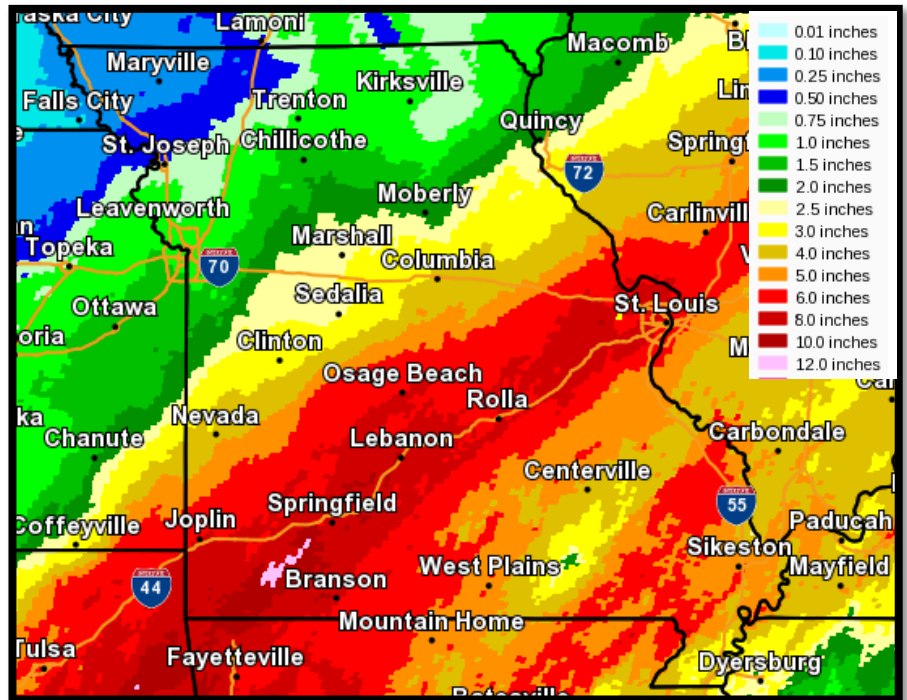


Overview

A prolonged period of rainfall occurred from the early morning hours of December 26th to the evening of December 28th. The heaviest rainfall occurred in a 50 to 75 mile wide swath from southwest Missouri through the Greater St. Louis Metropolitan Area and into central Illinois. Storm total rainfall within this swath ranged from 6 to 12 inches, with lighter amounts extending both northwest and southeast. Some of the precipitation fell as a wintry mix of freezing rain, sleet and snow across northwest portions of the state during the event.

The heavy rainfall led to widespread life threatening flash flooding and historic river flooding along the Bourbeuse and Meramec Rivers. Three Interstates were closed due to river flooding. Interstate 70 was closed in St. Peters, Missouri and Poca, Illinois, Interstate 44 was closed in Valley Park and two locations west of Rolla, Missouri, and Interstate 55 was closed near Arnold, Missouri. This severely impacted travel and commerce across the center of the country. Six fatalities were confirmed due to flash flooding and thousands of business and homes were damaged or destroyed by this historic flooding event. The total cost of this disaster is expected to top 1 billion dollars.

Storm Total Rainfall	
ST. LOUIS	9.18"
COLUMBIA	4.49"
JEFFERSON CITY	5.17"
CHESTERFIELD	7.85"
ST. CHARLES	8.04"
FARMINGTON	5.99"
QUINCY	2.58"
CAHOKIA	5.91"
BELLEVILLE/SCOTT	5.31"
PITTSFIELD	3.82"
SPARTA	5.53"
SALEM	3.05"



Storm Total Rainfall

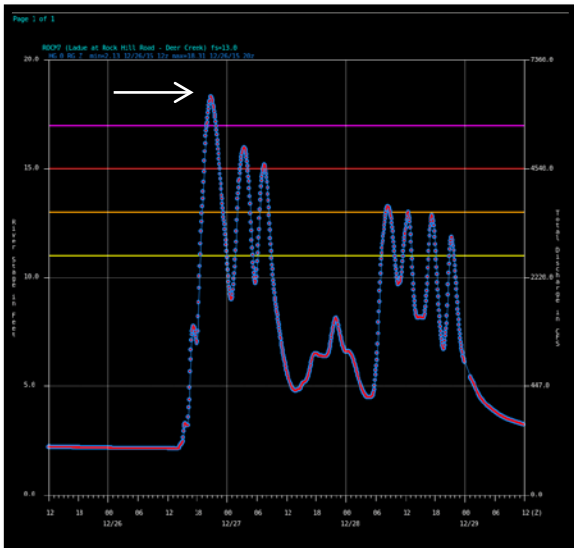
The following weather records were broken during this event:

St. Louis

- Wettest Year on Record 61.24" (Old Record 57.96" in 2008)
- Wettest December on Record 11.74" (Old Record 7.82" in 1982)
- December 26th Record Rainfall of 4.87"
- December 26th Rainfall of 4.87" set Daily Rainfall Record for December
- December 26th Rainfall was 3rd Wettest Day Ever Recorded in St. Louis History
- December 28th Record Rainfall of 2.59"

Flash Flooding

The first wave of heavy rain developed Saturday morning with embedded thunderstorms and incredible rainfall rates for December. Rainfall amounts of 3 to 5 inches were common in a 50 mile swath along a line from Springfield, Missouri through St. Charles, Missouri to Decatur, Illinois. The lack of vegetation and previous rainfall three days prior (above normal soil moisture) led to excessive runoff and flash flooding of low lying areas. Nearly every small creek and tributary under the heavy band of rainfall responded quickly to flood stage, sending water onto well traveled roads and into businesses and homes. For example, Deer Creek in Brentwood (St. Louis County, Missouri) rose nearly 11 feet in just 3 hours Saturday morning (hydrograph below) along with the Black Creek, sending water onto Manchester Blvd (photo below). Eight swift water rescues were performed as motorists became trapped in the rapidly rising water.



ROCM7 -Deer Creek Hydrograph in Brentwood



Manchester Blvd. in Brentwood (St. Louis County, Missouri)
Photo Courtesy of St. Louis Post Dispatch



Multiple Water Rescues in Lake St. Louis
(St. Charles County, MO)

Historic River Flooding on Bourbeuse and Meramec Rivers

This flood will serve as the new benchmark for river flooding along the Bourbeuse and Meramec River Basins, replacing the Flood of December 1982 and Great of Flood of 1993. The record crests from Union to Arnold in most cases were at least a foot above the flood of record and in some cases as much as 5 feet above. The flooding caused the closure of Interstate 44 near Valley Park, Interstate 55 near Arnold and hundred of other highways and roads.



East Central Missouri Rivers

River and Location	New Record	Old Record
Bourbeuse River at Union	34.31 ft Dec 29 2015	33.8 ft Dec 5 1982
Meramec River at Pacific	33.42 ft Dec 30 2015	32.71 ft Dec 5 1982
Meramec River near Eureka	46.06 ft Dec 30 2015	42.89 ft Dec 6 1982
Meramec River at Valley Park	44.11 ft Dec 31 2015	39.73 ft Dec 6 1982
Meramec River near Arnold	47.26 ft Dec 31 2015	45.30 ft Aug 1 1993



*I-44 and Highway 141 (Valley Park, Missouri)
Photo Courtesy of St. Louis Post Dispatch*



*MoDOT pumping water off of I-55 (near Arnold, Missouri)
Photo Courtesy of KTVI*



*I-55 (near Arnold, Missouri)
Photo Courtesy of St. Louis Post Dispatch*

Historic River Flooding on Bourbeuse and Meramec Rivers Continued

Thousands of homes and business were impacted by the flooding of these two rivers. Below are just a few pictures of the damage that occurred from Union to Arnold. Property damage estimates are expected to top 1 billion dollars.



*Meramec River Flooding in Pacific, Missouri
Photo Courtesy of KSDK*



*Meramec River Flooding in Eureka, Missouri
Photo Courtesy of St. Louis Post Dispatch*



*Meramec River Flooding in Pacific, Missouri
Photo Courtesy of St. Louis Post Dispatch*



*Meramec River Flooding in Valley Park, Missouri
Photo Courtesy of St. Louis Post Dispatch*

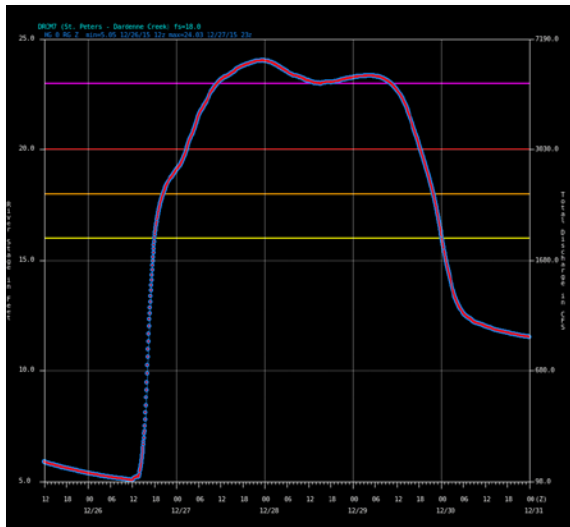


*Bourbeuse River Flooding in Union, Missouri
Photo Courtesy of St. Louis Post Dispatch*

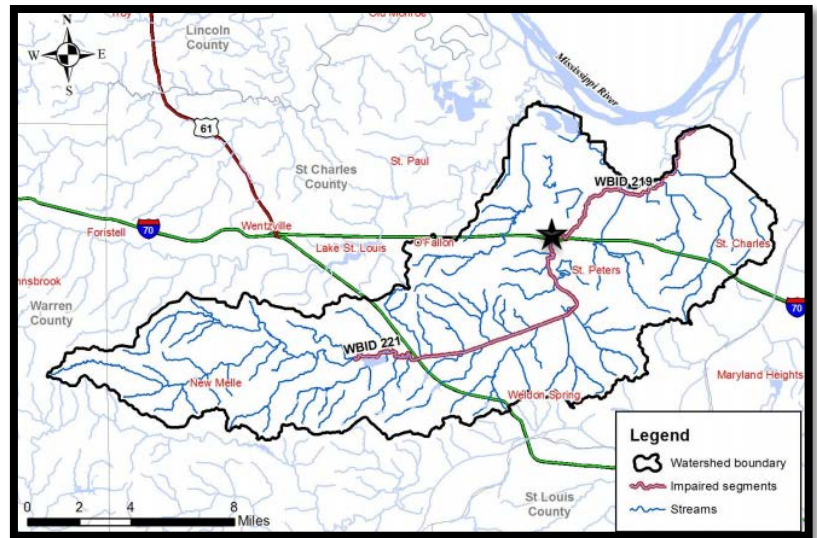
Dardenne Creek Flooding and Interstate 70 Closure

Very heavy rain fell in the Dardenne Creek watershed on December 26th which led to a rapid rise and flooding of the Dardenne Creek from O'Fallon to St. Peters in St. Charles County. The flood waters led to the closure of Interstate 70 on December 27th and 28th.

Traffic was rerouted along Interstate 61/Highway 40 through the City of St. Louis and Highway 370 into St. Louis County.



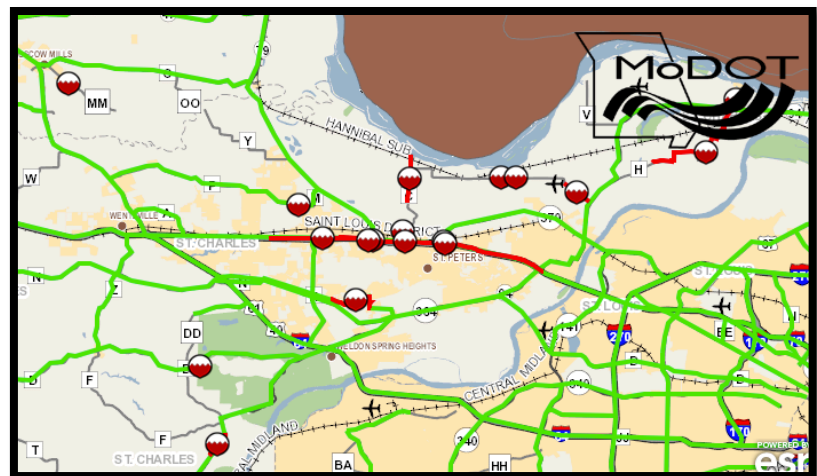
Dardenne Creek Hydrograph at St. Peters, Missouri



Dardenne Creek Watershed (St. Charles County, Missouri)



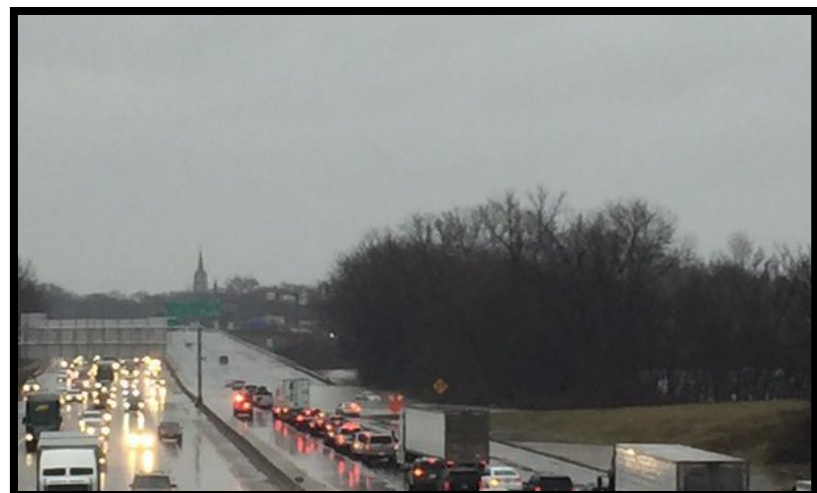
Flood water on Interstate 70 prior to closure.



MoDOT map showing Interstate 70 closure near St. Peters, Missouri



A car stalls out in flood waters on Interstate 70.



Flood water forces the closure of Interstate 70 near St. Peters, Missouri.

Storm Total Rainfall

In Northeast Missouri...

Ashburn	:	3.57"	DCP
Bowling Green	:	4.21"	COOP
Canton L/D20	:	2.58"	COOP
Cannon Dam	:	3.03"	COOP
Clarksville L/D24	:	4.47"	COOP
Edina	:	1.94"	COOP
Ewing	:	2.57"	DCP
Frankford	:	3.39"	DCP
Hannibal	:	3.51"	COOP
Madison	:	2.53"	DCP
Monroe City	:	3.36"	COOP
New London	:	2.87"	DCP
Novelty 1E	:	2.14"	MONET
Palmyra	:	3.80"	COCORAHS
Paris	:	3.13"	DCP
Perry	:	3.40"	DCP
Santa Fe	:	3.68"	DCP
Saverton L/D	:	4.00"	COOP
Shelbina	:	2.87"	COOP
Shelbyville	:	2.40"	COCORAHS
Steffenville	:	2.64"	COOP
Taylor 5 SW	:	3.03"	COCORAHS
Vandalia	:	4.08"	COOP

In East-Central Missouri...

Cedar Hill	:	6.99"	COCORAHS
De Soto	:	6.32"	COOP
Festus	:	5.74"	COOP
Grays Summit	:	9.49"	COCORAHS
Hermann	:	6.92"	COOP
House Springs	:	8.28"	COCORAHS
Imperial	:	6.47"	COCORAHS
Labadie	:	8.95"	DCP
Lyon	:	9.44"	COCORAHS
Moscow Mills	:	7.34"	MONET
New Haven	:	7.97"	DCP
Pacific	:	7.38"	DCP
Rosebud	:	9.62"	COOP
St. Clair	:	8.74"	COCORAHS
Sterling	:	5.45"	DCP
Troy 1 E	:	6.94"	COOP
Truxton 3 S	:	5.99"	COCORAHS
Union	:	9.00"	COCORAHS
Warrenton	:	8.86"	COCORAHS
Washington	:	9.80"	COOP
Winfield L/D25	:	6.92"	COOP

In Central Missouri...

Americus	:	6.73"	COCORAHS
Ashland	:	4.77"	COCORAHS
Auxvasse	:	4.19"	MONET
Brazito	:	6.97"	COCORAHS
California	:	5.19"	COOP
Columbia U OF M	:	3.93"	COOP
Centralia	:	3.43"	DCP
Freedom	:	8.35"	COOP
Fulton	:	4.30"	COCORAHS
High Hill	:	5.40"	COCORAHS
Holts Summit	:	4.98"	COCORAHS
Jefferson City	:	4.99"	COOP
Linn	:	7.28"	COCORAHS
Lupus	:	3.69"	COCORAHS
Mexico	:	3.72"	COCORAHS
Middleton	:	4.75"	COCORAHS
Montgomery City	:	6.42"	COCORAHS
St. Thomas	:	5.28"	DCP
Swiss	:	7.53"	COCORAHS
Wellsville	:	4.61"	COCORAHS
Williamsburg	:	3.94"	MONET

From our Saint Louis Metronet...

Alton L/D	:	10.78"	COOP
Arnold	:	7.18"	DCP
Belleville	:	5.57"	COCORAHS
Black Jack	:	8.94"	DCP
Centerville	:	5.87"	COCORAHS
Chesterfield	:	9.48"	COOP
Cottleville 1E MO	:	11.00"	COOP
Edwardsville 2W	:	9.03"	COOP
Eureka	:	7.85"	DCP
Harvester MO	:	10.95"	COOP
Lake Saint Louis MO	:	7.56"	COOP
O Fallon	:	8.79"	COOP
Oakville	:	7.16"	DCP
Pacific	:	7.38"	DCP
Pontoon Beach	:	8.57"	COCORAHS
Saint Charles MO	:	10.57"	COOP
Saint Peters MO	:	10.45"	COOP
STL Science Center	:	7.89"	COOP
Valley Park MO	:	9.34"	DCP
Washington Park	:	7.05"	COCORAHS
Weldon Spring NWS	:	10.37"	COOP
Winfield L/D	:	6.92"	COOP

Storm Total Rainfall Continued...

In Southeast Missouri...

Annapolis	:	4.83"	DCP
Bixby	:	5.96"	DCP
Brickeys	:	4.91"	DCP
Carr Creek	:	4.17"	RAWS
Cooks Station	:	6.35"	MONET
Council Bluff	:	6.63"	RAWS
Cuba	:	8.34"	COCORAHS
Desloge	:	5.08"	DCP
Ellington	:	5.30"	COCORAHS
Farmington	:	6.26"	COCORAHS
Fredericktown	:	5.46"	DCP
Hawn State Park	:	5.30"	COOP
Irondale	:	6.81"	DCP
Jonhsons Shut-In SP	:	5.45"	DCP
Libertyville	:	5.29"	DCP
Pilot Knob	:	4.85"	DCP
Potosi 5SW	:	7.00"	COOP
Roselle	:	5.02"	DCP
Sainte Genevieve	:	5.77"	COOP
Steelville	:	6.85"	DCP
Sullivan	:	8.50"	DCP
Viburnum	:	5.83"	COOP
Weingarten	:	6.22"	COCORAHS

In Central Illinois...

Coffeen	:	8.53"	DCP
Greenville 2NE	:	8.50"	COOP
Hillsboro	:	8.07"	COOP
Hoffman	:	4.34"	DCP
Iuka 12SW	:	4.51"	COOP
Odin	:	4.88"	COCORAHS
Patoka	:	5.40"	COOP
Pierron	:	5.84"	DCP
Posey	:	4.49"	DCP
Ramsey	:	5.78"	DCP
Salem	:	5.28"	COOP
Vandalia	:	5.62"	DCP
Venedy Station	:	5.19"	DCP
Wenonah	:	6.98"	COCORAHS

In West-Central Illinois...

Florence	:	4.44"	DCP
La Grange L/D	:	3.15"	DCP
Meredosia	:	4.55"	DCP
Perry 6NW	:	4.10"	COOP
Pittsfield	:	4.88"	COOP
Quincy L/D21	:	2.79"	COOP
Ripley	:	3.05"	DCP
White Hall 1E	:	5.81"	COOP

In Southwest Illinois...

Albers	:	4.74"	COOP
Carlinville	:	7.42"	COCORAHS
Chester	:	6.06"	DCP
Fayetteville	:	4.20"	DCP
Freeburg	:	4.64"	DCP
Girard	:	6.22"	COCORAHS
Grafton	:	8.13"	DCP
Hardin	:	6.63"	DCP
Hecker	:	4.65"	DCP
Highland	:	5.95"	COOP
Jerseyville 2SW	:	6.89"	COOP
Kaskaskia L/D	:	4.07"	DCP
Mount Olive 1E	:	8.54"	COOP
Medora	:	7.14"	COOP
Nashville 4NE	:	5.71"	COOP
Okawville	:	5.76"	COCORAHS
Prairie Du Rocher	:	5.90"	COOP
Red Bud	:	5.78"	COOP
Royal Lakes	:	8.56"	COCORAHS
Sparta	:	6.74"	COCORAHS
Saint Libory	:	5.81"	COOP
Steeleville	:	6.71"	COOP
Worden	:	8.90"	COCORAHS