



Monroe County Florida Keys Weather Briefing

concerning
Cold Wind Chills and Fire Weather Hazards this Weekend

January 27, 2022 – 9:30 am EST

This weather briefing is for emergency management and fire/rescue partners serving the Florida Keys of Monroe County.

Bottom Line:

Strong northwest to north winds combined with the coolest temperatures forecast thus far this winter season combining to create wind chills in the 35 to 45 degree range late Saturday night and Sunday morning

The combination of strong northwest to northwest winds and low relative humidity will increase brush fire danger Saturday and Sunday. Including cold temperatures Saturday night, the weather hazards may provide challenges for structure fire response.

Situation Overview:

A strong cold front will blast through the Florida Keys late Friday night, following by strong northwest to north winds, cold temperatures and low relative humidity Saturday through early Sunday. A variety of cold/dry season hazards including:

- Strong northwest to north winds with frequent gusts of 30 to 35 mph Saturday through early Sunday morning
- The coldest temperatures of the season, currently forecast to reach near 40 degrees in the far upper Keys to near 50 degrees in Key West early Sunday morning
- Wind chills in the 35 to 45-degree range from very late Saturday evening through mid Sunday morning
- Relative humidity as low as 35 to 45 percent Saturday afternoon and early evening, and again from midday Sunday through early Sunday evening.

Day/Date	General Location	Wind Chills	Hours of RH < 50%
Saturday night – Sunday Morning January 29 – 30	Upper Keys (including Ocean Reef, Key Largo, Islamorada)	35 to 45	8:00 pm Saturday to 10:00 am Sunday
	Middle & Lower Keys (including Layton, KCB, Marathon, Key West)	40 to 45	12:00 am Saturday to 9:00 am Sunday

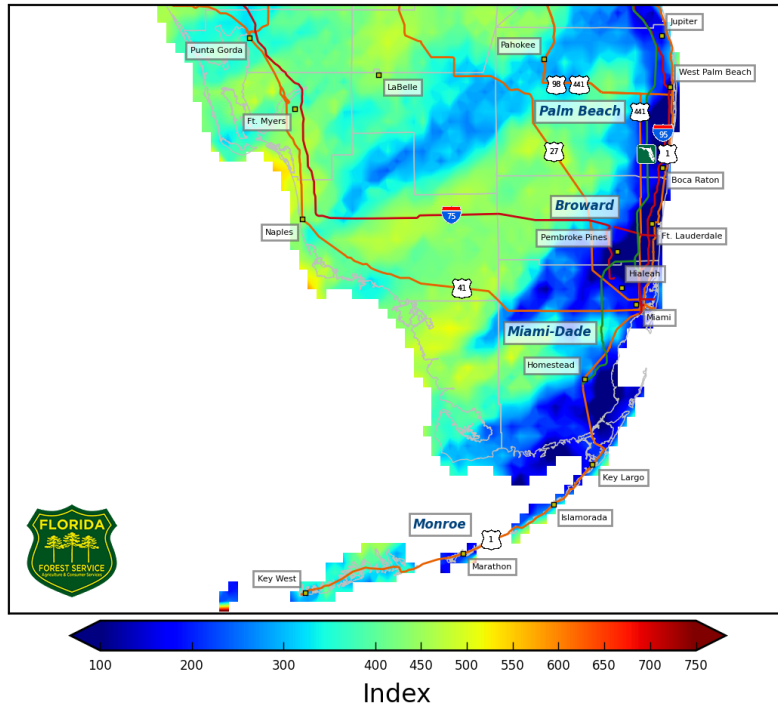
The combination of strong winds and low relative humidity is likely to result in increased brush fire danger, especially during both Saturday and Sunday afternoon. ***When adding the cold temperatures and wind chills Saturday night, there could be added challenges and increased risk for structure fires unless proper care and cautions are taken when using outdoor areal warmers or indoor space heaters. Such risks include improper spacing from combustible/flammable materials, and “overturning” due to strong wind gusts for outdoor devices.***

Timing of Minimum Relative Humidity and Winds

Day/Date	General Location	Minimum RH	Hours of RH 35% - 45%	Winds during RH 35% - 45%
Saturday January 29th	Upper Keys (including Ocean Reef, Key Largo, Islamorada)	35% to 45%	1200 - 1900 EST	NW to N 20 mph Gusts to 30 mph
	Middle Keys (including Layton, KCB, Marathon)	Near 45%	1500 – 1700 EST	NW to N 20 – 25 mph Gusts to 35 mph
	Lower Keys (including Key West)	45% or higher		NW to N 20 – 25 mph Gusts to 35 mph
Sunday January 30th	Upper Keys (including Ocean Reef, Key Largo, Islamorada)	35% to 45%	1000 – 1800 EST	N 15 mph, decreasing to 10 to 15 mph
	Middle Keys (including Layton, KCB, Marathon)	35% to 45%	1100 – 1900 EST	N 15 to 20 mph, decreasing to 10 to 15 mph
	Lower Keys (including Key West)	40 to 45%	1100 – 1800 EST	N 15 to 20 mph, decreasing to 10 to 15 mph

The latest Keetch-Byram Drought Index, an estimate of near-surface soil and duff layer moisture responsive to “short term” dry spells, generally ranges from about 150 to 350 throughout the Keys. While this is not a classic set-up for large wildfires, the winds and relative humidity may present challenges for small brush fires.

4 km Resolution KBDI
Everglades District
January 26, 2022



Next Update

The next update is scheduled for Friday morning, January 28th.

As always, you may contact the NWS Key West at (305) 295-1316 extension 3 to speak with a forecaster 24/7. Please contact us anytime if you need specific information (as best as the science allows) for critical hazardous weather information for decision support in your department’s activities.



For additional information, visit our webpage at: <http://www.weather.gov/key>
Or monitor us on Facebook at: <https://www.facebook.com/NWSKeyWest>
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