

Rainfall Event Report

August 22-23, 1995

prepared by
Timothy E. Sutko
Senior Hydrologist
Clark County
Regional Flood Control District
Las Vegas, Nevada

Highly localized and very intense storms dumped nearly 3/4" of rain in 15 minutes in the Las Vegas Valley both August 22 (Tuesday) and August 23 (Wednesday). Both of these storms caused significant amounts of runoff in the streets on the westside of the Valley. The Wednesday storm resulted in one flood-related fatality. There were no reports of damage to public or private property other than wind-related damages.

Rainfall began Tuesday afternoon at approximately 4:30PM. The Regional Flood Control District rain gage located near Rainbow Blvd and Oakey Blvd reported 0.71" of rain between 4:35 PM and 4:50 PM, and another gage located at the Oakey Detention Basin reported 0.28" of rain in nearly the same timeframe. While a few additional rain gages in the northwest part of the Valley reported a little rain, most of the Las Vegas Valley remained dry. It is apparent, however, based upon the amount of runoff in the east-west running streets, that a significant amount of rain fell in the area roughly bounded by Sahara Avenue, Buffalo Drive, Summerlin Parkway and Jones Blvd. There were numerous reports of flow at or near curb height at Rainbow Blvd and Westcliffe Avenue, Alta Drive between Rainbow Blvd and Jones Blvd, and Oakey Drive between Jones Blvd and Decatur Blvd. The flow in Alta Drive continued eastward at least as far as Rancho Blvd.

The Oakey Detention Basin captured runoff which would have previously flowed down streets. The maximum ponding depth in the basin was approximately 3.1 feet. The District water-level gage at the basin indicated that there was approximately 6 feet of water in the basin at the peak. However, post-storm inspection of the basin determined that the invert of the stilling well is three feet lower than the invert of the basin at the outlet. The water-level gage has been calibrated to reflect this condition.

There was no apparent street flow in Oakey Drive between the detention basin and Jones Blvd, indicating that the collection system on Oakey Drive functioned as designed. There was, however, a significant amount of water flowing in Oakey Drive between Jones Blvd and Decatur Blvd. This flow was entering Oakey Drive at Jones Blvd from the undeveloped lot on the northwest corner of that intersection.

There were also reports of flow in the Washington Avenue Channel leaving that channel in the vicinity of Bruce Street. Apparently debris blockage in the culverts at that location forced the flow out of the channel.

A very similar storm occurred on Wednesday afternoon in the Spring Valley area. Rainfall began at approximately 3 PM and continued until 3:15 PM. During that period, the District rain gage located at Torrey Pines Drive near Tropicana Avenue recorded 0.71" of rainfall. Other District rain gages at the Upper Flamingo Detention Basin and at Decatur Blvd near Tropicana Avenue reported 0.35" and 0.12" respectively. As on Tuesday, a few other gages in the northwest part of the Valley recorded some rainfall, but most of the Las Vegas Valley did not receive any rain. The National Weather Service received a report of 1.50" of rain in a 10 minute period in the Spring Valley area. They have not, however, been able to confirm the accuracy of that report.

This storm resulted in large flows down Spring Mtn Road, Flamingo Road and other streets on the westside. Much of this flow entered the Flamingo Wash where a peak depth of 4 feet was recorded at the District water level gage at Decatur Blvd. The debris carried in this flow partially blocked the entrance structures to the Winnick Avenue storm drain and caused a large amount of storm flow to bypass that facility and flow down Winnick Avenue. After the debris was cleared by the Clark County Public Works Department maintenance crews, the flood control facility appeared to function as designed. Koval Lane remained open and passable for all but 15 minutes during this event. The U.S. Geological Survey has preliminarily established the peak flow in the Flamingo Wash between Decatur Blvd and Eastern Avenue as 500-600 cfs.

The flow in the Flamingo Wash caused one death as an indigent man was swept from the box culverts beneath Koval Lane. After receiving reports of someone possibly being caught in the flood flows, swift water rescue crews with the Clark County Fire Department and Metro were able to set out life lines at Eastern Ave and other downstream road crossings before the flows reached those crossings. However, the individual apparently got snagged on debris in the Wash through the Sahara-Nevada Country Club, as rescue workers found his body under debris after the flows subsided.

Attached to this report are copies of the rainfall data for these two days.

**Clark County Regional Flood Control District
Rainfall Totals (inches)**

Station ID	4244	4249
08/22/95		
1630	0.00	0.00
1625	0.00	0.00
1620	0.00	0.00
1615	0.00	0.00
1610	0.00	0.00
1605	0.00	0.00
1600	0.00	0.00
1555	0.08	0.04
1550	0.31	0.16
1545	0.24	0.04
1540	0.08	0.04
1535	0.00	0.00
TOTALS:	0.71	0.28

All times a Pacific Standard Time

4244 Oakey Blvd near Rainbow Blvd

4249 Oakey Detention Basin

Clark County Regional Flood Control District
Rainfall Totals (inches)

Station ID	4349	4364	4369	4244	4249	4359
08/23/95						
1500	0.00	0.00	0.00	0.00	0.00	0.00
1455	0.00	0.00	0.00	0.00	0.00	0.00
1450	0.00	0.00	0.00	0.00	0.00	0.00
1445	0.00	0.00	0.00	0.00	0.00	0.00
1440	0.00	0.00	0.00	0.00	0.00	0.00
1435	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.04	0.00	0.00
1425	0.00	0.00	0.00	0.04	0.12	0.00
1420	0.00	0.00	0.04	0.04	0.08	0.00
1415	0.00	0.24	0.08	0.04	0.00	0.04
1410	0.08	0.35	0.00	0.04	0.04	0.08
1405	0.24	0.12	0.00	0.04	0.04	0.00
1400	0.04	0.00	0.00	0.04	0.00	0.00
1355	0.00	0.00	0.00	0.00	0.00	0.00
1350	0.00	0.00	0.00	0.00	0.00	0.00
1345	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.35	0.71	0.12	0.28	0.28	0.12

All times are Pacific Standard Time

- 4349** Upper Flamingo Detention Basin
- 4364** Flamingo Wash at Torrey Pines Drive
- 4369** Flamingo Wash at Decatur Blvd
- 4244** near Oakey Blvd and Rainbow Blvd
- 4249** Oakey Detention Basin
- 4359** Near Durango Drive and Desert Inn Drive