

With Trump gutting FEMA and fighting with state governments, what is in store for the rest of 2020 for Florida?

TL/DR:

Trump has failed to prepare us for disasters caused by climate change. What does this mean for Florida?

- Research shows climate change is costing Florida millions of dollars every year:
    - Florida has seen five hurricanes in the past decade that caused a total of $93.7 billion in damages and 214 deaths.
    - An "above-normal" Atlantic hurricane season is expected in 2020.
    - In 2019, FEMA obligated $2,832,992 to Florida following hurricanes and coastal storms.
- In addition to hurricanes, every year, Florida faces extreme flooding and severe thunderstorms have been linked to climate change, as hotter air carries more moisture, leading to more frequent and more intense storms:
    - Studies show one-third of the lower 48 states face flooding risks due to severe storms. AccuWeather also forecasts an above average number of tornadoes in 2020.
    - In the last decade, Florida has seen seven severe storms that caused a total of $12.3 billion in damages and 70 deaths.
- Floridians also can experience more frequent and extreme wildfires, due to climate change:
    - As temperatures rise due to climate change, the severity, frequency and extent of wildfires increases:
    - In May 2020, Florida witnessed its first wildfires of the season, which burned through 5,000 acres of land. Wildland fire potential was predicted to increase to above average in South Florida due to dry conditions.

HERE'S WHAT'S HAPPENING:

With Trump gutting FEMA and fighting with state governments, Floridians should be asking Trump and his team how ready the federal government is to provide aide in a disaster at a time when climate change is already fueling major disasters that impact Florida.

In 2019, FEMA obligated $2,832,992 to Florida following Hurricane Dorian, which caused $1.6 billion in damages and 10 deaths. Studies show climate change is making hurricanes stronger, and the science connecting climate change to hurricanes like Dorian is strong. In the past decade, Florida has seen five hurricanes, including Dorian, that have caused a total of $93.7 billion in damages and 214 deaths. This year, an "above-normal" Atlantic hurricane season is expected, putting Florida at risk once again.

In addition to hurricanes, Florida is at risk from other types of severe storms that have been linked to climate change. This year, one-third of the lower 48 states face flooding risks due to severe storms and an above average number of tornadoes are forecasted. In the past decade, Florida has seen seven severe storms that caused a total of $12.3 billion in damages and 70 deaths, with the state being particularly hard hit by damage from hailstorms in 2015 and 2018.

Florida is also at risk from climate-related wildfires, which studies showed increase in severity, frequency and extent due to rising temperatures. In May 2020, Florida's first wildfires of the season burned through 5,000 acres of land. Dry spring weather was viewed as a major contributor to the state's active wildfire season, and wildland fire potential in the state was predicted to increase to above average in the Southern part of the state due to dry conditions.

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DAMAGES FROM CLIMATE-RELATED DISASTERS IMPACTING FLORIDA

In The Past Decade, Florida Has Experienced 14 Climate-Related Disasters Responsible For Over A Billion Dollars' Worth Of Damages. According to NOAA's National Centers for Environmental Information, Florida experienced 14 climate-related disasters that were responsible for over a billion dollars' worth of damages. These 14 disasters that occurred between 2009 and 2019 include seven severe storms, five tropical cyclones, one freeze and one wildfire. [ndcd.noaa.gov, Accessed 4/30/2020]

Since Trump Assumed The Office Of The Presidency, Florida Has Experienced Seven Climate-Related Disasters Responsible For Over A Billion Dollars' Worth Of Damages. According to NOAA's National Centers for Environmental Information, since President Trump assumed office in 2017, Florida has experienced seven climate-related disasters responsible for over a billion dollars' worth of damages. These seven disasters include three severe storms, three tropical cyclones, and one freeze event. [ndcd.noaa.gov, Accessed 4/30/2020]

RECENT FEMA SPENDING IN FLORIDA

2019: FEMA Obligated $2,832,992 To Florida Following Hurricanes And Coastal Storms. According to data from the Federal Emergency Management Agency, Florida was obligated $2,832,992 in 2019 following severe storms. [FEMA.Gov, Accessed 5/21/2020]

HURRICANES

Link To Climate Change

New York Times Headline: "Climate Change Is Making Hurricanes Stronger, Researchers Find." On May 18, 2020, the New York Times reported: "Hurricanes have become stronger worldwide during the past four decades, an analysis of observational data shows, supporting what theory and computer models have long suggested: climate change is making these storms more intense and destructive. The analysis, of satellite images dating to 1979, shows that warming has increased the likelihood of a hurricane developing into a major one of Category 3 or higher, with sustained winds greater than 110 miles an hour, by about 8 percent a decade." [New York Times, 5/18/2020]

NOAA: Human Activities May Have Already Made Changes To Atlantic Hurricanes. According to the Geophysical Fluid Dynamics Laboratory, "It is premature to conclude that human activities–and particularly greenhouse gas emissions that cause global warming–have already had a detectable impact on Atlantic hurricane or global tropical cyclone activity. That

said, human activities may have already caused changes that are not yet detectable due to the small magnitude of the changes or observational limitations, or are not yet confidently modeled (e.g., aerosol effects on regional climate)." [NOAA, Geophysical Fluid Dynamics Laboratory, accessed 8/29/17]

Anthropogenic Warming Is Likely To Increase Intensity Of Hurricanes By As Much As 11%. According to the Geophysical Fluid Dynamics Laboratory, "Anthropogenic warming by the end of the 21st century will likely cause tropical cyclones globally to be more intense on average (by 2 to 11% according to model projections for an IPCC A1B scenario). This change would imply an even larger percentage increase in the destructive potential per storm, assuming no reduction in storm size." [NOAA, Geophysical Fluid Dynamics Laboratory, accessed 8/29/17]

Increased Hurricane Activity Is Linked To Higher Surface Temperatures Caused By Man Made Carbon Emissions. According to the National Climate Assessment, "The recent increases in activity are linked, in part, to higher sea surface temperatures in the region that Atlantic hurricanes form in and move through. Numerous factors have been shown to influence these local sea surface temperatures, including natural variability, human-induced emissions of heat-trapping gases, and particulate pollution. Quantifying the relative contributions of natural and human-caused factors is an active focus of research." [National Climate Assessment, Extreme Weather, 2014]

Warming Water Would Provide Fuel For More Intense Hurricanes. According to NASA, "The one way in which global warming could impact hurricanes is by making them more intense. More heat and water in the atmosphere and warmer sea surface temperatures could provide more fuel to increase the wind speeds of tropical storms." [NASA, Earth Observatory, accessed 8/28/17]

2020 Season Outlook

NOAA Report: "An Above-Normal 2020 Atlantic Hurricane Season Is Expected." According to the National Oceanographic and Atmospheric Administration: "An above-normal 2020 Atlantic hurricane season is expected, according to forecasters with NOAA's Climate Prediction Center, a division of the National Weather Service. The outlook predicts a 60% chance of an above-normal season, a 30% chance of a near-normal season and only a 10% chance of a below-normal season. The Atlantic hurricane season runs from June 1 through November 30." [NOAA press release, 5/21/2020]

Accuweather Forecasted 14-20 Tropical Storms For the 2020 Atlantic Hurricane Season With 7-11 Becoming Hurricanes. Based on the newest forecasting models, AccuWeather forecasters have extended the upper range of hurricanes predicted for the Atlantic hurricane season. The hurricane team, led by Dan Kottlowski, the company's top hurricane expert, is now predicting 14 to 20 tropical storms, with additions also to the number of storms that become hurricanes: seven to 11 this season." [Accuweather, 5/7/2020]

CNN Headline: "Experts Agree This Hurricane Season Will Be Above-Average, Maybe Even Extremely Active." On May 8, 2020, CNN reported: "Hurricane season is fast approaching and it is likely to be active -- maybe even an extremely active -- season. 'Nearly all seasonal projections that have been issued by various agencies, institutions and private forecasting companies call for this season to be quite busy,' CNN meteorologist Taylor Ward says. Almost all of which are forecasting an above-average -- more than six -- hurricanes this season, which begins June 1. Some are even calling for an 'extremely active' season -- more than nine hurricanes. There are over a dozen forecasts published. And even though the official forecast from the National Oceanic and Atmospheric Administration won't come until May 21, a strong consensus in the forecasts across the industry indicates the US is in for an active season." [CNN 5/8/2020]

2019: Hurricane Dorian

August – September 2019: Hurricane Dorian Caused $1.6 Billion In Damages And Resulted In 10 Deaths. According to NOAA's National Centers for Environmental Information, Hurricane Dorian, which hit Florida in August and September of 2019, caused $1.6 billion in damages and resulted in 10 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Dorian Reached A Maximum Sustained Wind Speed At Landfall At 185 Miles Per Hour, The Highest Since The 1935 Labor Day Hurricane.** According to NOAA's National Center for Environmental Information, "Dorian's intensification to a category 5 storm marks the fourth consecutive year, in which a maximum category 5 storm developed in the Atlantic basin - a new record. Dorian also tied the record for maximum sustained wind speed for a landfalling hurricane (185 mph) in the Atlantic, a record shared with the historic 1935 Labor Day Hurricane." [ndcd.noaa.gov, Accessed 4/30/2020]

Washington Post: "The Science Connecting Climate Change To Hurricanes Like Dorian Is Strong." On September 4, 2019, the Washington Post reported: "The science connecting climate change to hurricanes like Dorian is strong. Warmer oceans fuel more extreme storms; rising sea levels bolster storm surges and lead to worse floods. Just this summer, after analyzing more than 70 years of Atlantic hurricane data, NASA scientist Tim Hall reported that storms have become much more likely to 'stall' over land, prolonging the time when a community is subjected to devastating winds and drenching rain. But none of the numbers in his spreadsheets could prepare Hall for the image on his computer screen this week: Dorian swirling as a Category 5 storm, monstrous and nearly motionless, above the islands of Great Abaco and Grand Bahama." [Washington Post, 9/4/2019]

2018: Hurricane Michael

October 2018: Hurricane Michael Caused $25.5 Billion In Damages And Resulted In 49 Deaths. According to NOAA's National Centers for Environmental Information, Hurricane Michael, which hit Florida in October 2018, caused $25.5 billion in damages and 49 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Hurricane Michael Was A Category 5 Hurricane That Reached Wind Speeds Of 160 Miles Per Hour.** According to NOAA's National Centers for Environmental Information, "Powerful category 5 hurricane made landfall at Mexico Beach, Florida with devastating winds of 160 mph and storm surge in excess of 15 feet. [...] Michael's intense winds also reached well inland causing billions in damage costs to agriculture and forestry, as high winds hit during harvest season for numerous crops across several states. [...] Michael was initially rated as a category 4 with 155 winds but upgraded to a category 5 with 160 mph winds upon further analysis." [ndcd.noaa.gov, Accessed 4/30/2020]

- **Hurricane Michael Was The Third Category 4 Or Higher Storm To Make Landfall In The U.S. Since 2017.** According to NOAA's National Centers for Environmental Information, "Michael is the third category 4 or higher storm to make landfall in the U.S. since 2017. Michael is the first category 5 to strike the U.S. mainland since Hurricane Andrew in 1992 and is only the fourth on record. The others are the Labor Day Hurricane (1935) and Hurricane Camille (1969)." [ndcd.noaa.gov, Accessed 4/30/2020]

CBS News: "Sometimes Connecting Climate Change To A Specific Weather Event Is Difficult. With Hurricane Michael, It's Not." In October of 2018, CBS News reported: "Sometimes connecting climate change to a specific weather event is difficult. With Hurricane Michael, it's not. The science is easy: Earth's waters are getting warmer due to an increasing global temperature, and warmer waters fuel hurricanes. Water temperatures in the far northern Gulf of Mexico were 3 to 5 degrees Fahrenheit higher than normal for this time of year. Instead of water temperatures being near 80, they were in the mid-80s as Michael moved over the Gulf and approached the Florida coast. That's a huge difference. Even a small temperature bump in the ocean causes a tremendous addition of energetic heat and water vapor to a storm, meaning higher wind speeds and more storm surge. All other things being equal, a storm hovering above 85-degree water will become much stronger than a storm hovering above 80-degree water." [CBS News, 10/13/2018]

2017: Hurricane Irma

September 2017: Hurricane Irma Caused $52.5 Billion In Damages And 97 Deaths. According to NOAA's National Centers for Environmental Information, Hurricane Irma, which hit Florida in September 2017, caused $52.5 billion in damages and 97 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Hurricane Irma Was A Category 4 Hurricane And A Category 5 Storm That Made Landfall At Cudjoe Key, Florida.** According to NOAA's National Centers for Environmental Information, "Category 4 hurricane made landfall at Cudjoe Key, Florida after devastating the U.S. Virgin Islands - St John and St Thomas - as a category 5 storm." [ndcd.noaa.gov, Accessed 4/30/2020]

- **25 Percent Of Buildings In The Florida Keys Were Destroyed And 65 Percent Were Significantly Damaged.** According to NOAA's National Centers for Environmental Information, "The Florida Keys were heavily impacted, as 25% of buildings were destroyed while 65% were significantly damaged. Severe wind and storm surge damage also occurred along the coasts of Florida and South Carolina. Jacksonville, FL and Charleston, SC received near-historic levels of storm surge causing significant coastal flooding." [ndcd.noaa.gov, Accessed 4/30/2020]
- **The Florida Coast Experienced Severe Wind And Storm Surge Damage, With Jacksonville Receiving Near-Historic Levels Of Storm Surge That Caused Significant Coastal Flooding.** According to NOAA's National Centers for Environmental Information, "The Florida Keys were heavily impacted, as 25% of buildings were destroyed while 65% were significantly damaged. Severe wind and storm surge damage also occurred along the coasts of Florida and South Carolina. Jacksonville, FL and Charleston, SC received near-historic levels of storm surge causing significant coastal flooding." [ndcd.noaa.gov, Accessed 4/30/2020]
- **Hurricane Irma Sustained Winds Of 185 Miles Per Hour For Longer Than 37 Hours, The Longest Recorded In The Satellite Era.** According to NOAA's National Centers for Environmental Information, "Category 4 hurricane made landfall at Cudjoe Key, Florida after devastating the U.S. Virgin Islands - St John and St Thomas - as a category 5 storm. [...] Irma maintained a maximum sustained wind of 185 mph for 37 hours, the longest in the satellite era. Irma also was a category 5 storm for longer than all other Atlantic hurricanes except Ivan in 2004." [ndcd.noaa.gov, Accessed 4/30/2020]

Scientists Say Climate Change Made Hurricane Irma Much Stronger. In September of 2017, BloombergNEF reported: "Climate change didn't cause Hurricane Irma, the most powerful storm to form in the open Atlantic Ocean, but did make it much stronger, scientists in Germany and the U.K. said. Irma made landfall in the Caribbean early Wednesday and barreled toward Puerto Rico on a path that may bring it ashore in Florida and destroy so much property that damages surpass Hurricane Katrina. 'Unfortunately, the physicality is very clear: Hurricanes get their destructive energy from the warmth of the ocean, and the region's water temperatures are super elevated,' said Anders Levermann, a climate scientist at the Potsdam Institute for Climate Impact Research, in an emailed statement on Wednesday." [BloombergNEF, 9/6/2017]

2016: Hurricane Matthew

October 2016: Hurricane Matthew Caused 10.9 Billion In Damages And 49 Deaths. According to NOAA's National Centers for Environmental Information, Hurricane Matthew, which hit Florida in October 2016, caused $10.9 billion in damages and 49 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Hurricane Matthew Caused Widespread Damage From Wind, Storm Surge And Inland Flooding In Florida.** According to NOAA's National Centers for Environmental Information, "Category 1 hurricane made landfall in North Carolina, after it paralleled

the Southeast coast along Florida, Georgia and the Carolinas causing widespread damage from wind, storm surge and inland flooding." [ndcd.noaa.gov, Accessed 4/30/2020]

2012: Hurricane Isaac

August 2012: Hurricane Isaac Caused $3.2 Billion In Damages And Nine Deaths. According to NOAA's National Centers for Environmental Information, Hurricane Isaac, which hit Florida in August 2012, caused $3.2 billion in damages and nine deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Florida Was One Of Four States To Experience Damage From A Large Storm Surge And Flooding Rains As A Result Of Category 1 Hurricane Isaac.** According to NOAA's National Centers for Environmental Information, "Category 1 hurricane made landfall over Louisiana. Isaac's slow motion and large size led to a large storm surge and flooding rains. This created damage across several southeastern states (LA, MS, AL, FL) including 9 deaths (5 direct, 4 indirect)." [ndcd.noaa.gov, Accessed 4/30/2020]

SEVERE STORMS

Link To Climate Change

Heavy Rainstorms Have Become Heavier And More Frequent In The U.S. In The Past Three To Five Decades. According to the National Climate Assessment, "Heavy downpours are increasing nationally, especially over the last three to five decades. The heaviest rainfall events have become heavier and more frequent, and the amount of rain falling on the heaviest rain days has also increased. " [National Climate Assessment, Extreme Weather, 2014]

- **The Midwest And Northeast Have Seen A 30% Increase In Very Heavy Precipitation Over The 1901-1960 Average - The Largest Increase In The Nation.** According to the National Climate Assessment, "Since 1991, the amount of rain falling in very heavy precipitation events has been significantly above average. This increase has been greatest in the Northeast, Midwest, and upper Great Plains – more than 30% above the 1901-1960 average. There has also been an increase in flooding events in the Midwest and Northeast, where the largest increases in heavy rain amounts have occurred." [National Climate Assessment, Extreme Weather, 2014]

Scientists Have Linked An Increase in Heavy Downpours To Climate Change. According to the National Climate Assessment, "Global analyses show that the amount of water vapor in the atmosphere has in fact increased due to human-caused warming. This extra moisture is

available to storm systems, resulting in heavier rainfalls." [National Climate Assessment, Extreme Weather, 2014]

National Climate Assessment: "Heavy Downpours Are Increasing Nationally…The Mechanism Driving These Changes Is Well Understood." According to the 2014 National Climate Assessment: "Heavy downpours are increasing nationally, especially over the last three to five decades. The heaviest rainfall events have become heavier and more frequent, and the amount of rain falling on the heaviest rain days has also increased. Since 1991, the amount of rain falling in very heavy precipitation events has been significantly above average. This increase has been greatest in the Northeast, Midwest, and upper Great Plains – more than 30% above the 1901-1960 average. There has also been an increase in flooding events in the Midwest and Northeast, where the largest increases in heavy rain amounts have occurred. The mechanism driving these changes is well understood. Warmer air can contain more water vapor than cooler air. Global analyses show that the amount of water vapor in the atmosphere has in fact increased due to human-caused warming.,,, This extra moisture is available to storm systems, resulting in heavier rainfalls. Climate change also alters characteristics of the atmosphere that affect weather patterns and storms." [2014 National Climate Assessment: Extreme Weather]

2020 Season Outlook

Washington Post Headline: "One-Third Of The Lower 48 Faces Risk Of Flooding This Spring, Weather Service Says." On March 19, 2020, the Washington Post reported: "A third of the United States is at risk of flooding this spring, including 23 states and 128 million Americans. That's according to the spring flood outlook released by the National Weather Service on Thursday. The forecast for significant spring flooding comes a year after one of the worst seasons on record in 2019. But this year, the flooding isn't expected to be quite as severe." [Washington Post, 3/19/2020]

AccuWeather Forecasts An Above Average Number Of Tornadoes In 2020. According to AccuWeather, "For all of 2020, AccuWeather predicts a normal to slightly above-normal number of tornadoes, with a range of 1,350 to 1,450. That range would cover what occurred in 2019 (1,422) and is 5 to 15 percent more than the United States annual average (between 1,253 and 1,297 tornadoes occur annually in the U.S.). " [AccuWeather, 4/6/2020]

2018 Severe Storms

April 2018: Southern And Eastern Tornadoes And Severe Weather Caused $1.4 Billion In Damages And 3 Deaths. According to NOAA's National Centers for Environmental Information, Southern and Eastern Tornadoes and Severe Weather that hit Florida in April 2018 caused $1.4 billion in damages and 3 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Florida Was One Of Fifteen States That Experienced Damage From Tornadoes And Severe Storms With Large Hail.** According to NOAA's National Centers for Environmental Information, "Tornadoes and severe storms with large hail cause widespread damage across many Southern and Eastern states (AR, FL, GA, LA, MD, MI, MS, MO, NJ, NY, NC, PA, SC, TX, VA) over a multi-day period." [ndcd.noaa.gov, Accessed 4/30/2020]

March 2018: Southeast Tornadoes And Severe Weather Caused $1.5 Billion In Damages And Zero Deaths. According to NOAA's National Centers for Environmental Information, tornadoes and severe weather across the Southeast that hit Florida in March 2018 caused $1.5 billion in damages and zero deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Severe Storms Caused Over 20 Tornadoes And Widespread Hail Damage From Texas To Florida.** According to NOAA's National Centers for Environmental Information, "A potent severe storm system caused over 20 tornadoes across Alabama and also widespread hail damage from Texas to Florida. Most notably this system produced an EF-3 tornado that caused extensive damage in Jacksonville, Alabama and across the campus of Jacksonville State University." [ndcd.noaa.gov, Accessed 4/30/2020]

2017 Severe Storms

January 2017: Southern Tornado Outbreak And Western Storms Caused $1.2 Billion In Damages And 24 Deaths. According to NOAA's National Centers for Environmental Information, tornado outbreak across Southern States and storms across the Western U.S., which hit Florida in January 2017, caused $1.2 billion in damages and 24 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **79 Confirmed Tornadoes Affected Southern States Including Florida.** According to NOAA's National Centers for Environmental Information, "High wind damage occurred across southern California near San Diego followed by 79 confirmed tornadoes during an outbreak across many southern states including AL, FL, GA, LA, MS, SC and TX. This was the 3rd most tornadoes to occur in a single outbreak of extreme weather during a winter month (Dec.-Feb.) based on records from 1950." [ndcd.noaa.gov, Accessed 4/30/2020]

2016 Severe Storms

April 2016: North/Central Texas Hail Storm Caused $3.8 Billion In Damages And Zero Deaths. According to NOAA's National Centers for Environmental Information, a hailstorm across North and Central Texas, which impacted Florida in April 2016, caused $3.8 billion in damages and zero deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

February 2016: Southeast And Eastern Tornadoes Caused $1.1 Billion In Damages And 10 Deaths. According to NOAA's National Centers for Environmental Information, South and

Eastern Tornadoes that hit Florida in February 2016 caused $1.1 billion in damages and 10 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **At Least 50 Tornadoes Caused Widespread Damage Across Fifteen States Including Florida.** According to NOAA's National Centers for Environmental Information, "Early outbreak of tornadoes and severe weather across many southern and eastern states including (AL, CT, FL, GA, LA, MA, MD, MS, NC, NJ, NY, PA, SC, TX, VA). There were at least 50 confirmed tornadoes causing widespread damage." [ndcd.noaa.gov, Accessed 4/30/2020]

2015 Severe Storms

April 2015: South/Southeast Severe Weather Caused $1.4 Billion In Damages And Zero Deaths. According to NOAA's National Centers for Environmental Information, South/Southeast Severe Weather that hit Florida in April 2015 caused $1.4 billion in damages and zero deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

- **Florida Was One Of Twelve States Impacted By High Winds And Severe Hail From The Storms.** According to NOAA's National Centers for Environmental Information, "Severe storms across the South and Southeastern states (AL, AR, FL, GA, KS, LA, MS, NC, OK, SC, TN, TX). High winds and severe hail created the most significant damage in Texas." [ndcd.noaa.gov, Accessed 4/30/2020]

2014 Severe Storms

April 2014: Midwest/Southeast/Northeast Tornadoes And Flooding Caused $1.9 Billion In Damages And 33 Deaths. According to NOAA's National Centers for Environmental Information, tornadoes and flooding across the Midwest, Southeast and Northeast, which hit Florida in April 2014, caused $1.9 billion in damages and 33 deaths. [ndcd.noaa.gov, Accessed 4/30/2020]

WILDFIRE

Link To Climate Change

Climate Change Is Increasing The Severity, Frequency, And Extent Of Wildfires. According to a report from the EPA: "Higher temperatures and drought are likely to increase the severity, frequency, and extent of wildfires in Colorado, which could harm property, livelihoods, and human health. In 2013, the Black Forest Fire burned 14,000 acres and destroyed over 500 homes. Wildfire smoke can reduce air quality and increase medical visits for chest pains, respiratory problems, and heart problems. The size and number of western forest fires have increased substantially since 1985." [Environmental Protection Agency, "What Climate Change Means for Colorado" August 2016]

The National Climate Assessment Has Found That The Number Of Wildfires Is Likely To Increase As The Climate Warms And Could Induce "Profound Changes To Certain Ecosystems." In August of 2018, The Atlantic reported: "As if there wasn't enough evidence of that. Last year, the National Climate Assessment—written by a panel of scientists in the military, federal civilian agencies, and private universities—reviewed the complete scientific literature on climate change and wildfires. They concluded that the number of large blazes had increased since the early 1980s. They also said the number of wildfires 'is projected to further increase in those regions as the climate warms.' They warned this could induce 'profound changes to certain ecosystems.'" [The Atlantic, 8/10/18]

Acres Burned By Wildfire Doubled In Recent Decades Due To Climate Change. According to the 2018 National Climate Assessment Report: "Wildfire is a natural part of many ecosystems in the Southwest, facilitating germination of new seedlings and killing pests. Although many ecosystems require fire, excessive wildfire can permanently alter ecosystem integrity. Climate change has led to an increase in the area burned by wildfire in the western United States. Analyses estimate that the area burned by wildfire from 1984 to 2015 was twice what would have burned had climate change not occurred. Furthermore, the area burned from 1916 to 2003 was more closely related to climate factors than to fire suppression, local fire management, or other non-climate factors." [National Climate Assessment, Chapter 25, 2018]

2020 Season Outlook

May 2020: Florida Witnessed Its First Wildfires Of The Season, Which Burned Through 5,000 Acres Of Land. According to Washington Post, "At least 5,000 acres have been torched by a pair of wildfires raging in Southwest Florida, sending thick plumes of smoke high into the sky and forcing hundreds to evacuate in Collier County. The 22nd Ave. and the 36th Ave. Fires have merged near the Everglades Parkway east of Naples, and hit areas near the Golden Gate Estates, where several structures have burned, the hardest." [Washington Post, 5/14/2020]

Dry Spring Weather Was Expected To Be A "Major Contributor" To The State's Active Wildfire Season. According to Washington Post, "Wildfires are no stranger to Florida, and they typically occur around this time of year. However, recent weather has been a major contributor to the active fire season. The Sunshine State had its driest March on record, with parts of the Everglades not seeing a drop of rain all month. Fort Myers, north of Naples, picked up a trace of rain during the month, a time of year when an average of 3.26 inches falls. Southwest Florida International Airport has seen only 3.53 inches of rain since the start of the year, barely a third of the 10.2 inches that typically falls by mid-May. That excessive dryness contributes to dried-out vegetation." [Washington Post, 5/14/2020]

Wildland Fire Potential Was Predicted To Increase To Above Average In South Florida Due To Dry Conditions. According to The Weather Channel, "However, the wildland fire potential will increase to above average in South Florida and southeastern Arizona in May. Much of Florida has experienced drier-than-average conditions so far this year, especially in March. Miami had its second-driest March on record with only 0.10 inches of rain. Dry conditions are

expected to continue into at least mid-spring in Florida, which will raise the fire concern there until precipitation increases by late spring or early summer." [The Weather Channel, 4/2/2020]