

# National Weather Service WFO Florida Keys

305-295-1316

# Monroe County Florida Keys Weather Briefing

## **Multi-Hazard Weather Event:**

Increasing Confidence: Heavy Rainfall & Strong Wind Gusts Late Thursday through Saturday Night Lower Confidence: A potential for damaging thunderstorm wind gusts and/or a tornado Saturday, and coastal flooding early next week

Issued: Thursday December 14, 2023 - 11:00 am EST

This weather briefing is for emergency management and critical infrastructure core partners serving the Florida Keys of Monroe County.

A Coastal Flood Advisory is in effect for the Upper Florida Keys, primarily the Card, Barnes and Blackwater Sound areas

A Gale Watch is in effect for all Florida Keys coastal waters from this afternoon through Friday evening.

A Flood Watch is in effect for all of Florida Keys from early Friday morning through late Saturday Night.

#### **Bottom Line:**

A multi-hazard weather event is developing across the eastern Gulf of Mexico and Florida region.

- 1. Locally heavy rainfall from early Friday morning through Saturday evening. Rainfall totals now through Saturday evening likely to be 3 to 6 inches, with a few isolated locations receiving around 8 inches.
- 2. Very windy conditions developing with sustained northeast winds increasing to near 25 mph with gusts near 35 mph by this evening. These winds will gradually turn more easterly Friday and Friday night, then southeast by Saturday evening while decreasing slightly.
- 3. A potential for severe, damaging wind gusts in thundery squalls and an isolated tornado or two late Saturday afternoon through Saturday evening. The Storm Prediction Center has outlooked the Florida Keys for a MARGINAL RISK (Level 1 out of 5) for severe thunderstorms for Saturday and Saturday night. Severe weather risk aside, thundery squalls could easily produce brief wind gusts of 45-50 mph as early as late tonight.
- 4. Coastal Flooding Potential with three potential events:
  - a. Minor to moderate coastal flooding in the Card/Sound/Barnes Sound areas, as strong northeast to east winds pile water from the Atlantic into the backcountry of the northeastern-most Upper Keys. Water levels may peak within 6 to 12 inches of the elevation of Card Sound Road late tonight through Friday.
  - b. Minor oceanside coastal flooding is possible Saturday evening and Saturday night, especially along the Middle and Lower Keys as the winds become more southeasterly, then shift to the

- southwest. Heavy wave action will likely cause significant overwash of seawalls, docks, with wave runup into exposed oceanside streets and yards.
- c. As winds shift from the southwest to west during the early morning hours Sunday, there is the potential for moderate Gulfside and Bayside flooding. The most likely times for this flooding would be during the early morning hours Sunday along the Lower Keys and Middle Keys, and possibly along the Bayside Upper Keys late Sunday into Monday. This scenario, however, is low confidence.

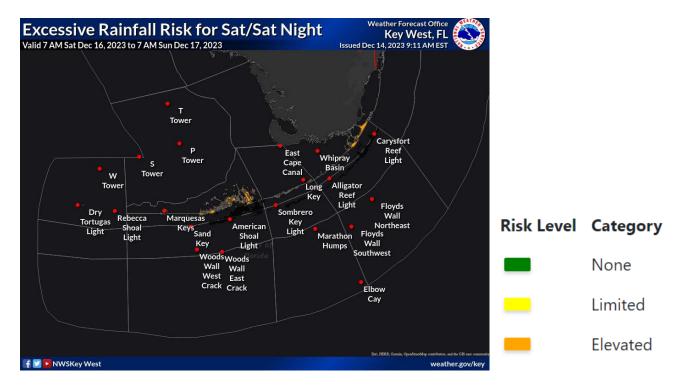
#### **Situation Overview:**

A large area of strong high pressure across the eastern United States while a diffuse stationary front remains over the Straits of Florida will cause further increases in the northeast winds and increasing chances for rain. Friday night, non-tropical low pressure will develop over the south central Gulf of Mexico, then move northeast to near north or central Florida by Sunday morning. As the low pressure strengthens, winds will turn more easterly with the potential for locally heavy, flooding rainfall and coastal flooding beginning late Friday night. The potential for severe thunderstorms and a possible tornado may increase by late Saturday and Saturday night, before winds shift to the southwest and west before Sunday morning.

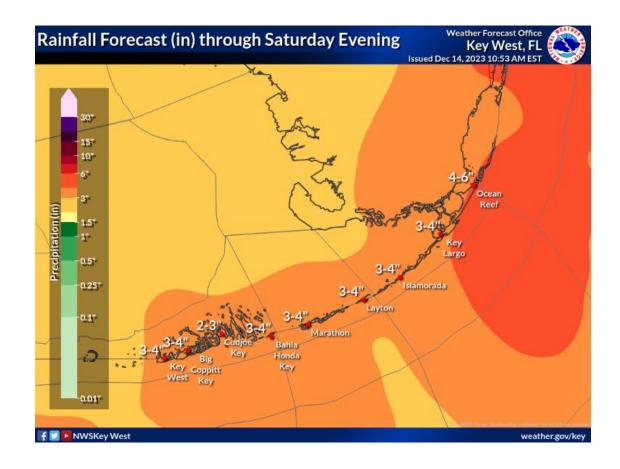
Improving weather is forecast for Sunday, although scattered light rain showers may continue through the day. However, should the winds remain westerly through the day Sunday, some additional coastal flooding could occur along the Gulfside and Bayside. Except for possible lingering coastal flooding near the east end of Florida Bay and Blackwater Sound, dry, breezy conditions are expected by Monday.

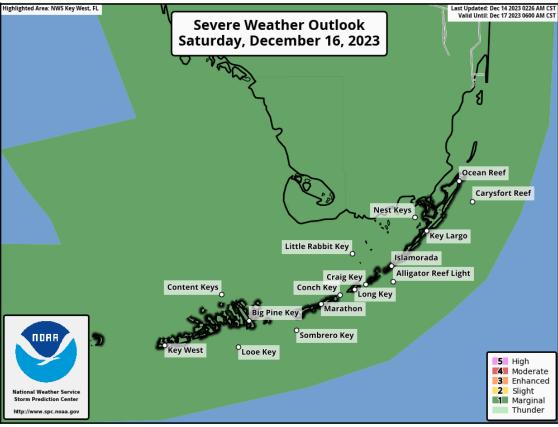
#### The current risk for excessive rainfall in the Florida Keys is as follows:

Saturday: Elevated Risk (Level 2 out of 4) for all of the Florida Keys



General rainfall totals through Saturday evening of 3 to 6 inches with isolated locations receiving near 8 inches is forecast.





The Severe Weather Outlook for Saturday/Saturday night currently depicts a MARGINAL RISK (Level 1 out of 5) for severe thunderstorms throughout the Florida Keys and adjacent coastal waters.

## **Impact Confidence Summary:**

#### **Relatively High Confidence:**

Flooding rainfall potential Friday night through Saturday Night.

Strong northeast to east winds near 25 mph with frequent gusts near 35 mph, especially Thursday night and Friday. A few thundery squalls are likely produce brief wind gusts up to near 50 mph.

#### **Moderate Confidence:**

Coastal flooding potential Barnes/Card Sound Tonight and Friday, and along the oceanside of the Lower and Middle Keys Saturday evening and night.

#### **Relatively Low Confidence:**

Severe thunderstorm damaging wind and/or isolated tornado potential late Saturday/Saturday night. Coastal flooding potential Gulfside and Bayside Sunday through Monday,

#### **Next Update**

The next update to the weather brief is scheduled for release by 11 am Friday morning.

You may contact the NWS Key West at (305) 295-1316 extension 3 to speak with a meteorologist 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.





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