

Rainfall Event Report

August 2, 2007

prepared by
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A brief but intense and localized thunderstorm dropped over 2.50 inches of rain in a 90-minute period in the Brownstone Canyon area of the west Las Vegas Valley. The resulting runoff washed out the Calico Basin Road in several locations and closed SR159 for a short time. The Red Rock Detention Basin captured approximately 430 acre-feet of runoff. Aside from the Calico Basin Road and minor debris in roadways, there were no reports of injuries or property damages resulting from this event.

Rainfall in the Las Vegas Valley began at 1:00PM and quickly intensified. At 1:33PM the local office of the National Weather Service issued a Flood Advisory for the far western portions of the Las Vegas Valley, and by 2:00PM approximately 2.30" of rainfall had been recorded by the District's Flood Threat Recognition System rain gage in Brownstone Canyon. Three additional rain gages measured more than one-inch of rainfall during this event. Because of the amount and intensity of the rainfall measured by the Brownstone Canyon gage, District staff removed that gage the following day to verify the accuracy of the measurements. It was determined that the gage operated correctly and was within the manufacturer's calibration specifications.

Based on the weather radar images viewed during this event, this storm was similar in size and intensity to the storm that caused flooding in the Gowan Road area in August 2003. While the August 2003 event resulted in significant damages to public and private property, the August 2, 2007 storm caused only relatively minor damages to a few roadways. The major difference between these two events was the location. The August 2003 storm occurred over an area where flood control detention basins had been constructed, but the collection system to funnel runoff into the basins was not fully in place. The August 2007 rain occurred over an area where most of the runoff entered either the Red Rock or Summerlin Village 5 Detention Basins.

A summary of the rainfall data collected during this event is attached.

Rainfall Summary
August 2, 2007

DeviceID	3914	4204	4324	4329
08/02/07				
1500	0.00	0.00	0.00	0.00
1445	0.00	0.04	0.00	0.00
1430	0.00	0.16	0.04	0.04
1415	0.00	0.16	0.31	0.31
1400	0.04	0.35	0.59	0.55
1345	0.04	0.47	0.04	0.63
1330	0.20	0.04	0.08	0.91
1315	0.08	0.00	0.00	0.20
1300	0.16	0.00	0.00	0.04
1245	0.55	0.00	0.00	0.00
1230	0.24	0.00	0.00	0.00
1215	0.08	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00
1145	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00
TOTALS	1.38	1.22	1.06	2.68

Rainfall values are in inches for the 15 minute period ending at the time indicated.

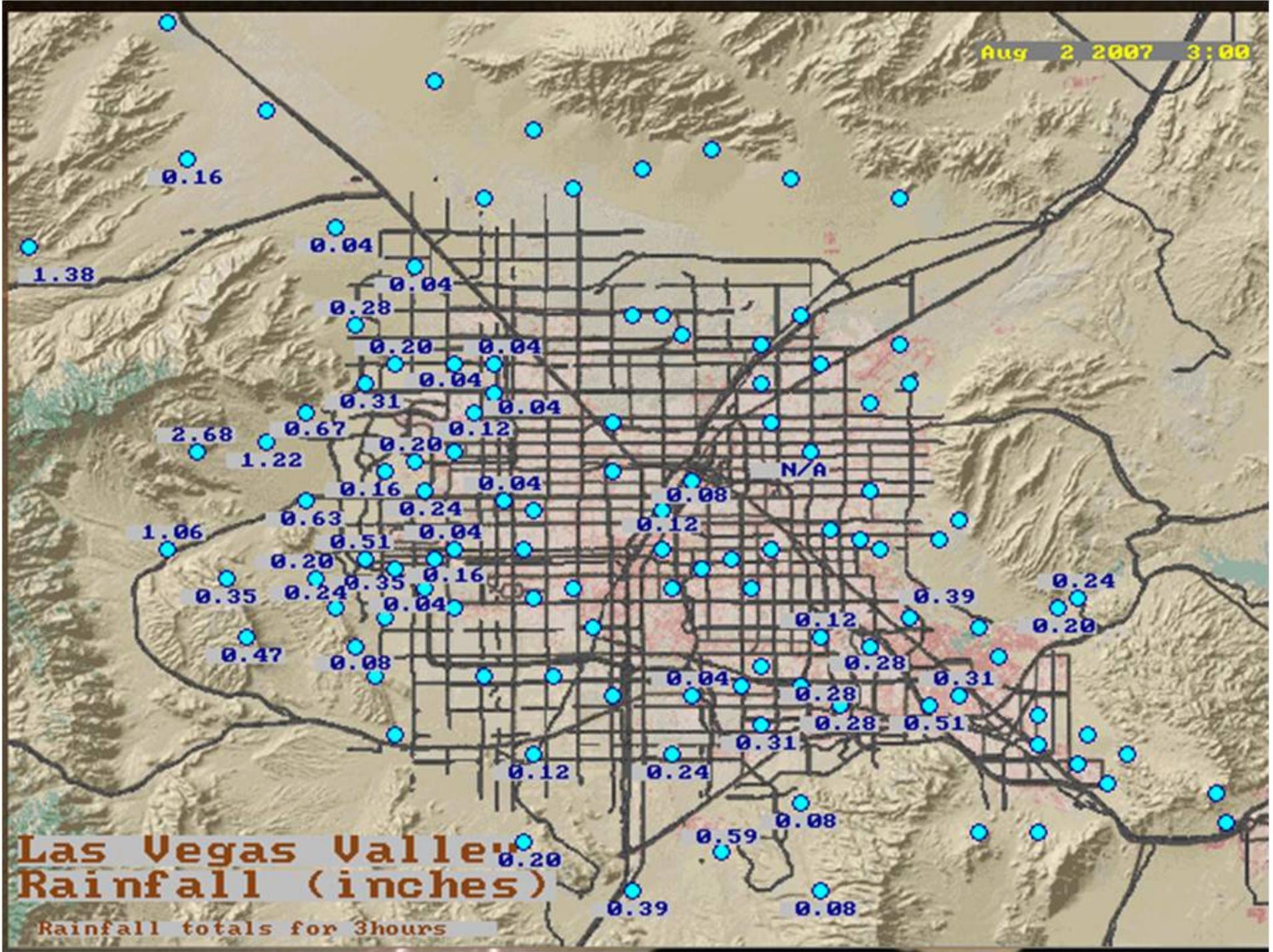
3914 – Grapevine Spring 2 (10 miles WSW of US-95 and Kyle Canyon Road)

4204 – Summerlin West (3 miles NW of I-215 and Charleston Blvd)

4324 – Red Rock Canyon Visitor’s Center

4329 – Brownstone Canyon (4 miles NW of Red Rock Detention Basin)

Aug 2 2007 3:00



Las Vegas Valley Rainfall (inches)

Rainfall totals for 3 hours

0.16
1.38
0.04
0.28
0.20
0.04
0.04
0.31
0.04
2.68
0.67
0.20
1.22
0.16
0.04
0.63
0.24
1.06
0.20
0.51
0.04
0.35
0.24
0.35
0.16
0.04
0.47
0.08
0.12
0.24
0.04
0.28
0.31
0.28
0.51
0.12
0.24
0.31
0.59
0.08
0.20
0.39
0.08
N/A
0.24
0.20
0.39
0.24
0.31
0.28
0.51
0.08
0.39



Damages to Calico Basin Road resulting from storm runoff on August 2, 2007.



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