

Quick Facts

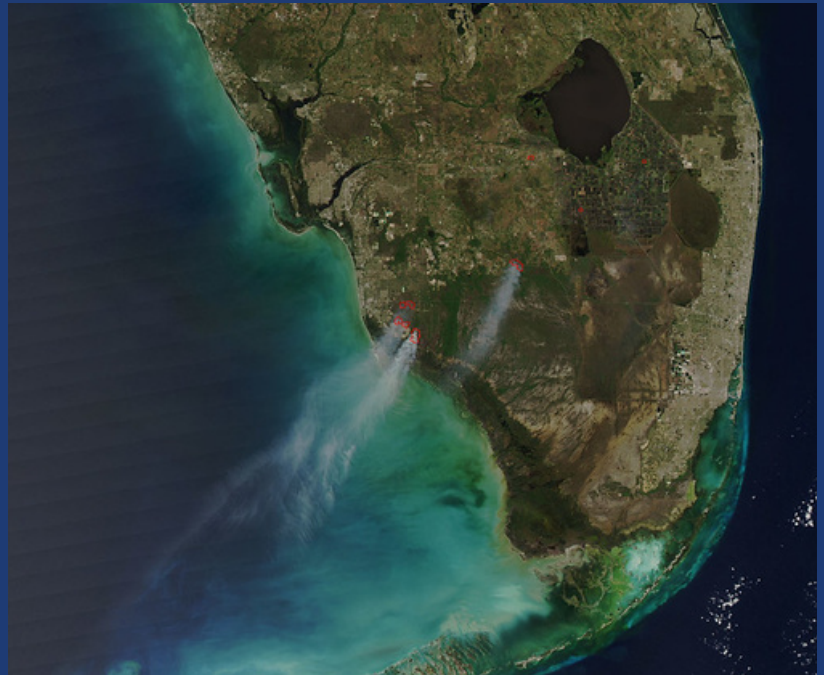
- Florida's vulnerability to sea-level rise, severe weather, and flooding often gets more attention, but the state also has to contend with wildfires year-round. Fire both helps and harms, as it is a critical factor in forest regeneration and human productivity while also being a destructive and sometimes deadly force. As Florida's population grows and a greater proportion of its land becomes developed, the state's wildfires could become more destructive.
- Between 2010 and 2020, Florida had an average of about 2,700 wildfires annually, with about 2,100 of those being human-induced. Roughly 70 percent of annual wildfires threaten human infrastructure, requiring both reactive and preventative measures to limit the spread of wildfires.
- Wildfires have forced the state to develop a robust fire prevention system that involves fire forecasting and management in addition to fire fighting. In fact, Florida's wildfire management system is being copied by California to mitigate fire risk.
- Florida's wildfire management system makes use of the prescribed burn method, which reduces the risk and intensity of "catastrophic wildfires." With 2.2 million acres authorized for annual prescribed burning, Florida has the most active prescribed burn management programs in the country.

Florida Forest Economics

- Florida's forests provide a number of economic benefits to the state, including timber, recreational activities, hunting, ecosystem regulation, and tourism. The state's forests support a robust timber industry that harvests over 16 million tons of timber, creates 133,000 jobs, and has an annual economic contribution of about \$16.5 billion.
- Florida's 2020 Forest Action Plan found that "the annual market value of harvested wood, mostly pulpwood and sawtimber, is approximately \$315 million, but as value is added through processing and manufacturing, total value approaches \$25.1 billion in output (revenue) impacts." Wildfire management helps ensure this important part of the state's economy stays profitable.
- The economic viability of Florida's forests is impacted by a number of factors. Hurricanes can have a large impact on forest ecosystems. For example, Hurricane Michael destroyed close to \$1.3 billion worth of timber. Furthermore, wildfires contribute to the depletion and fragmentation of forests, compounding rapid deforestation in the state due to urbanization. Florida's growing population and development are also increasing the wildfire-urban interface, as more urban areas abut forested land.

Florida Wildfire Management Policy

- There are two primary forms of proactive wildfire management in Florida:
 - Prescribed burning involves clearing underbrush on the forest floor of “fuel” by burning it off in a controlled manner to reduce the likelihood of large scale burning.
 - Prescribed burning is not only one of the most effective preventative measures, but it is also the least costly method for preventing wildfires.
 - Fire pre-suppression are activities undertaken in advance to help disrupt or deter a wildfire's path. For example, lines can be plowed by the U.S. Forest Service at a fixed rate for people's homes in fire zones.
- The Florida Department of Agriculture's Forest Service oversees one of the most active prescribed fire programs in the country.
- The Florida Forest Service also provides Certified Prescribed Burn Managers (CPBMs) education and training. Any citizen can become a CPBM once they complete training courses. This has helped Florida become the leader in prescribed burning in the U.S., with the most acres designated for prescribed burn management.
 - Incorporating the broader public into wildfire management is critical because the majority of forested areas in Florida, roughly 65%, are owned privately.
- Florida's prescribed burning efforts are governed by several federal, state, and local laws, including the 1998 Prescribed Burning Act, which amended the 1990 law of the same name. The 1998 law was a result of an acutely destructive wildfire season, and has several major provisions that protect prescribed burners from civil liability in the event the prescribed burn evolves into a wildfire.
- Fire management is financed differently on public and private land. The USDA provides some funding for prescribed burns on public lands, and the Department of the Interior provides fire suppression for national parks and wildlife refuges. Private land owners can become CPBMs or purchase fire management services from the Florida Forest Service.
- Wildfire management policies also leverage state and federal forecasting data and early warning systems to inform planners, and citizens about the potential for wildfires. These forecasting tools can track rainfall and drought conditions, among other things, to predict an area's potential for wildfires. 2023 is predicted to be a particularly active wildfire season.



Wildfires breakout after lightning strikes in southern Florida.
Source: ASA/Goddard/Jeff Schmaltz/LANCE/EOSDIS MODIS Rapid Response Team (CC by 2.0)

Wildfires and Military Bases/Installations

- The relationship between military bases and wildfires cuts both ways. Routine military training has sparked wildfires, and bases/installations have had to reduce operations because of wildfires, thus impacting readiness and resilience.
- The U.S. military has served as an important national resource for firefighting since the 1880s. In Florida, Eglin Air Force Base, one of the most at-risk bases for potential climate change impacts, also serves as a regional hub for the Air Force Wildland Fire Branch. The base's innovative Wildland Support Module allows it to operate in periods of drought and serves buffers against wildfire.



Florida National Guard supports wildfire suppression efforts in March 2022.

Source: Florida National Guard (CC by 2.0)

Potential Wildfire Risk to Florida's Military Bases:

Moderate-High	Eglin Air Force Base Homestead Air Reserve Base Hurlburt Field Patrick Air Force Base
Moderate	Naval Station Mayport Tyndall Air Force Base
Low-Moderate	Avon Park Airforce Base Range Camp Blanding Naval Air Station Jacksonville Naval Air Station Pensacola Naval Air Security Activity Orlando
Low	MacDill Air Force Base

Data collected from the Southern Wildfire Risk Assessment Portal.

The Changing Landscape of Florida's Wildfires

- As the state becomes hotter and drier due to climate change, the frequency of wildfires is expected to grow. By 2050, the number of properties exposed to wildfires in Florida could double. These changes in the state's climate also lengthen peak wildfire season, which has historically occurred in April and May when humidity is low.
- Climate change has other indirect effects on wildfire risk in Florida. Hurricanes and other extreme weather events exacerbate fires by hampering prescribed burn efforts. Hurricane Michael put 72 million tons of timber on the ground in the impacted counties in Northwest Florida. This felled timber becomes fodder for wildfires, emphasizing the need for greater understory management to prevent fires.
- According to a wildfire risk assessment from the First Street Foundation, Florida will see a rapidly increasing proportion of properties throughout the state classified as "at risk" from wildfires. This could have widespread economic impacts, as well as on insurance, infrastructure, and human health.