



Time: 932 AM Sat May 15,  
2021

Forecaster: Brad Simmons

## Heavy Precipitation Outlook

### Flash Flood Prediction Program

#### LATE AFTERNOON AND EVENING THUNDERSTORMS...

- Trough of low pressure to the west will rotate an upper level disturbance over the District later today producing mid to late afternoon thunderstorms that may persist well into the evening. Ahead of the thunderstorm activity conditions will be dry through early afternoon with temperatures being held down a bit due to cloud cover, over northern areas of the District with sunshine this morning over southern zones resulting in highs in the 60s/70s. This sunny/cloudy line will play a role in thunderstorm development later today...
- Thunderstorms will first begin to initiate where there is more sunshine through the first half of the day over the foothills and Palmer Divide region between 1-3pm. These initial storms will likely produce outflow boundaries and initiate new storm development over a larger geographical area between 3-6pm. Widely scattered storm coverage is then expected through about 10pm, but could linger until around midnight, ending from west to east.
- Moderate to strong thunderstorms will be capable of producing brief moderate to heavy rainfall and stronger thunderstorms may become severe with gusty winds and large hail being the primary threats. Storm motions will generally be from west to east at 15-20mph. Stronger thunderstorms may move against the grain and outflow boundaries may lead to erratic storm movements at times.

**STORM RAINFALL POTENTIAL AND DURATION:** Typical rain showers and weak thunderstorms will produce a 0.1-0.3" of rain. Moderate to strong thunderstorms will have the potential to produce 0.3-0.8" in 10-30 minutes.

**WORST CASE SCENARIO:** A stalled out thunderstorm along an outflow boundary may result in up to 1.6" of rain in 60 minutes or less.

**A LOOK AHEAD:** Thunderstorm activity will increase on Sunday with a wet and cool weather pattern setting up into early next week as the upper level low pressure system to the W continues to rotate disturbances into Colorado. Thunderstorms will become possible by around noon Sunday with stronger storms capable of producing periods of moderate and briefly heavy rainfall. Sunday evening thunderstorm activity is expected to diminish with a continued chance of rain showers overnight.

Location	Prime Time	30-Minute Rainfall and % Probability	Message Potential
Plains			
Boulder	400 PM TO 1000 PM	0.1" (80%) to 0.3" (60%) to 0.8" (20%)	MOD
Broomfield	400 PM TO 1000 PM	0.1" (80%) to 0.3" (60%) to 0.8" (15%)	MOD
Adams	300 PM TO 1000 PM	0.1" (90%) to 0.3" (65%) to 0.8" (20%)	MOD
Denver	300 PM TO 1000 PM	0.1" (80%) to 0.3" (60%) to 0.8" (15%)	MOD
Jefferson	300 PM TO 1000 PM	0.1" (80%) to 0.3" (60%) to 0.8" (15%)	MOD
Arapahoe	200 PM TO 1000 PM	0.1" (90%) to 0.3" (65%) to 0.8" (20%)	MOD
Douglas	100 PM TO 1000 PM	0.1" (90%) to 0.3" (65%) to 0.8" (20%)	MOD
Foothills above 6500ft			
Boulder	100 PM TO 900 PM	0.1" (95%) to 0.3" (75%) to 0.8" (20%)	MOD
Douglas	100 PM TO 900 PM	0.1" (90%) to 0.3" (65%) to 0.8" (20%)	MOD
Jefferson	100 PM TO 900 PM	0.1" (90%) to 0.3" (65%) to 0.8" (20%)	MOD

**MONITOR NATIONAL WEATHER SERVICE FOR SEVERE WEATHER STATEMENTS.**

MHFD Flood Prediction Center: 303-458-0789 [F2P2 Website](#)

