



Severe Weather Likely Today

May 15, 2025
11:58 AM


Atmosphere Favorable For Significant Severe Weather Impacts

Bottom Line Up Front:


- Large hail, damaging winds, and tornadoes are all possible
- Peak storm intensity between 4-8 pm
- Initial storm development will favor storms that produce large hail and possibly tornadoes (EF-2+ also still possible)
- If storms quickly merge into a line, then damaging winds are going to be more of a concern, along with brief tornadoes

What has changed:


- Increase in storm coverage in southeast WI
- Increasing potential in damaging wind in SE WI
- Lake Michigan ‘marine layer’ may not be as far inland as shown yesterday




Large Hail
(Some > Golf Balls)



Tornadoes
(EF-2 Possible)



Damaging Winds (Some > 70 MPH)



Brief Heavy Rain

Event Timeline		
2 PM to 4 PM	4 PM to 8 PM	After 8 PM
Initial storm development	Peak storm coverage and intensity	Storms reach Lake Michigan
Large to very large hail, tornadoes	All severe hazards Peak Intensity	Hazards Ending





Severe Thunderstorm Risk Today

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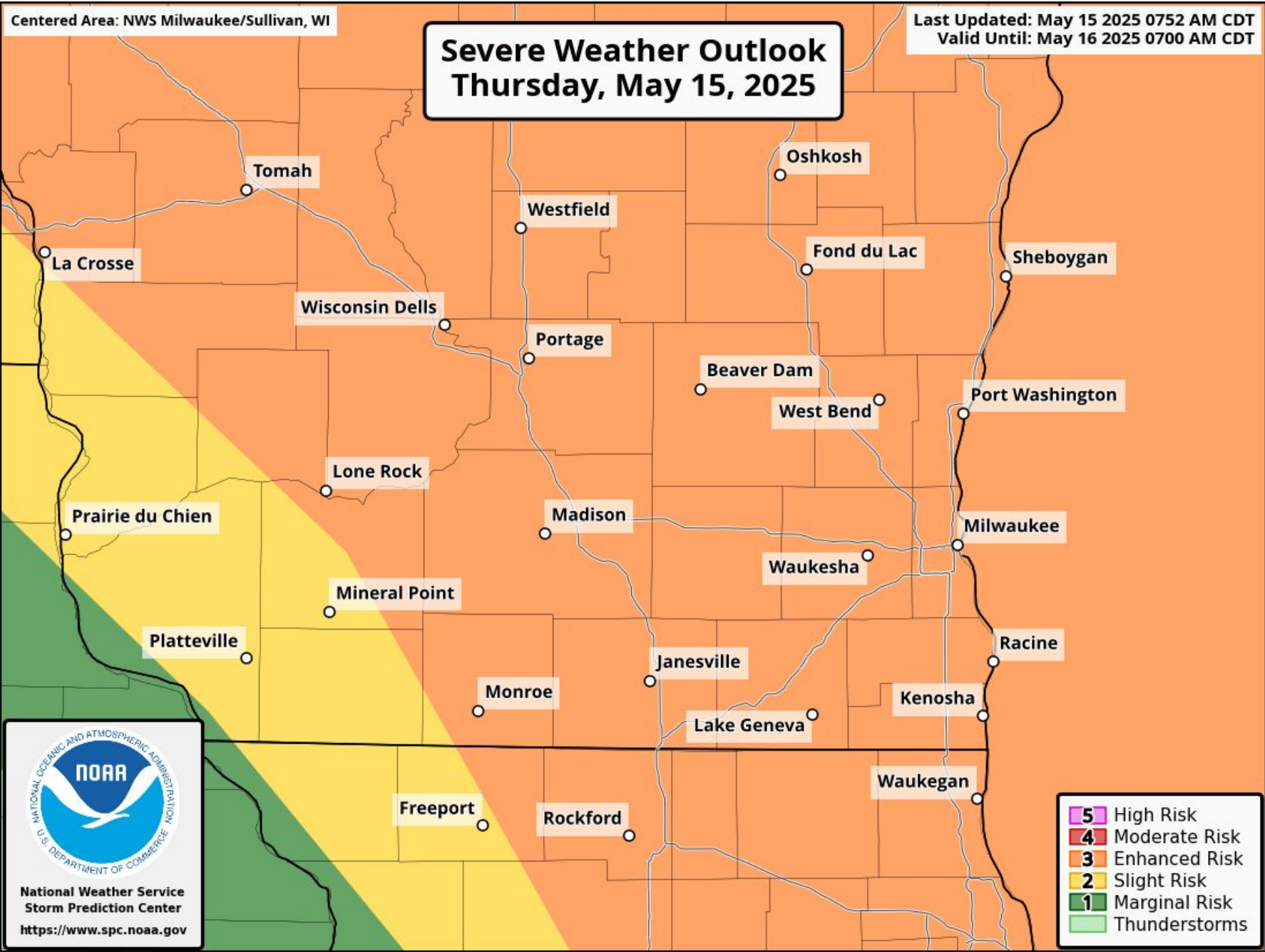
All Hazards Possible: Large Hail, Damaging Winds, Tornadoes

Bottom Line Up Front

- ➔ Numerous storms producing large hail (over egg sized) looks very likely
- ➔ Tornado risk: Mainly short lived tornadoes, but can't rule out an EF-2+
- ➔ Quick moving system, not expecting flooding

Statewide Timing

Beginning	Today 2-4pm West Central Wisconsin
Peak	4pm to 8pm
Ending	By 9pm (Earlier West)



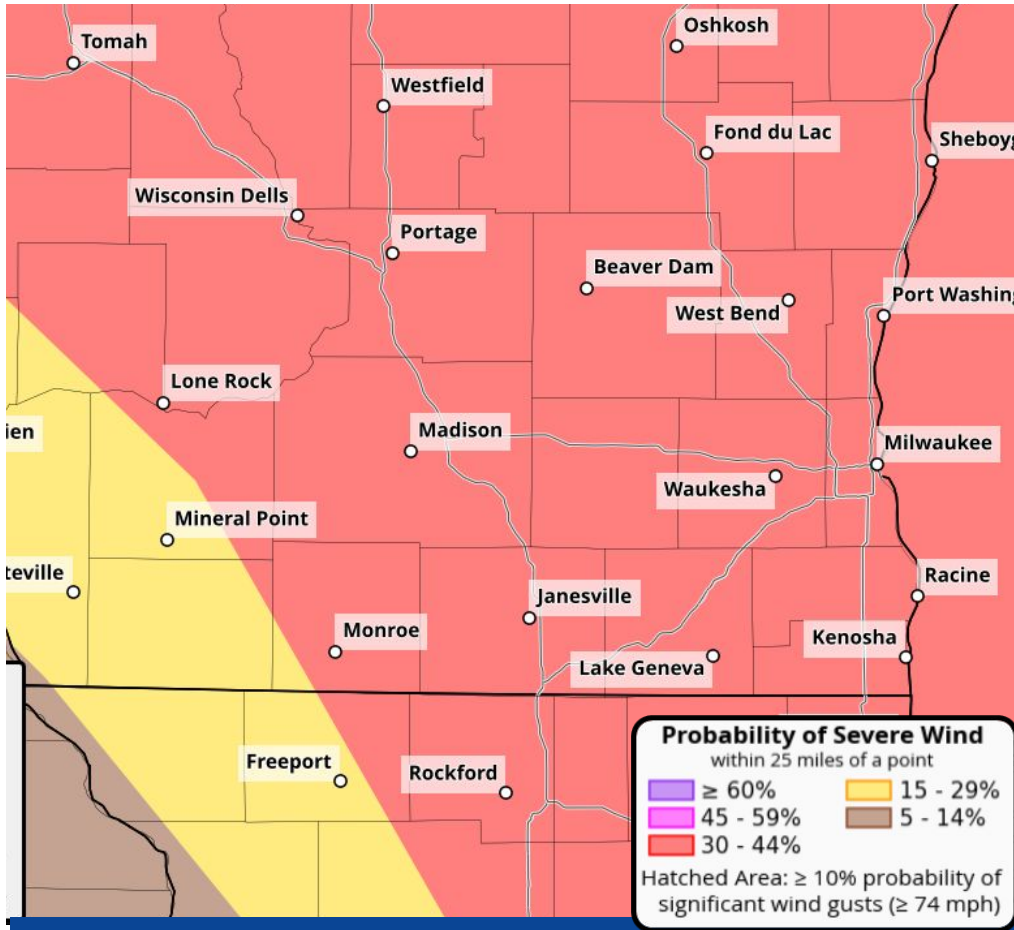


All Severe Hazards Possible

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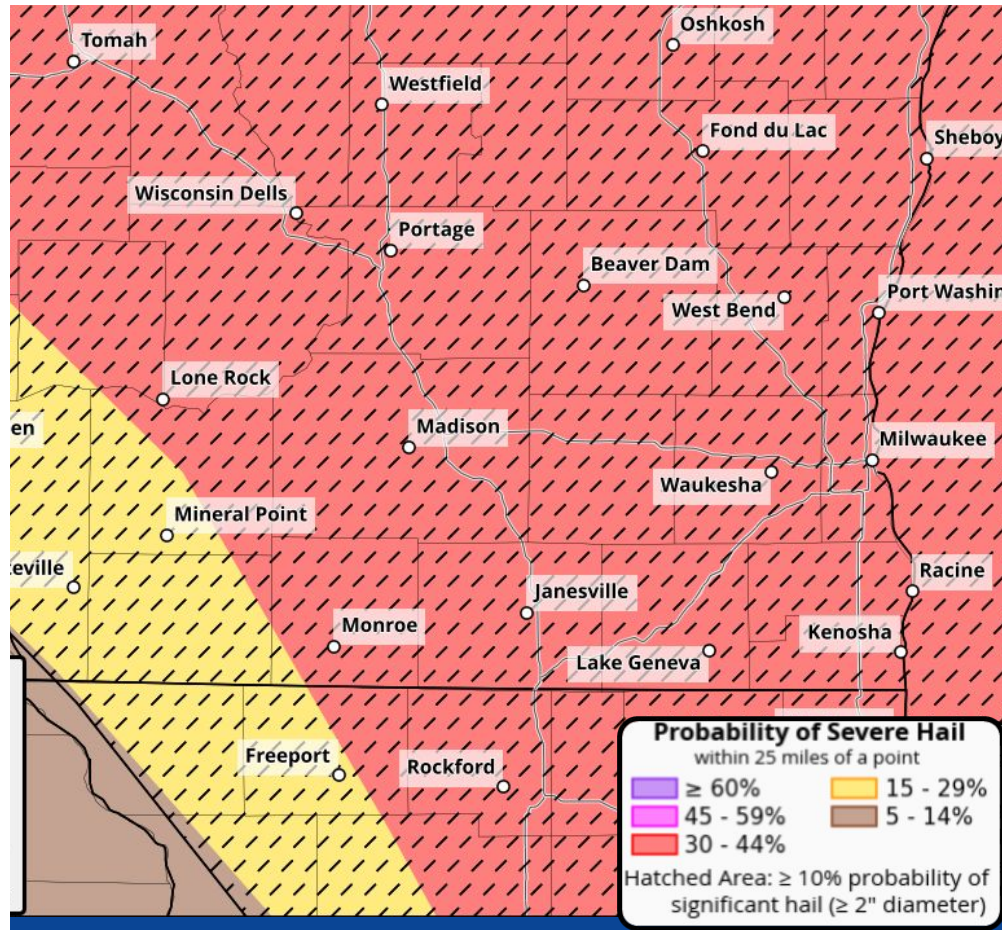
‘Hatched’ areas mean a higher end hazard type

Damaging Wind Outlook



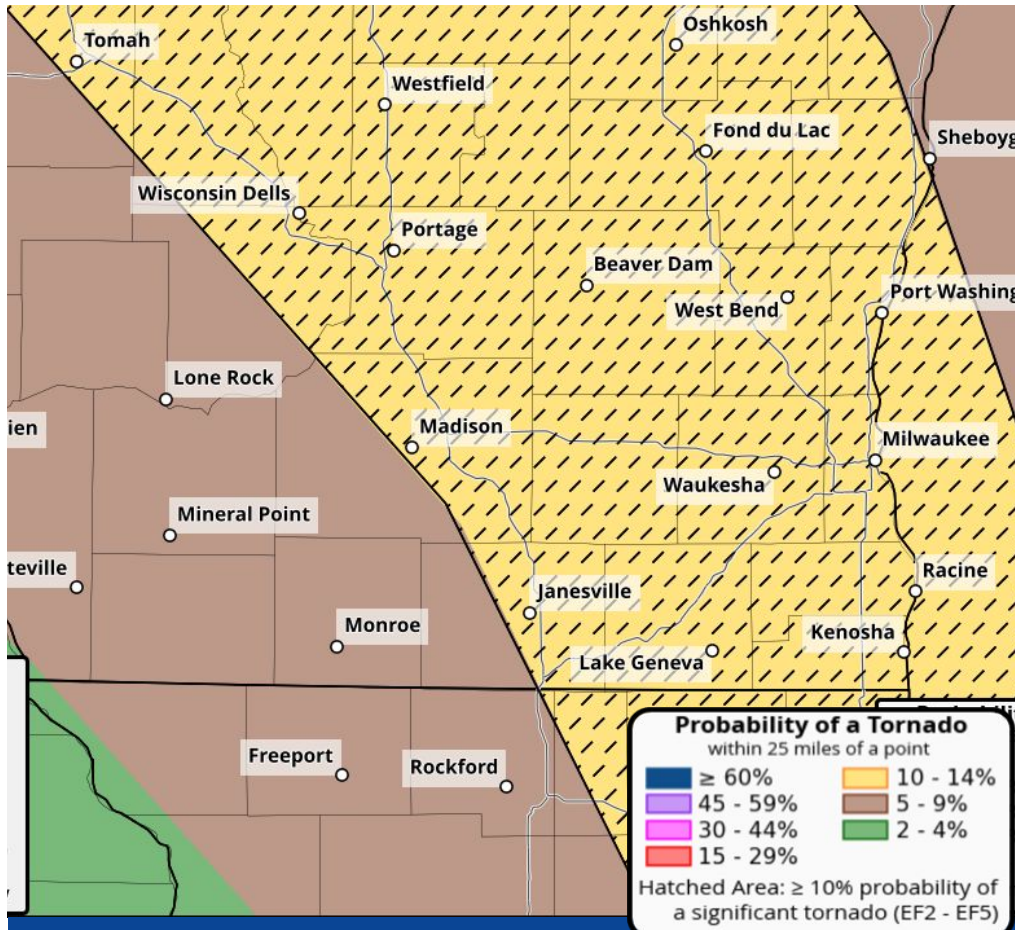
Winds most likely in 60-80 mph range w/severe storms

Damaging Hail Outlook



Hatched: Higher probability of significant hail (Bigger than 2"/Eggs)

Tornado Outlook

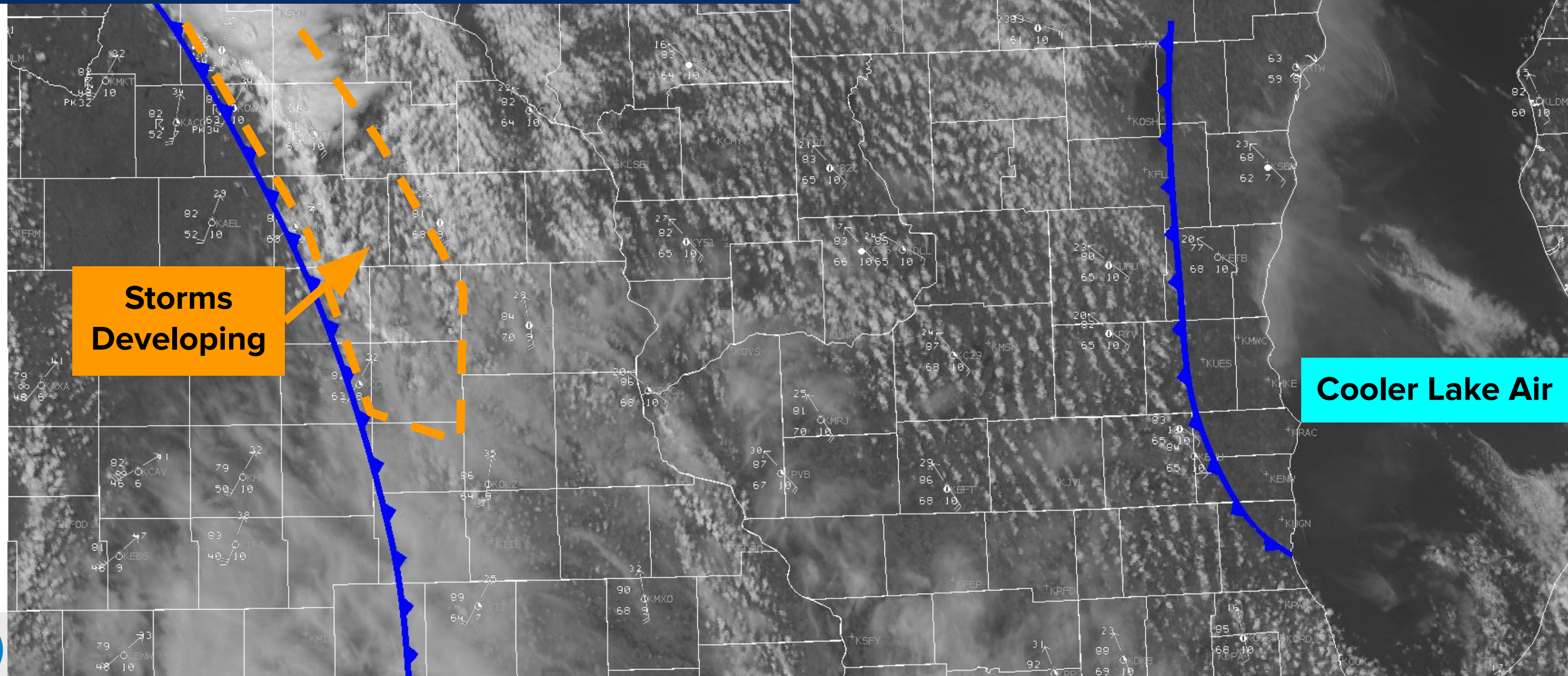


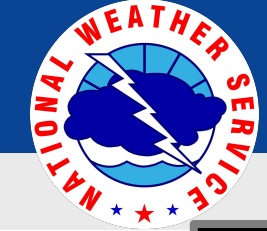
Hatched: Higher probability of an EF-2+ tornado



1:45pm Satellite Update

- Warm, moist air mass will move into southern WI this afternoon
- Lake Michigan cooler air boundary/overnight fog, should shift back east by afternoon



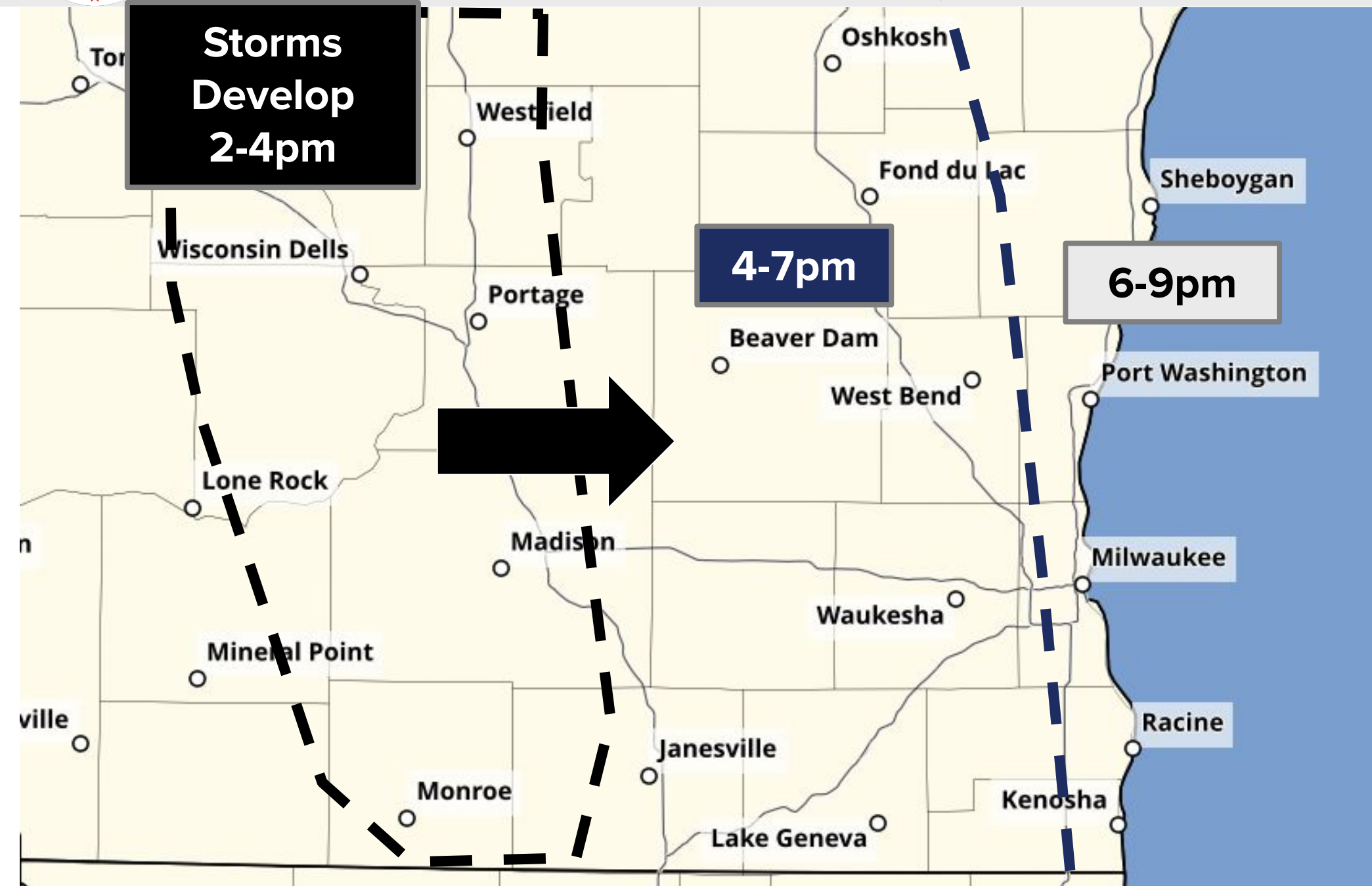


Timing Of Storms Today

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Develop over much of Wisconsin during the peak heating of the day



Timing/Storm Mode

- **2-4pm:** Storms develop in SW/SC WI. Initially isolated to scattered in coverage. Development will be quick. Large Hail/Tornado risk.
- **4-7pm:** Storms rapidly increase in coverage from north to south. All hazards possible.
- **6-9pm:** Line of storms should extend all the way along the Lake Michigan lakeshore. Increased chances of damaging winds, brief tornadoes.

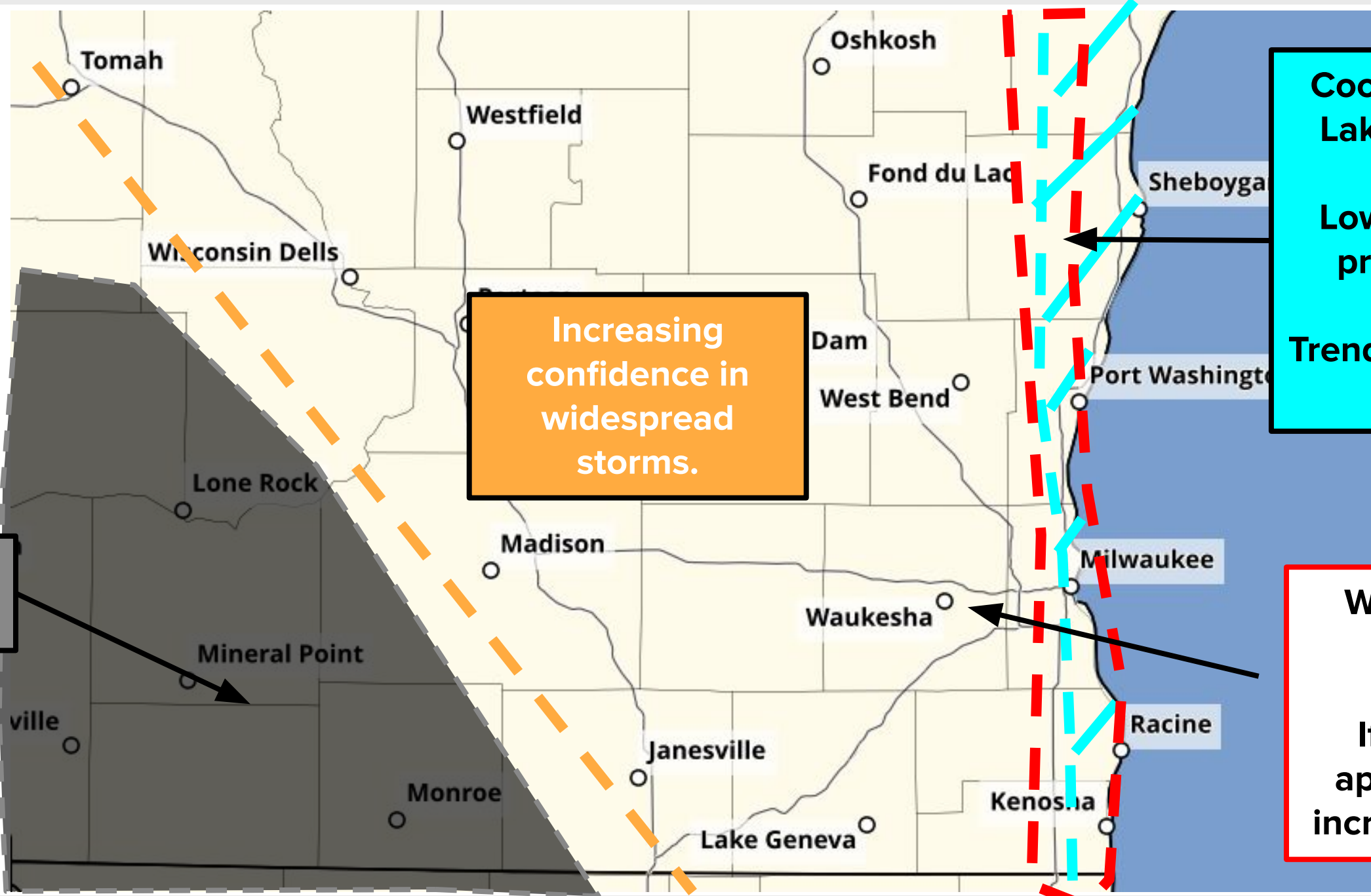




Uncertainties/Trends

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Impact of marine layer near Lake Michigan and also where storms initially develop



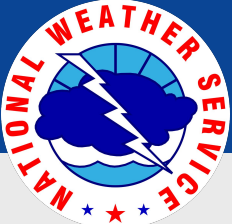
Increasing confidence in widespread storms.

Cooler air off of Lake Michigan
Lower tornado probabilities
Trending not as far inland

Likely nothing develops

Warm Front/Lake Boundary
If/when a storm approaches, could increase tornado risk





Wireless Emergency Alert Levels

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What level of Warning triggers the alerts

TORNADO WARNING (All Levels)

BASE

- Level 1
- Radar or Observed

CONSIDERABLE

- Level 2
- EF2+ Level Tornado Expected

CATASTROPHIC

- Level 3
- “Tornado Emergency”

SEVERE THUNDERSTORM WARNING (Level 3)

BASE

- Level 1
- 58 mph winds/1” Hail

CONSIDERABLE

- Level 2
- 70 mph winds/1.75” (Golf Ball) Hail

DESTRUCTIVE

- Level 3
- 80 mph winds/2.75” (Baseball) Hail

