## RAINFALL EVENT REPORT September 6, 1991

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A moist, unstable air mass moved across southern California and Clark County during the period September 6-8, 1991. Numerous cells of localized, moderately intense rainfall were associated with this system, particularly on September 6th. Intense rainfall on the westside of the Las Vegas Valley caused significant flow in the Flamingo Wash which, in turn, caused some damage to public property. There have been no reports of injuries or damage to private properties as a result of this storm.

The rainfall in Clark County began shortly before 6:00 am on September 6 and continued sporadically throughout the weekend. A District raingauge located 10 miles southeast of Jean recorded 1.02" of rain between 6:00 - 7:30 am, and another 0.59" between 9:30 - 10:00 am. A total of 1.77" of rain was recorded at this location during the course of the day. The National Weather Service (NWS) issued a flash flood watch for all of Clark County at 8:30 am, upgrading the Special Weather Statement on severe weather which they had issued earlier.

In the Las Vegas Valley, rainfall began shortly before 10:30 am with the most intense rainfall occuring between 11:00 am - 2:00 pm. While a total of six District raingauges recorded in excess of 0.50" of rainfall, most of the Valley received little or no rain. The storm consisted primarily of intense, isolated and very localized rainfall which appeared to move across the westside of the Valley from south to north. Threshold alarm levels were exceeded at five District gauges. The most rainfall recorded by the District's raingauge network was 1.18" at Torrey Pines Drive and the Flamingo Wash. Tabular and graphical summaries of the rainfall data are attached to this report.

As a result of this rainfall, there was significant flow in the Flamingo Wash as well as in a number of streets. The Clark County Public Works Department reported that flow in Sahara Avenue west of Rainbow Blvd made that major east-west thoroughfare impassible for a short time. Flow in the Flamingo Wash necessitated the closing of Koval Lane, Paradise Road and Palos Verdes Street. Flow through numerous dip-sections caused the closure of Rainbow Blvd south of Tropicana Blvd. The USGS has estimated that the peak water depth in the Flamingo Wash at Torrey Pines Drive was 2.9' (1200 cfs), and 4.2' (1000 cfs) at Eastern Avenue. These values are subject to revision.

While the rainfall and subsequent flooding disrupted traffic in a number of areas, only isolated damages have been reported. Flow along Tropicana Blvd east of Rainbow Blvd damaged approximately 20' of sidewalk, curb and gutter as the flow entered the Flamingo Wash. Flow in the Wash damaged the street pavement in Winnick Ave near Koval Lane, and caused some damage at Paradise Rd where a bridge over the Wash was under construction. The Clark County Public Works Department has estimated the cost of cleanup from this event at \$6000 in overtime and equipment.

No cost estimates for the damages to public property are available at this time. There have been no reports of any injuries.

The District's Flood Warning System provided timely information on the extent of flooding and rainfall to both District staff and the NWS. Staff maintained open communications with the NWS, advising them of areas with heavy rainfall as well as known road closures. Staff also advised Metro, Clark County Public Works Department, North Las Vegas Public Works Department and Las Vegas Street Department of the occurrence of heavy rains in the area and the potential for significant runoff.