

Time: 637 AM Tuesday June 30, 2015

MESSAGE 2

**Flash Flood Prediction Program** 

## FLASH FLOOD WATCH

#### **FLOOD WARNING EXERCISE – THIS IS ONLY A TEST**

The National Weather Service has issued a <u>FLASH FLOOD WATCH</u> for: the following counties: <u>Boulder (City of Boulder</u> <u>affected, Four Mile Burn Area affected)</u>, Jefferson, Broomfield, Douglas, Adams, Denver, Arapahoe including: <u>DIA, the</u> <u>City of Aurora, Arvada, Wheat Ridge, Lakewood</u>

from: <u>Current</u> to <u>1159 PM</u>. <u>The National Weather Service in Boulder has issued a Flash Flood Watch that includes the</u> <u>entire District from Current until 1159 PM tonight.</u>

Prime time for flooding: <u>Current</u> to <u>1000 PM</u>.

Forecast rainfall: Rain showers and training thunderstorms will have the potential to produce very heavy rainfall of 2.50-7.00" of rain in 3-6 hours.

The most likely areas to be impacted by flooding are:

Mountain streams & floodplains; road crossings; canyon roads & highways; recreational trails; adjacent open space areas/campgrounds/parks; fishing access points & stream reaches; buildings near streams; utilities

Urban streams/gulches; road crossings; recreational trails; adjacent open space areas/campgrounds/parks; floodplain properties; utilities



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Urban streets, intersections, low lying areas, known trouble spots



Mountain locations subject to mud/rock/debris slide

# Additional information: Flash flooding of District watercourses will be possible today and tonight as well as significant urban and street flooding from slow moving thunderstorm cells.

A Flash Flood Watch means that flash flooding is possible within the watch area.

This message is not intended for public dissemination. Please pass this information along to affected emergency response organizations (police, fire, public works, etc.) within your area.

Also, please take appropriate actions to prepare for possible flooding.

Further information will be provided to you as it becomes available.





#### QUANTITATIVE PRECIPITATION FORECAST (QPF) Flash Flood Prediction Program

#### MORE RAIN SHOWERS AND THUNDERSTORMS WITH HEAVY RAINFALL LIKELY

#### FLOOD WARNING EXERCISE – THIS IS ONLY A TEST

- Rain showers will produce rainfall amounts of 0.25" to 0.60" in 10-30 minutes, while thunderstorms will produce heavy rainfall of 0.40" to 1.60" in 10-30 minutes. Heavy rainfall of up to 2.50" of rainfall in 60-120 minutes will be possible, due to thunderstorm training.
- Very heavy rainfall of up to 8.00" will be possible over a 4-7 hour period due to training thunderstorm cells.

#### STORM STRENGTH vs. PEAK RAINFALL AMOUNTS (inches)

Strength	10 min	30 min	60 min	Storm Total
Weak	0.10	0.30	0.50	0.90
Moderate	0.30	0.90	1.30	2.50
Strong	0.60	1.60	2.50	4.00

NOTE: Peak storm rainfalls in >50dBZ radar reflectivity areas only ZONE/BASIN-SPECIFIC FORECAST PROBABILITIES OF OCCURRENCE

Location	Weak Storm	Moderate Storm	Strong Storm
above 6000 feet			
Boulder County	100%	80%	50%
Jefferson County	100%	80%	50%
Douglas County	100%	80%	50%
below 6000 feet			
District NW of I-25 & I-70	100%	80%	50%
District NE	100%	80%	50%
District SE	100%	80%	50%
District SW	100%	80%	50%
Warning Plan Basins			
Boulder & South Boulder Creek	100%	80%	50%
Ralston Creek	100%	80%	50%
Lena Gulch	100%	80%	50%
Bear Creek	100%	80%	50%
Goldsmith & Harvard Gulch	100%	80%	50%
Westerly Creek	100%	80%	50%
Toll Gate Creek	100%	80%	50%
Other Drainage Basins			
Coal Creek	100%	80%	50%
Clear Creek	100%	80%	50%
Sand Creek	100%	80%	50%
Cherry Creek (Denver)	100%	80%	50%
Cherry Creek (Douglas Co.)	100%	80%	50%
Plum Creek	100%	80%	50%

No entry means less than a 10% probability

UDFCD Flood Prediction Center: 303-458-0789 Website: http://f2p2.udfcd.org





# **Internal Message Status**

Flash Flood Prediction Program

#### **MESSAGES 2'S ISSUED FOR THE ENTIRE DISTRICT**

#### FLOOD WARNING EXERCISE – THIS IS ONLY A TEST

- An upper level low located over southern Nevada will continue to pump sub-tropical moisture over the District today and tonight. As was the case yesterday and earlier this morning, the result will be copious amounts of rain showers and embedded thunderstorms that will move from south to north across the District throughout the day.
- Message 2's and NWS Flash Flood Watch have been issued for the entire forecast District, valid until Midnight.
- The wet weather pattern, and heavy rainfall threat, is expected to continue through Friday.

**STORM RAINFALL POTENTIAL AND DURATION:** Rain showers will produce rainfall amounts of 0.08" to 0.35" in 10-30 minutes, while thunderstorms will produce heavy rainfall of 0.40" to 1.60" in 10-30 minutes. Heavy rainfall of up to 3.50" of rainfall in 1-3 hours will be possible, due to thunderstorm training.

**WORST CASE SCENARIO:** A slow moving thunderstorm complex or multiple strong thunderstorms track over a single location resulting in up to 6.00" of rainfall in 3-6 hours.

County	Message Val		lid Times	Prime	Time
Boulder County	2	Current TO 1200 AM		Current TO 1000 PM	
Jefferson County	2	Current TO 1200 AM		Current TO 1000 PM	
Broomfield County	2	Current TO 1200 AM		Current TO 1000 PM	
Douglas County	2	Current TO 1200 AM		Current TO 1000 PM	
Adams County	2	Current TO 1200 AM		Current TO 1000 PM	
Denver County	2	Current	t TO 1200 AM	Current TO	1000 PM
DIA	2	Current	t TO 1200 AM	Current TO	1000 PM
Arapahoe County	2	Current TO 1200 AM		Current TO 1000 PM	
the City of Aurora	2			Current TO 1000 PM	
Arvada	2	Current TO 1200 AM		Current TO 1000 PM	
Wheat Ridge	2	Current TO 1200 AM		Current TO 1000 PM	
Lakewood	2			Current TO 1000 PM	
County-specific Quantitative Precipitation Outlook	Precip			Rainfall Messag	
Plains					
Adams	Curren	t TO 1200 AM	0.1" (100%) to 0.4" (80%) to 1.2" (50%)		ISSUED
Arapahoe Current		t TO 1200 AM 0.1" (100%) to 0.4" (80%		%) to 1.2" (50%)	ISSUED
Boulder Current		t TO 1200 AM 0.1" (100%) to 0.4" (80%		%) to 1.2" (50%)	ISSUED
Broomfield Current		t TO 1200 AM 0.1" (100%) to 0.4" (80%		%) to 1.2" (50%)	ISSUED
Denver	Curren	t TO 1200 AM	0.1" (100%) to 0.4" (80%	%) to 1.2" (50%)	ISSUED
Douglas	Curren	t TO 1200 AM	0.1" (100%) to 0.4" (80%	%) to 1.2" (50%)	ISSUED
Jefferson	Curren	t TO 1200 AM	0.1" (100%) to 0.4" (80%	%) to 1.2" (50%)	ISSUED
Foothills above 6500ft					
Boulder	Curren	t TO 1200 AM	0.1" (100%) to 0.4" (80%		ISSUED
Douglas		t TO 1200 AM	0.1" (100%) to 0.4" (80%	, , ,	ISSUED
Jefferson	Curren	t TO 1200 AM	0.1" (100%) to 0.4" (80%	%) to 1.2" (50%)	ISSUED

MONITOR NATIONAL WEATHER SERVICE FOR SEVERE WEATHER STATEMENTS.



Date/Time: June 30<sup>th</sup>, 2015 920 AM

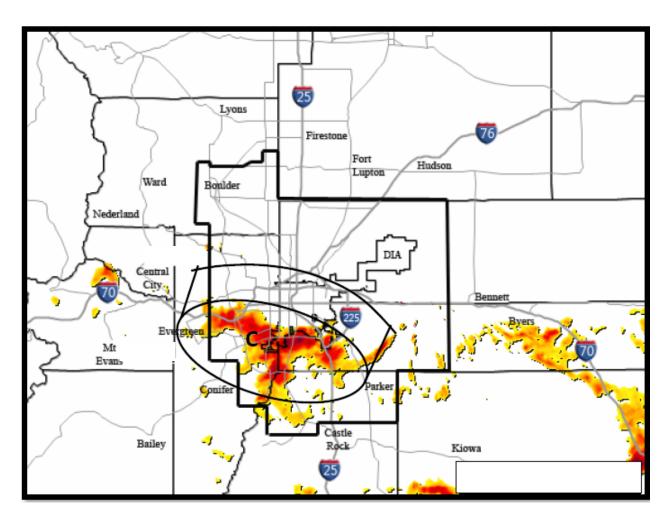
Meteorologist: Bryan Rappolt



**Storm Track Prediction** 

Flash Flood Prediction Program

# VALID PERIOD: 930 AM - 1100 AM

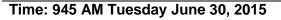


Storm C: Very heavy rain of 2.50-5.00" likely over the next 1-2 hours. Storm motion is very slowly to the north/northeast. Large hail and active cloud to ground lightning will be likely as well. <u>Flash Flooding will be likely across central Jefferson County, western Arapahoe County and Denver County.</u>

FLOOD WARNING EXERCISE – THIS IS ONLY A TEST

UDFCD Flood Prediction Center: 303-458-0789 (voice) 303-458-5309 (fax) Website: http://f2p2.udfcd.org Genesis Weather Solutions/Skyview Weather Prediction Center: 303-688-9175 (voice) Consultant Email: f2p2@skyview-wx.com Website: http://skyview-wx.com & http://www.genesisweathersolutions.com





Forecaster: Bryan Rappolt



**MESSAGE 3** 

**Flash Flood Prediction Program** 

#### FLASH FLOOD WARNING

#### PRIORITY DISSEMINATION RECOMMENDED

## FLOOD WARNING EXERCISE – THIS IS ONLY A TEST

The National Weather Service has issued a **FLASH FLOOD WARNING** for the following counties: **Jefferson**, including: **The City of Lakewood and Wheat Ridge**.

from: <u>Current</u> to <u>1200 PM</u>. <u>The National weather service has issued a Flash Flood Warning effective until</u> <u>1200 PM for central Jefferson County.</u> <u>2.00 to 4.00 inches of rain has been observed across the warned</u> <u>area over the last 2 hours.</u> <u>Flash flooding is expected as additional heavy rain of 2.50 to 5.00" is expected</u> <u>over the next 2-4 hours.</u>

Prime time for flooding: Current to 1230 PM.

Forecast rainfall: 2.50 to 5.00" of rainfall is expected over the next 2-4 hours.

The most likely areas to be impacted by flooding are:

Urban streams/gulches; road crossings; recreational trails; adjacent open space areas/campgrounds/parks; floodplain properties; utilities

Lurban streets, intersections, low lying areas, known trouble spots

Additional explanation: Flooding of creeks, rivers and streams is occurring or imminent.

Please pass this information along to affected emergency response organizations (police, fire, public works, etc.) within your area.

Also, please take appropriate actions to prepare for possible flooding.

Further information will be provided to you as it becomes available.





**Internal Message Status** 

Flash Flood Prediction Program

#### MESSAGES 2'S CONTINUE VALID...MESSAGE 3'S IN AFFECT FOR PORTIOS OF THE DISTRICT

#### FLOOD WARNING EXERCISE – THIS IS ONLY A TEST

- An upper level low located over southern Nevada will continue to pump sub-tropical moisture over the District today and tonight. As was the case yesterday and earlier this morning, the result will be copious amounts of rain showers and embedded thunderstorms that will move from south to north across the District throughout the day.
- Message 2's and NWS Flash Flood Watch have been issued for the entire forecast District, valid until Midnight.
- A Flash Flood Warning and Message 3's have been issued for central Jefferson County, western Arapahoe County and Denver County.

**STORM RAINFALL POTENTIAL AND DURATION:** Rain showers will produce rainfall amounts of 0.08" to 0.35" in 10-30 minutes, while thunderstorms will produce heavy rainfall of 1.00" to 2.50" in 10-30 minutes. Heavy rainfall of up to 7.00" of rainfall in 3-5 hours will be possible, due to thunderstorm training.

**WORST CASE SCENARIO:** A slow moving thunderstorm complex or multiple strong thunderstorms track over a single location resulting in up to 8.00" of rainfall in 4-6 hours.

County	Message	Message Valid Times		Prime Time	
Boulder County	2 Current		t TO 1200 AM	Current TO	1000 PM
Jefferson County	3	Current TO 1200 PM		Current TO 1200 PM	
Broomfield County	2	Current TO 1200 AM		Current TO 1000 PM	
Douglas County	2	Current TO 1200 AM		Current TO 1000 PM	
Adams County	2	Current TO 1200 AM		Current TO 1000 PM	
Denver County	3	Current TO 1200 PM		Current TO 1200 PM	
DIA	2	Current TO 1200 AM		Current TO 1000 PM	
Arapahoe County	3	3 Current TO 1200 PM		Current TO 1200 PM	
the City of Aurora	2	2 Current TO 1200 AM		Current TO 1000 PM	
Arvada	2	Current TO 1200 AM		Current TO 1000 PM	
Wheat Ridge	3	Current TO 1200 PM		Current TO 1200 PM	
Lakewood	3	Current TO 1200 PM		Current TO 1200 PM	
County-specific Quantitative Precipitation Outlook	Precipitation Time		30-Minute Rainfall and % Probability		Message Potential
Plains					
Adams	Curren	TO 1200 AM 1.0" (100%) to 2.5" (80%		%) to 5.0" (50%)	ISSUED
Arapahoe Current		t TO 1200 AM 1.0" (100%) to 2.5" (80%		, , ,	ISSUED
Boulder Current		t TO 1200 AM 1.0" (100%) to 2.5" (80%		%) to 5.0" (50%)	ISSUED
Broomfield Current		t TO 1200 AM 1.0" (100%) to 2.5" (80%		%) to 5.0" (50%)	ISSUED
Denver	Curren	t TO 1200 AM	1.0" (100%) to 2.5" (80%	%) to 5.0" (50%)	ISSUED
Douglas	Curren	t TO 1200 AM	1.0" (100%) to 2.5" (80%	%) to 5.0" (50%)	ISSUED
Jefferson	Curren	t TO 1200 AM	1.0" (100%) to 2.5" (80%	%) to 5.0" (50%)	ISSUED
Foothills above 6500ft					
Boulder	Curren	t TO 1200 AM	1.0" (100%) to 2.5" (80%	%) to 5.0" (50%)	ISSUED
Douglas	Curren	t TO 1200 AM	1.0" (100%) to 2.5" (80%	%) to 5.0" (50%)	ISSUED
Jefferson	<b>C</b>	t TO 1200 AM	1.0" (100%) to 2.5" (80%	() to E O" (EO0/)	ISSUED

DFCD Flood Prediction Center: 303-458-0789 Website: http://f2p2.udfcd.org

