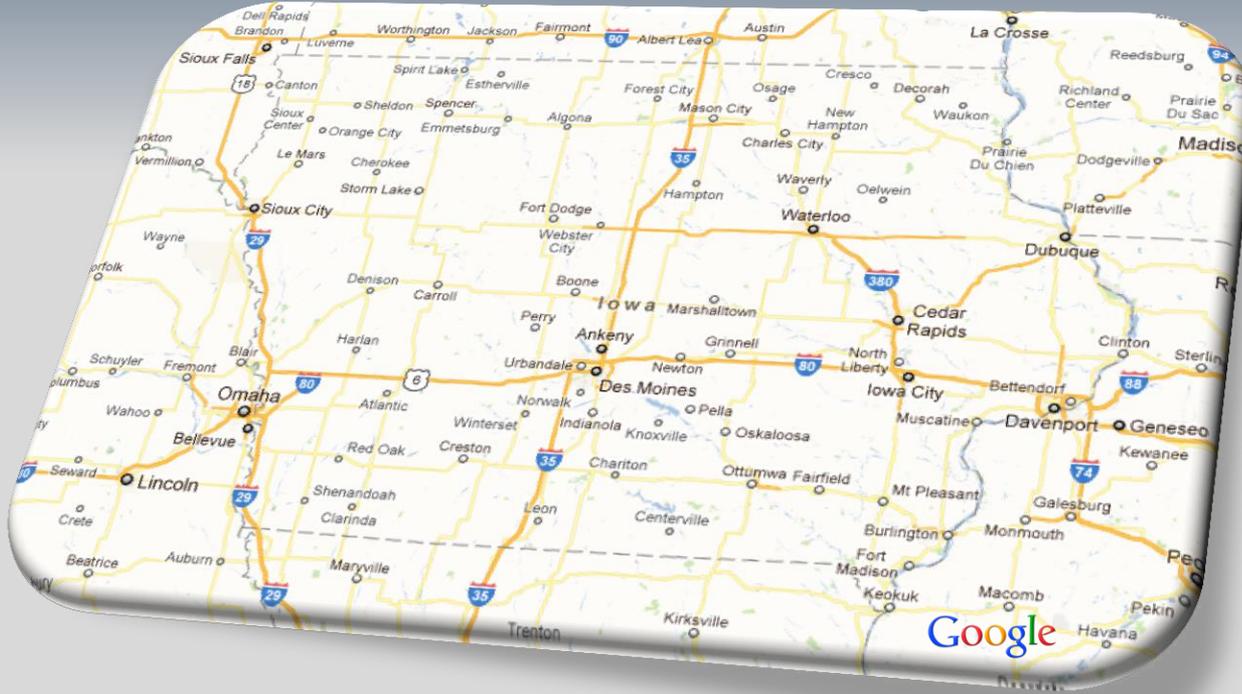




Iowa HSEMD Decision Support Briefing

Tuesday, June 17, 2014



National Weather Service
Des Moines, IA



www.weather.gov/desmoines

Email: w-dmx.webmaster@noaa.gov

Phone: 515-270-2614





Decision Support Briefing

Key Points



- **Severe weather possible this afternoon & tonight**
 - Damaging winds, large hail, flash flooding & tornadoes possible
- **More severe weather & flooding possible Wednesday & Wednesday night**
- **Additional heavy rainfall across northern half of Iowa for next several days**
 - Prolonged & additional river flooding



Decision Support Briefing

Key Points

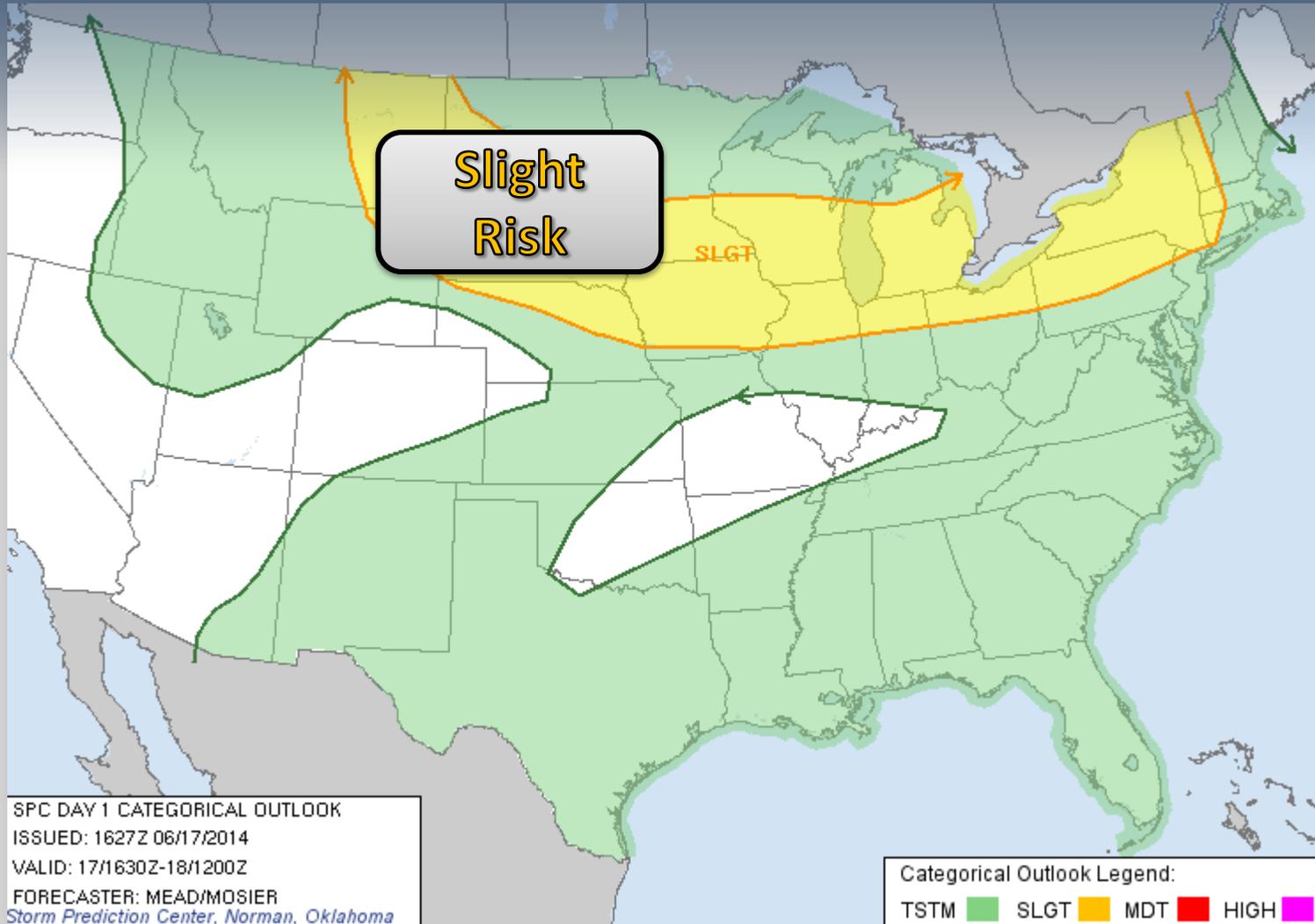


What	Where	Timing	Impacts
Severe Weather Damaging Winds, Large Hail & Tornadoes	Northern 2/3rds of Iowa	(1) This Afternoon into Tonight (2) Wednesday Afternoon & Evening	<ul style="list-style-type: none">• Can be life-threatening• Damage to trees and property• Injury possible to those who do not seek shelter
Severe Weather Heavy Rainfall, Flash Flooding & River Flooding	Northern Half of Iowa	Several Rounds for Next Several Days	<ul style="list-style-type: none">• Rapid rises of floodwaters• Avoid flooded roads• More difficult to see flooding at night• Prolonged or additional flooding



Severe Weather Outlook

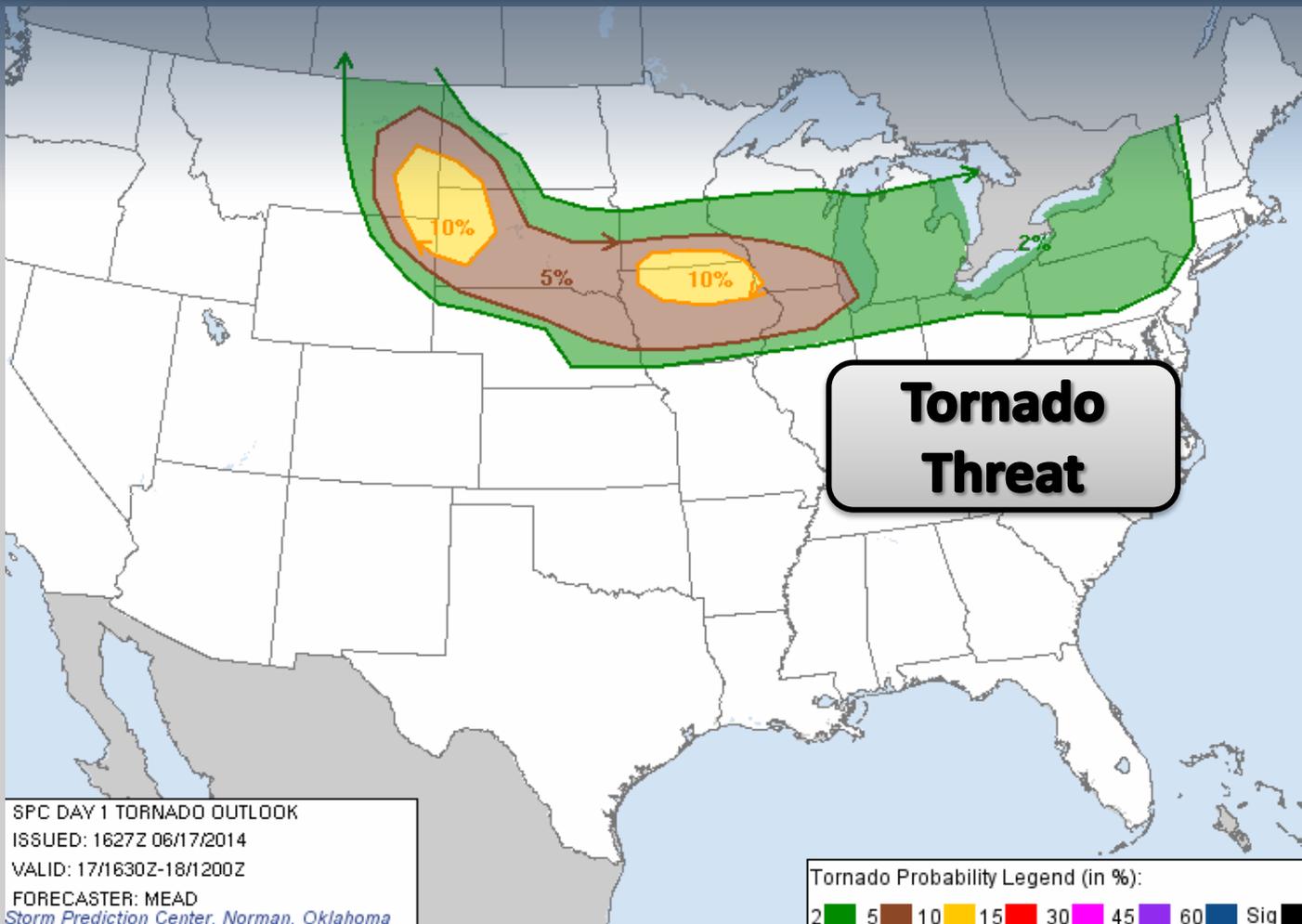
Day 1 – Tuesday PM – Wednesday AM





Severe Weather Outlook

Day 1 – Tuesday PM – Wednesday AM

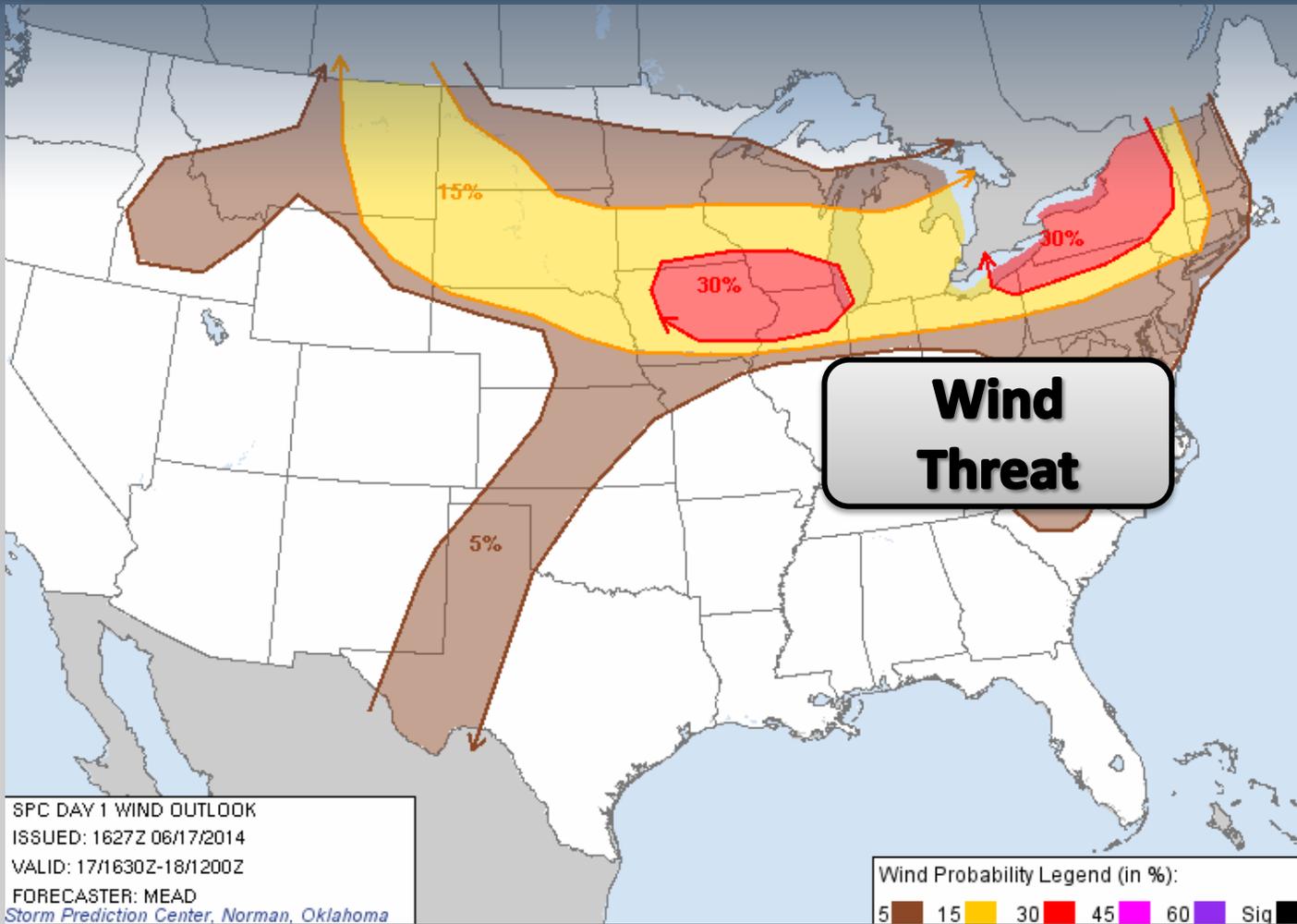


Probability of Tornadoes Within 25 Miles of a Point

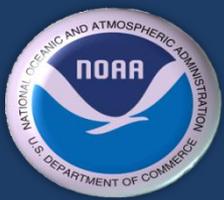


Severe Weather Outlook

Day 1 – Tuesday PM – Wednesday AM

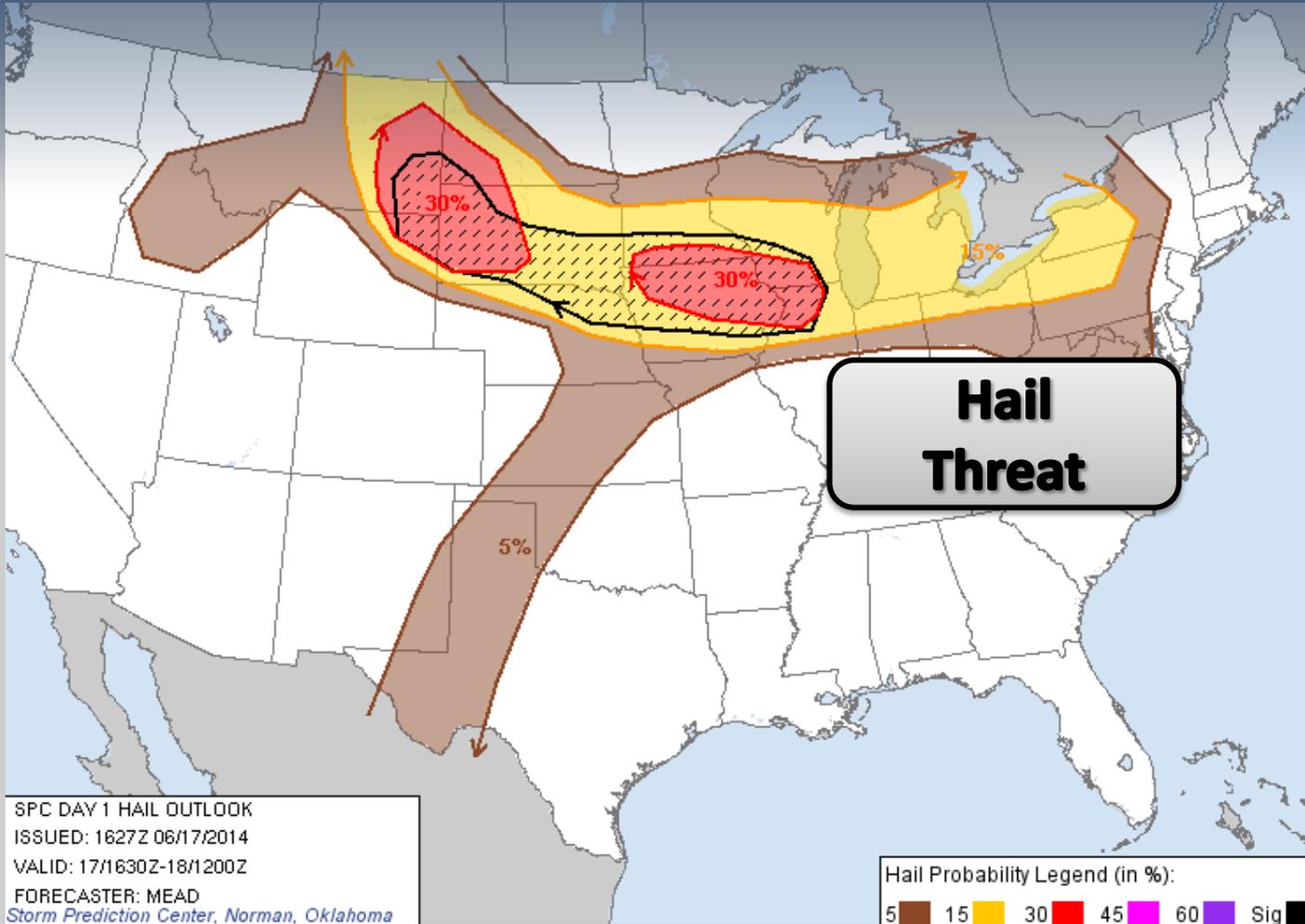


**Probability of 58+ mph thunderstorm wind gusts
Within 25 Miles of a Point**



Severe Weather Outlook

Day 1 – Tuesday PM – Wednesday AM

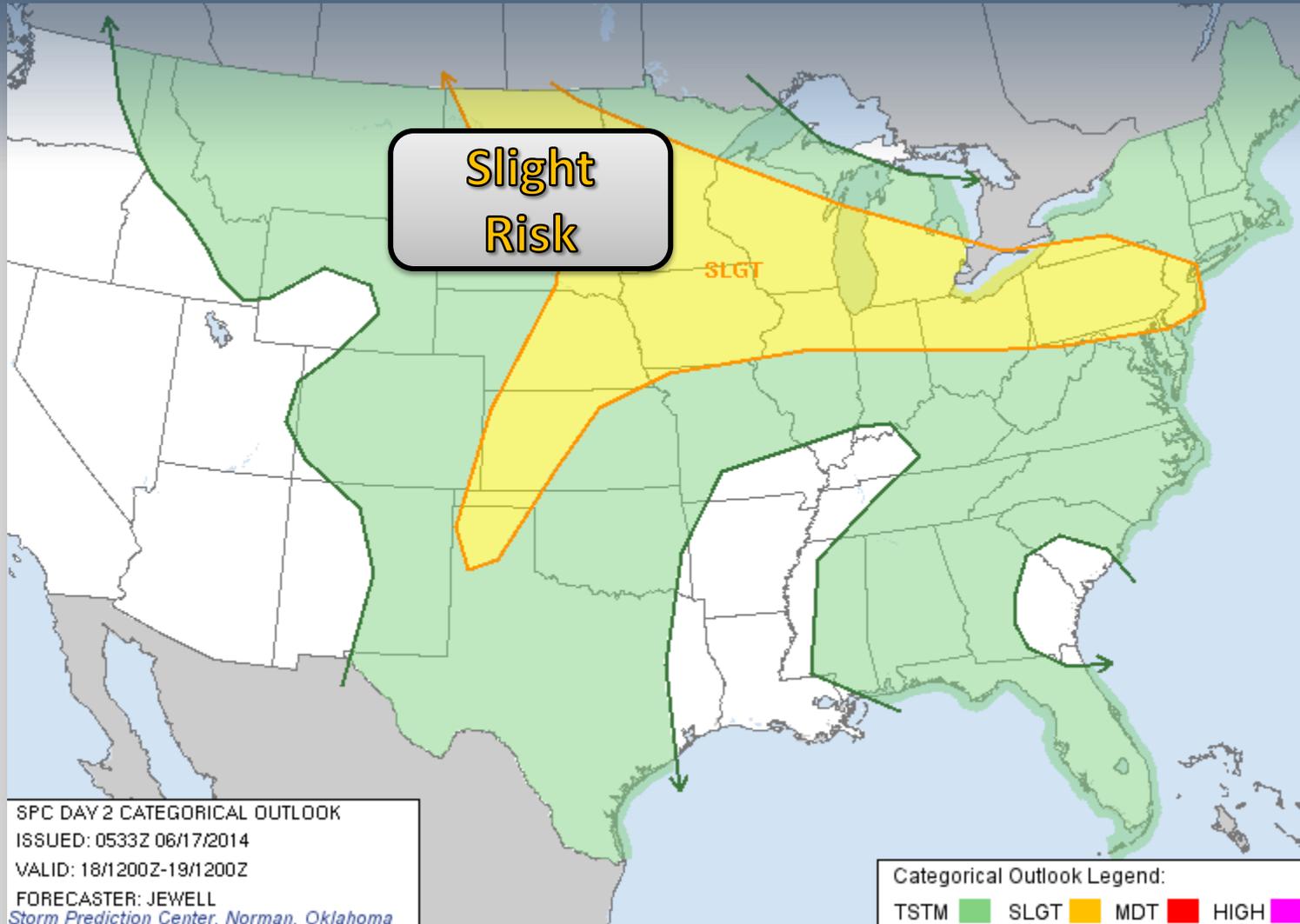


**Hatched Area: 10%+ Chance of 2+ diameter hail
Within 25 Miles of a Point**



Severe Weather Outlook

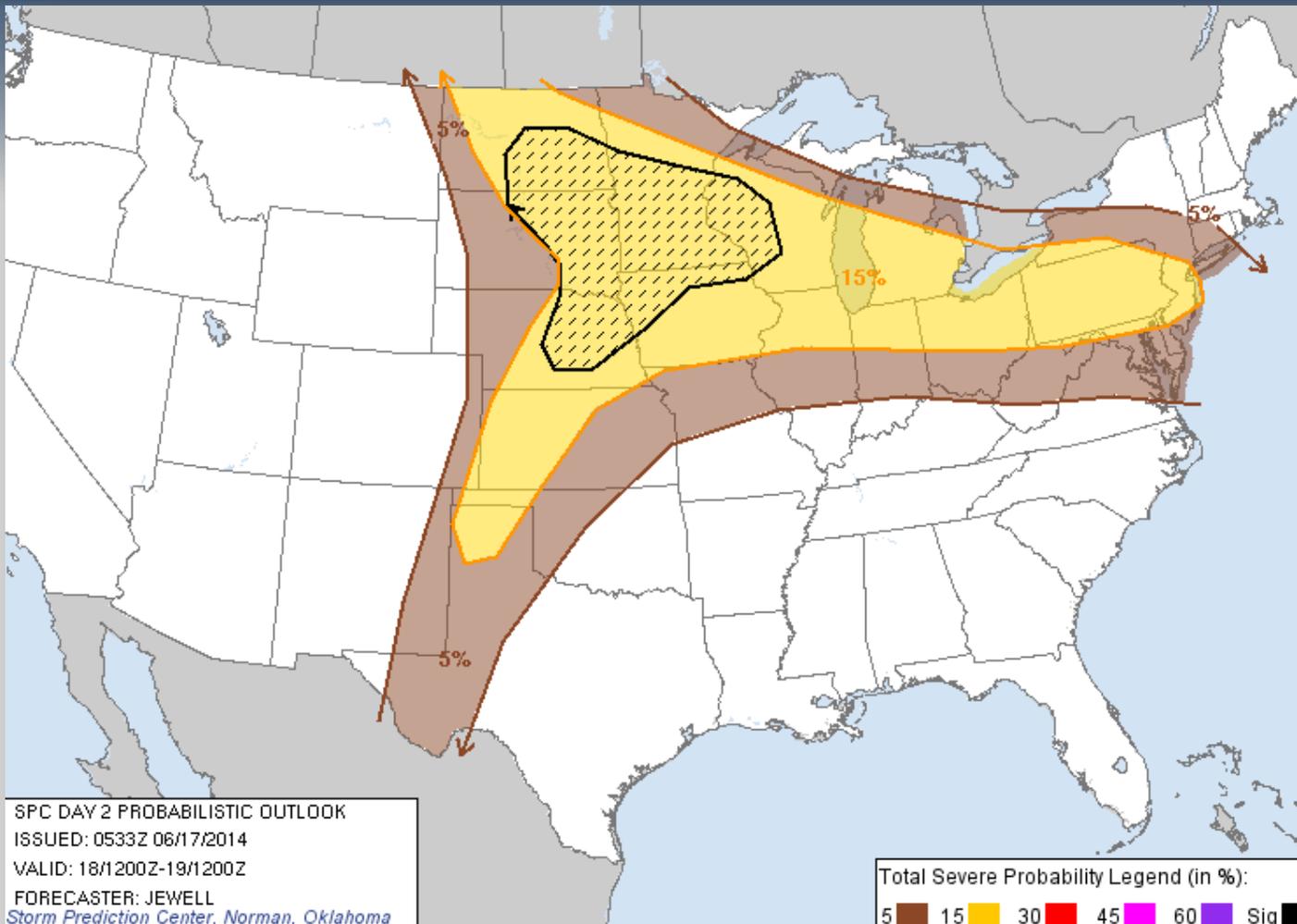
Day 2 – Wednesday PM – Thursday AM



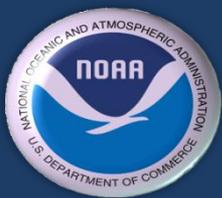


Severe Weather Outlook

Day 2 – Wednesday PM – Thursday AM

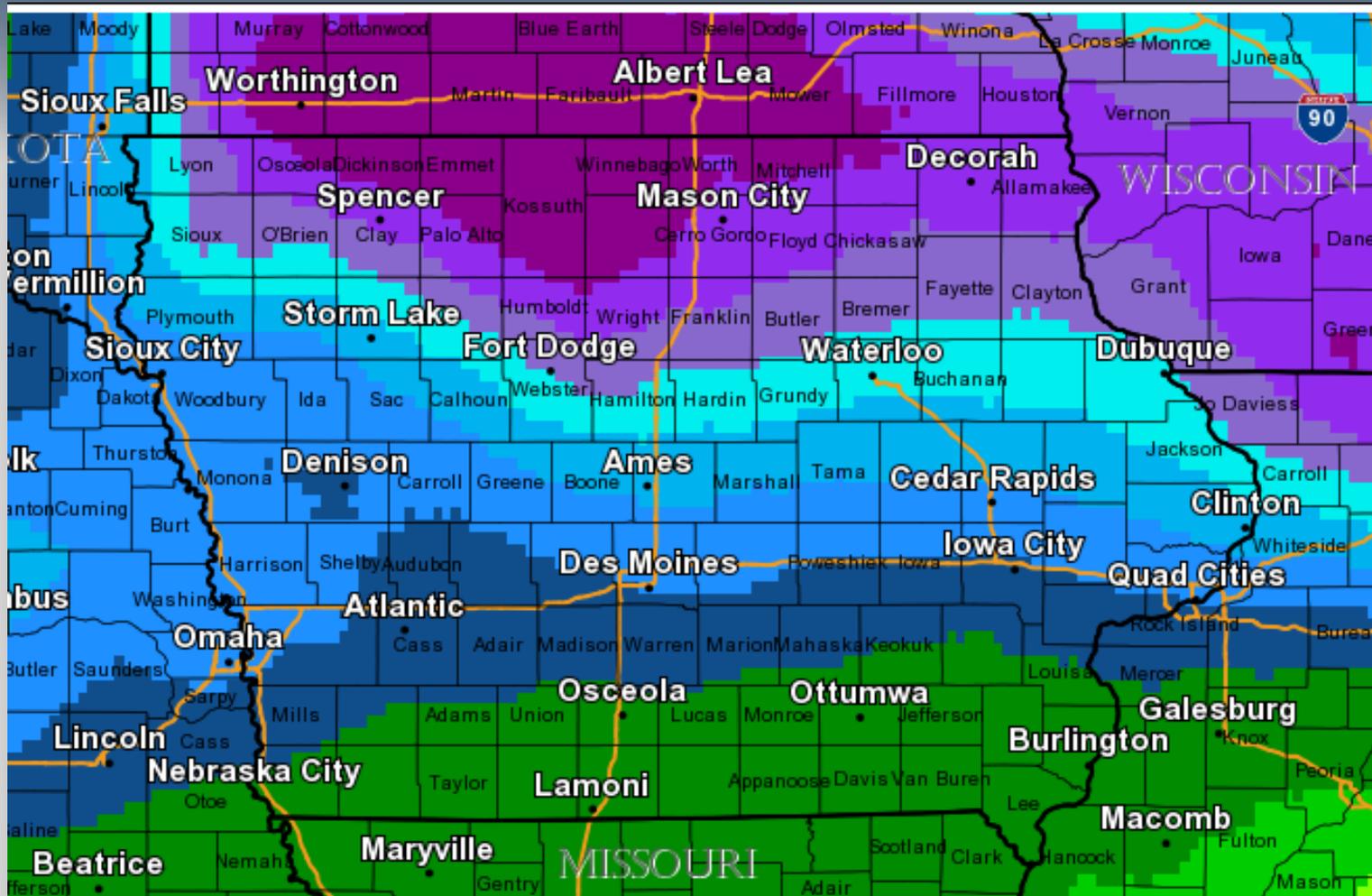


**Hatched Area: 10%+ Chance Significant Severe Weather
Within 25 Miles of a Point**



Rainfall Potential

Days 1-3 Total (Tuesday AM – Friday AM)



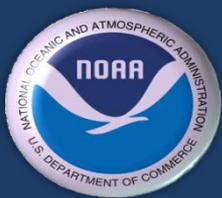
Three Day Total Precipitation

- Up to 0.1 inch
- 0.1 to 0.25 inches
- 0.25 to 0.5 inches
- 0.5 to 0.75 inches
- 0.75 to 1.0 inches
- 1.0 to 1.25 inches
- 1.25 to 1.5 inches
- 1.5 to 1.75 inches
- 1.75 to 2.0 inches
- 2.0 to 2.5 inches
- 2.5 to 3.0 inches
- 3.0 to 4.0 inches
- 4.0 to 5.0 inches
- 5.0 to 7.0 inches
- 7.0 to 10.0 inches
- 10.0 to 15.0 inches
- 15.0 to 20.0 inches
- Greater than 20 inches



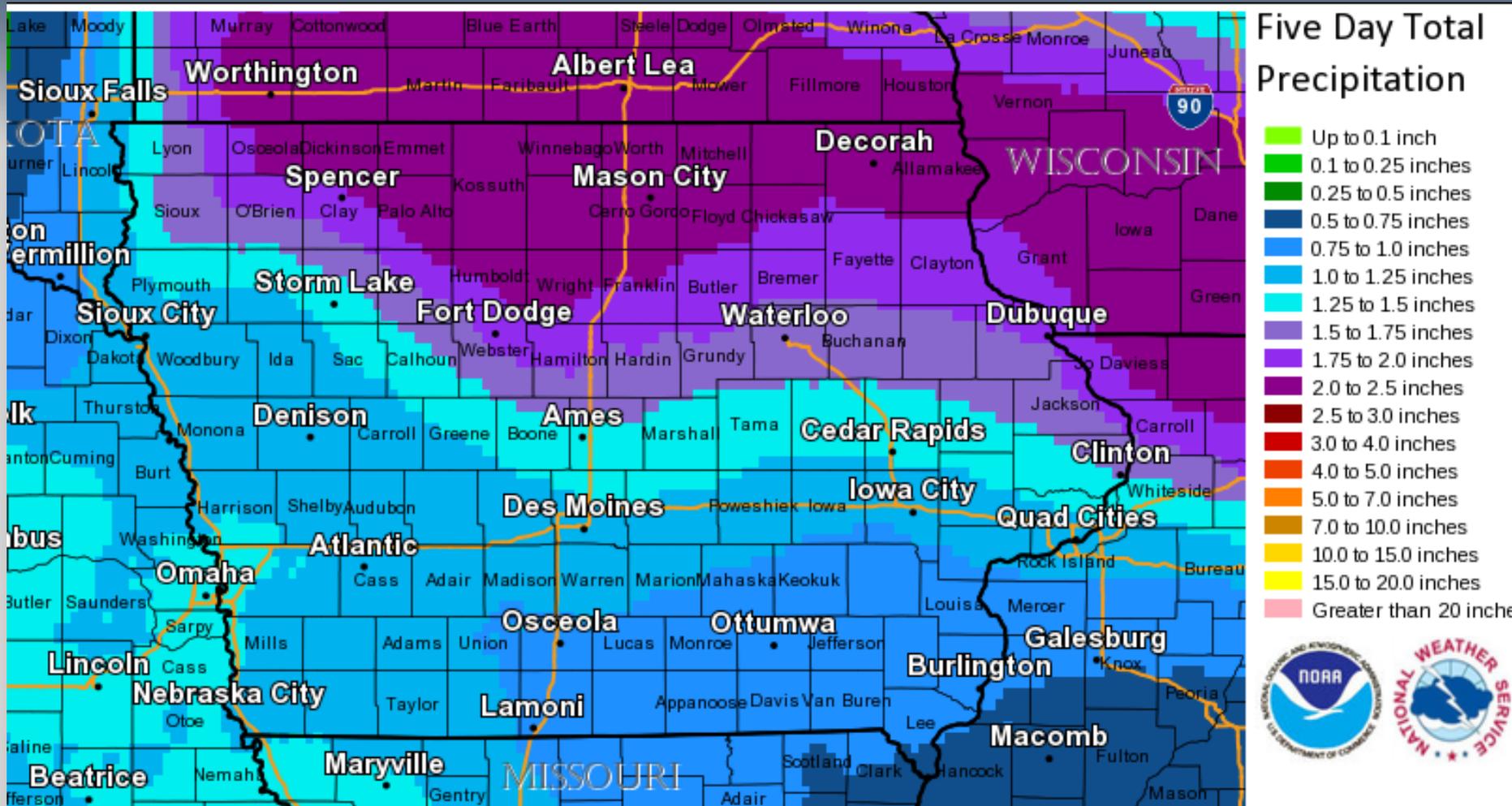
Valid ending at Friday June 20th, 2014 at 7 AM CDT

Created Tuesday June 17th, 2014 at 9:29 AM CDT



Rainfall Potential

Days 1-5 Total (Tuesday AM – Sunday AM)



Valid ending at Sunday June 22nd, 2014 at 7 AM CDT

Created Tuesday June 17th, 2014 at 9:22 AM CDT





Rivers of Most Concern

Flooding



➤ Short Term (~1 day)

- Rock, Big Sioux & Little Sioux (NW IA)

➤ Medium Term (~1 to 2 days)

- Des Moines (northern IA)

➤ Longer Term (beyond ~2 days)

- Cedar & tributaries (NE IA)
- Missouri
- Mississippi

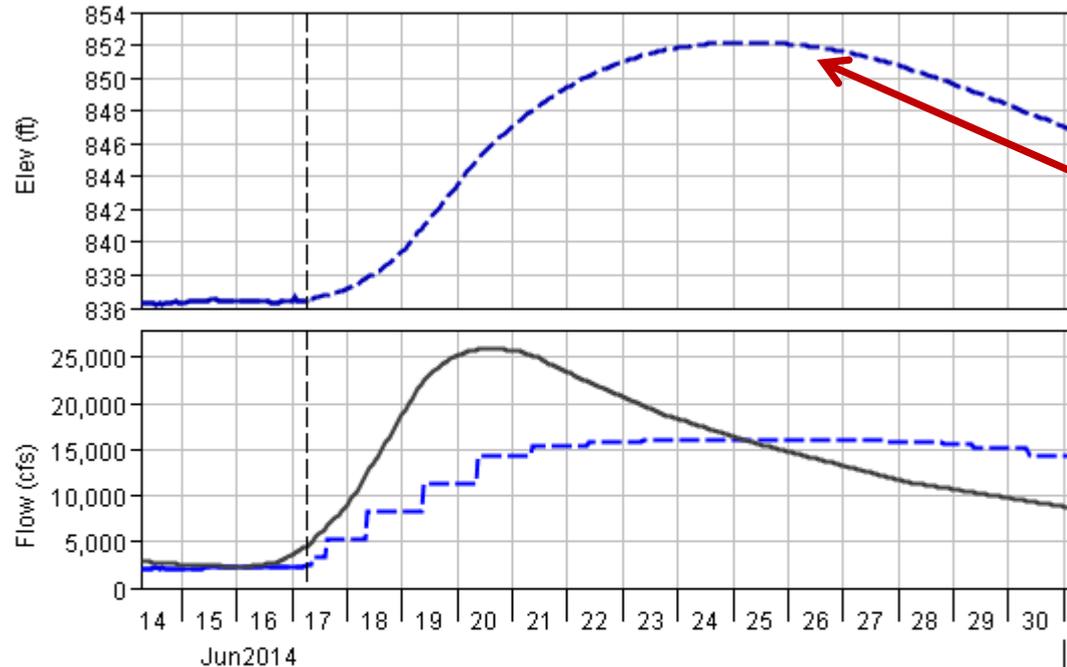


Saylorville Reservoir



Based on Forecast Rainfall through Wed AM

Saylorville Forecast (17Jun2014 09:16:21) RP



- ~ 20 ft Rise
- Based on 24 hrs of forecast rainfall
- Normal Pool = 836 ft
- Spillway = 890 ft

— Observed Pool
- - - Forecasted Pool
— Observed Outflow
- - - Forecasted Outflow
— Estimated Inflow

Graph Provided by:
USACE
Rock Island District

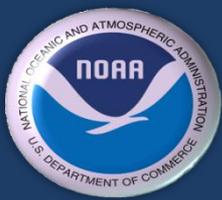


Decision Support Briefing

Key Points



What	Where	Timing	Impacts
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Decision Support Briefing

Severe Weather Resources



Storm Prediction Center: www.spc.noaa.gov

Severe Weather Preparedness:
www.weather.gov/dmx/?n=preparesvrintro

Storm Prediction Center
NOAA / National Weather Service

A Slight Risk of Severe Thunderstorms is Forecast Today and/or Tonight

Slight Risk Areas: FROM NEBR WY INTO WISN & CENTRAL SD
Slight Risk Areas: OVER PARTS OF MS AND AL
Slight Risk Areas: OVER PARTS OF CENTRAL TX

For additional details, see the latest Day 1 Convective Outlook.

News: The SPC Mesoscale Page now has an option to incorporate the experimental ESRL Rapid Refresh version 2 (20152) model as background input for the mesoanalysis fields, in addition to the current operational NCEP Rapid Refresh (RAP) model. (Updated: April 30 2013)

Current time in UTC/GMT (Zulu): 16:46:16

Decision Support Page:
www.weather.gov/dmx/?n=dsscurren

National Weather Service Weather Forecast Office
Des Moines, IA

Home Site Map News Organization Search for: NWS All NOAA

Back to Selection Page

Severe Weather: Introduction

Before it Strikes... **Introduction** Planning Ahead Understanding the Forecast Receiving the Warning

Staying Safe... Tornadoes Lightning Hail and Straight Line Winds

XML RSS Feeds
Current Hazards
Watches/Warnings
Outlooks
Submit Report
Current Conditions
Observations
Radar
Satellite
Snow Cover
Snowfall Analysis
Precip Analysis
Forecasts
Forecast Discussion
Local Area
Activity Planner
Aviation Weather
Fire Weather
Severe Weather
Winter Weather
Hurricane Center
Hydrology
Rivers & Lakes
Climate
Local
National
Drought
More...

lowans are quite familiar with the severe weather that can rake across the state in the spring and summer months. Located at the northern end of Tornado Alley, Iowa typically sees about 50 tornadoes a year, along with frequent severe storms that can unleash dangerous hail and straight-line winds, and hundreds of additional thunderstorms that can produce deadly lightning. However, the chances that a tornado will strike your exact location are very low, and most people will only experience a few severe thunderstorms in a given year. Therefore, it is crucial that you are ready each year for severe weather and have a safety plan in place. Hopefully, you will never need to implement your safety plan, but having one can mean the difference between life and death in a dangerous weather event.

The remainder of this page contains a quick introduction to the various types of severe weather one can expect in Iowa, while the links at the top will help you develop a safety plan, become familiar with weather forecasts and warnings, and provide tips on staying safe when severe weather threatens.

An Introduction to Iowa Severe Weather

Tornadoes

A tornado is defined as a violently rotating column of air generated from a thunderstorm in contact with the ground. Winds in a tornado can range anywhere from 50 to 200+ mph. Tornadoes take on a variety of shapes, sometimes resembling a thin rope that is only a few feet wide, other times appearing as a monstrous mile-wide wedge that fills the horizon. Rain sometimes surrounds a tornado and makes it impossible to see until it is too late. In addition, tornadoes may last only a minute or so, while others may stay on the ground for over an hour.

Iowa has experienced tornadoes during every month of the year, but they are most frequent from March to July, with the climatological peak in activity occurring in June. This does not mean that violent and deadly tornadoes are confined to this five month window. Deadly tornado outbreaks have occurred in Iowa as early as late January and as late as mid November. Tornadoes tend to touch down

NWS Des Moines Decision Support Page

Current Conditions and Seven Day Forecast

City, St, or Zip Code

Go to Enhanced Version

Current Conditions Forecast **Severe Weather** Hydrology/Rivers Winter Weather Fire Weather Safety

Current Watches and Warnings

Central Iowa Watches and Warnings Map

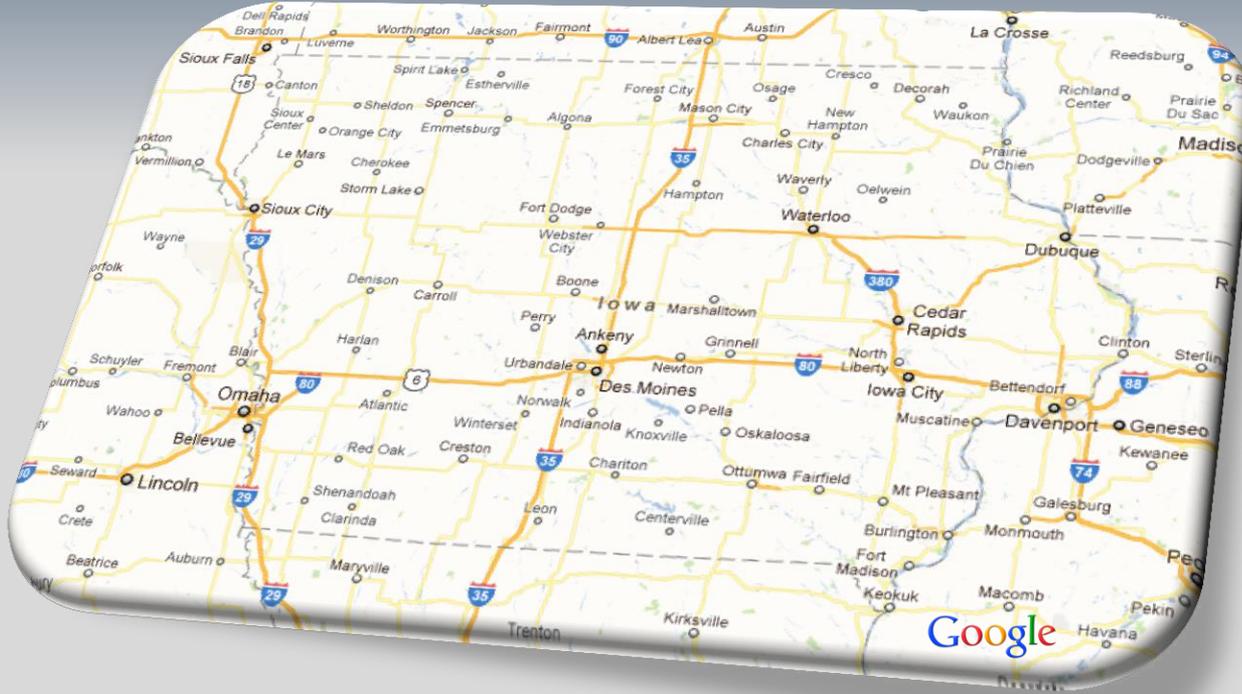
United States Watches and Warnings Map

Watches and Warnings Key: Show



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