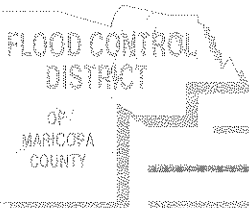


FLOOD CONTROL
DISTRICT OF
MARICOPA COUNTY

STORM REPORT

JULY 23-24, 1992



STORM REPORT
JULY 23-24, 1992

Flood Control District of Maricopa County
2801 W. Durango Street
Phoenix, AZ 85009
(602) 506-1501

Prepared by

Stephen D. Waters
Hydrologist II
ALERT System Operator
Hydrology Division, Special Projects Branch

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INTRODUCTION

The purpose of this report is to present in a concise manner selected rainfall, runoff, and statistical data from the storm event of July 23-24, 1992, which was most intense in and around the Phoenix metro area. The majority of the data presented was collected by the Flood Control District's (FCD) ALERT system, with contributions from FCD and National Weather Service (NWS) rainfall observers.

The goal of this report is to present the data for general information purposes, and as a guide for future prediction of water levels and discharge rates for FCD structures, particularly Dreamy Draw dam, Indian Bend Wash, and the Arizona Canal Diversion Channel (ACDC).

Meteorology

Listed below are condensed versions of several NWS watches and warnings which were issued prior to and during the storm event of July 23-24, 1992.

Flash Flood Watch

NWS Phoenix

1:33 pm MST Thursday July 23, 1992

... Flash Flood Watch for the east half of Arizona this afternoon and evening until 9:00 pm ...

The NWS in Phoenix has issued a flash flood watch until 9:00 pm to include the eastern Arizona counties of Apache, Navajo, eastern Coconino, Gila, Graham, Greenly, far east Maricopa, Pinal, eastern Pima, Santa Cruz, and Cochise. Tucson is included in the watch, but Phoenix and Flagstaff are not included.

Special Weather Statement

NWS Phoenix

7:45 pm MST Thursday July 23, 1992

... Thunderstorms Developing Around Metro Phoenix ...

Radar at Phoenix airport spotted some newly developing thunderstorms around the Salt River valley at 7:30 pm this evening. One fairly strong cell was developing near Goodyear and Avondale. Others were developing further south ... in the region east of Gila Bend. Visual reports of cloud development indicate other thunderstorms may be about to develop over other parts of the metro area.

Flash Flood Watch

NWS Phoenix

8:40 pm MST Thursday July 23-24, 1992

... Flash Flood Watch extended for much of southern Arizona ...

A giant thunderstorm complex has developed over southeast Arizona and a large part of Sonora Mexico ... spreading over most of out state east and south of Phoenix and in Mexico from the Sierra Madre to the Sea of Cortez. Southeast winds are moving this mass of thunderstorms toward the northwest at around 10 mph. Satellite images show the cloud tops beginning to warm up, indicating the system is beginning to weaken as it moves further into Arizona. But it could still cause an inch or two of rain in some of its heavier individual showers, especially during the first half of the night.

Flash Flood Statement

NWS Phoenix

12:35 am Friday July 24, 1992

... The flash flood watch that was in effect for southcentral through eastcentral and southeast Arizona has expired ...

NWS radar and satellite pictures show a decrease in showers and thunderstorms in most of central and eastern Arizona as of midnight. However, some street flooding has been reported in the eastern portion of the greater Phoenix area including southern Scottsdale near McKellips and McDowell roads, and in portions of Mesa. It is possible that some washes are running in the former watch area.

Flash Flood Watch

NWS Phoenix

1:50 am Friday July 24, 1992

... Flash flood watch for central Arizona including the Phoenix area and the eastern half of Maricopa County, northern Pinal County, eastern Yavapai County, and northwestern Gila County including Payson ...

NWS radar was indicating redevelopment of thunderstorms with heavy rain in the flash flood watch area as of 1:30 am this morning. It is unusual for thunderstorms with heavy rain to be developing so early in the morning. This indicates how moist and unstable the airmass is. An observer at New River reported 1.25 inches of rain in 45 minutes at 1:50 am this morning. Also, radar indicated thunderstorms with very heavy rain developing over the southeast greater Phoenix area near Chandler and also over Saguaro lake north of Apach Junction.

Urban and Small Stream Flood Advisory

NWS Phoenix

3:19 am MST Friday July 24, 1992

... Urban and small stream flood advisory for eastern Maricopa and northern Pinal counties, including the greater Phoenix area, until 7:00 am MST ...

NWS radar was showing that strong thunderstorms with heavy downpours are likely to continue for the next several hours, or until about 7:00 am.

EBS Activation Requested

Flash Flood Warning

NWS Phoenix

4:40 am MST Friday July 24, 1992

A Flash Flood Warning effective until 7:00 am MST has been issued for western Gila County, eastern Maricopa County, and northwestern Pinal County.

NWS radar, satellite pictures, and cooperative observer reports indicate very

heavy rain in the flash flood warning area. Several reports of well over an inch of rain have been received. Heavy rainfall is expected to continue until 6 or 7 am MST this morning, then decrease thereafter.

EBS Activation Requested
Flash Flood Warning ... Correction for Issuance Time
NWS Phoenix
7:00 am MST Friday July 24, 1992

The NWS in Phoenix has extended a flash flood warning for eastern Maricopa County, Pinal County, and Western Gila County until 9:00 am MST. In addition, the flash flood warning has been extended to include the southeast half of Yavapai County. NWS radar, satellite pictures, and cooperative observer reports indicate that very heavy rain has occurred or was still occurring in the warning area. The greatest report of overnight rain received as of 7:00 am was 6.05 inches at 27th Avenue and Camelback Road. Heavy rainfall is expected to continue at least in the northern portion of the warning area until 8 or 9 am MST this morning.

Flash Flood Statement
NWS Phoenix
9:02 am MST Friday July 24, 1992

... Flash Flood Warning Expires ...

The flash flood warning for central Arizona including the Phoenix metro area expired at 9:00 am.

Flash Flood Watch
NWS Phoenix
9:25 am MST Friday July 24, 1992

... Flash Flood Watch for south central and northeast Arizona until
9:00 pm. ...

The watch includes Santa Cruz, Pima, Pinal, Maricopa, Gila, Yavapai, eastern Coconino, Navajo, and Apache counties. Flagstaff is not included in the watch area.

Copies of the actual bulletins issued by the National Weather Service are included as Appendix A of this report.

Rainfall

Listed below are statistics for the Flood Control District's 125 telemetered raingages.

1. Number of Gages which failed to operate during the storm: 3.
2. Average rainfall duration: 7.7 hours.
3. Rainfall duration standard deviation from the mean: 3.5 hours.
4. Number of gages recording no rainfall: 15.
5. Number of gages recording .01 to 1.0 inches of rainfall: 53.
6. Number of gages recording 1.01 to 2.0 inches of rainfall: 37.
7. Number of gages recording 2.01 to 3.0 inches of rainfall: 11.
8. Number of gages recording more than 3.0 inches of rainfall: 2.
9. Greatest amount of rain recorded: 3.87 inches at 59th Ave. & Indian School.

Rainfall totals and durations in 30 minute intervals for all FCD telemetered rain gages are presented in Appendix B. Return periods were estimated for selected stations in the urban area based on the total storm duration and the Phoenix WBO duration/frequency table in "Estimated Return Periods for Short Duration Precipitation in Arizona" by P. Kangieser (Table 1). More accurate return period computations for three selected stations are presented as Figures 1, 2, and 3. These figures generally characterize this storm as being of low return period for the peak rainfall intensities less than 2 hours, but gradually increasing in return period as the duration approaches 6 to 8 hours.

Graphical representations of rainfall distributions corresponding to the more precise return period estimates are presented as Figures 4, 5, and 6. A list of rainfall amounts recorded by FCD observers is presented as Appendix C.

TABLE 1

ESTIMATED RETURN PERIODS FOR SHORT-DURATION PRECIPITATION IN ARIZONA (Inches)

Station: Phoenix WBO

Latitude: 33° 26'

Longitude: 112° 01'

Elevation (feet): 1117

RETURN PERIOD (YEARS)

	1	2	5	10	25	50	100
5 min.	0.17	0.26	0.38	0.47	0.59	0.68	0.77
10 min.	0.27	0.40	0.59	0.72	0.91	1.06	1.20
15 min.	0.34	0.50	0.74	0.92	1.15	1.34	1.52
30 min.	0.47	0.70	1.03	1.27	1.60	1.86	2.10
1 hr.	0.60	0.88	1.30	1.61	2.02	2.35	2.66
2 hr.	0.65	0.94	1.39	1.72	2.15	2.49	2.82
3 hr.	0.69	1.01	1.48	1.82	2.27	2.62	2.97
6 hr.	0.81	1.16	1.70	2.07	2.57	2.96	3.35
12 hr.	0.91	1.30	1.90	2.30	2.84	3.26	3.69
24 hr.	1.02	1.44	2.10	2.53	3.12	3.57	4.04

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STATION 6575
MARYVALE MUNI GOLF (Indian School & 59TH Ave.)
STORM OF July 23-24, 1992
3.78 inches of Rain in 7 hours

FIGURE 1

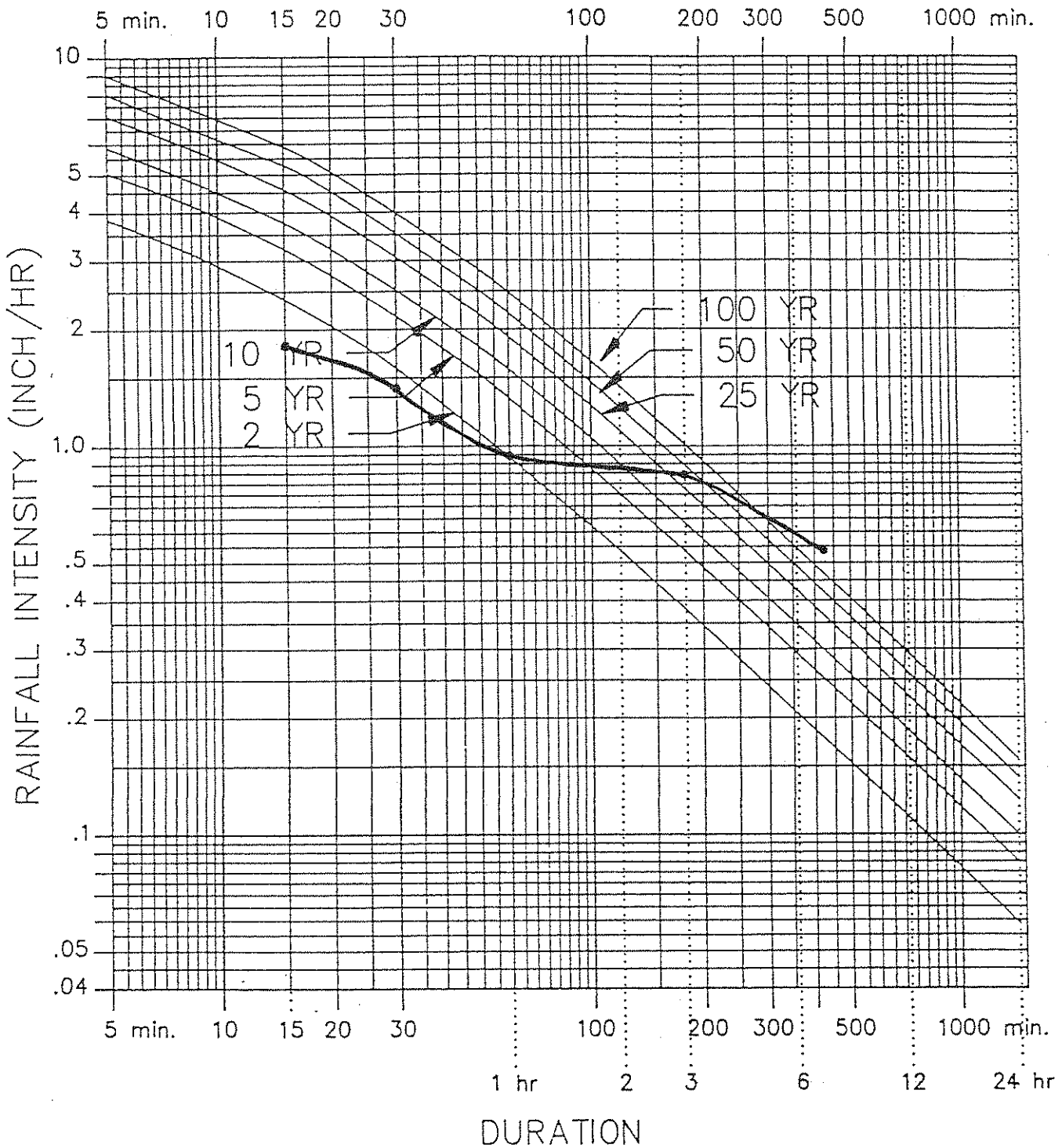


Figure 1
Rainfall Intensity-Duration-Frequency Relation
(Phoenix Metro Area)

FIGURE 2

STORM OF JULY 23-24, 1992
3.03 Inches of Rain in 7.5 Hours

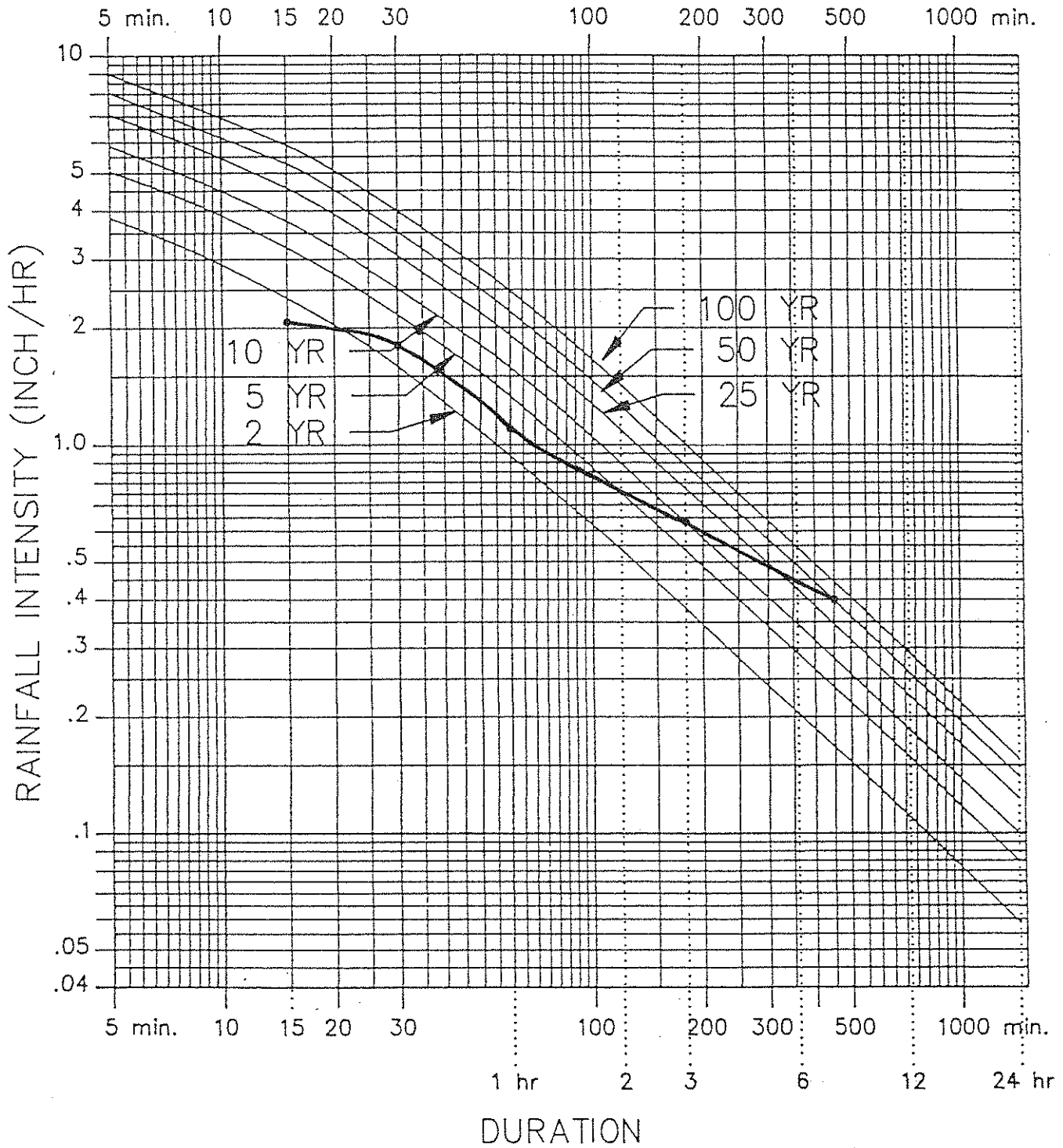


Figure 2
Rainfall Intensity-Duration-Frequency Relation
(Phoenix Metro Area)

Application

STATION 6300

DREAMY DRAW DAM

FIGURE 3

STORM OF July 23-24, 1992

1.93 inches of rain in 11 hours

Peak Stage: 17.9 feet

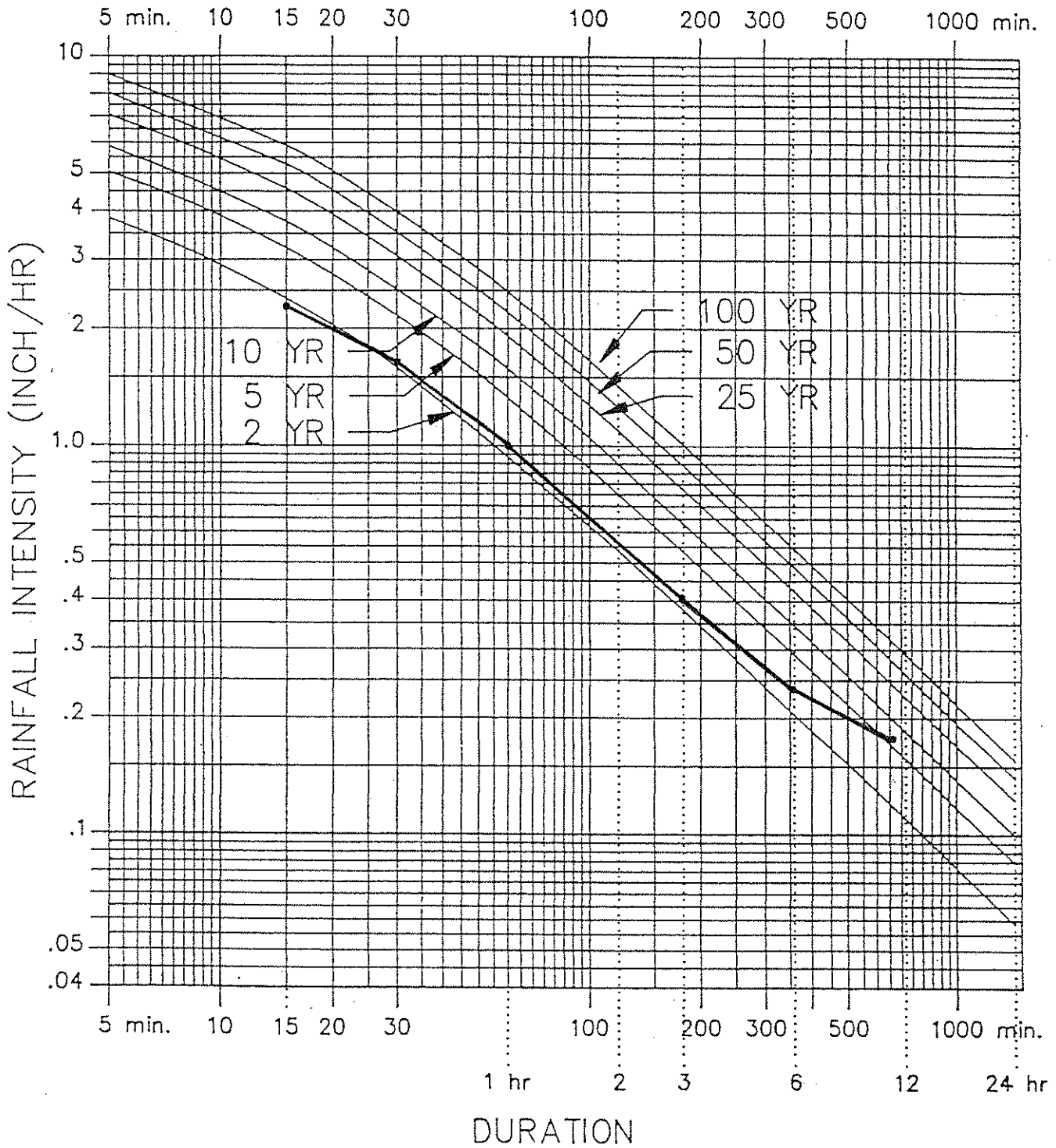
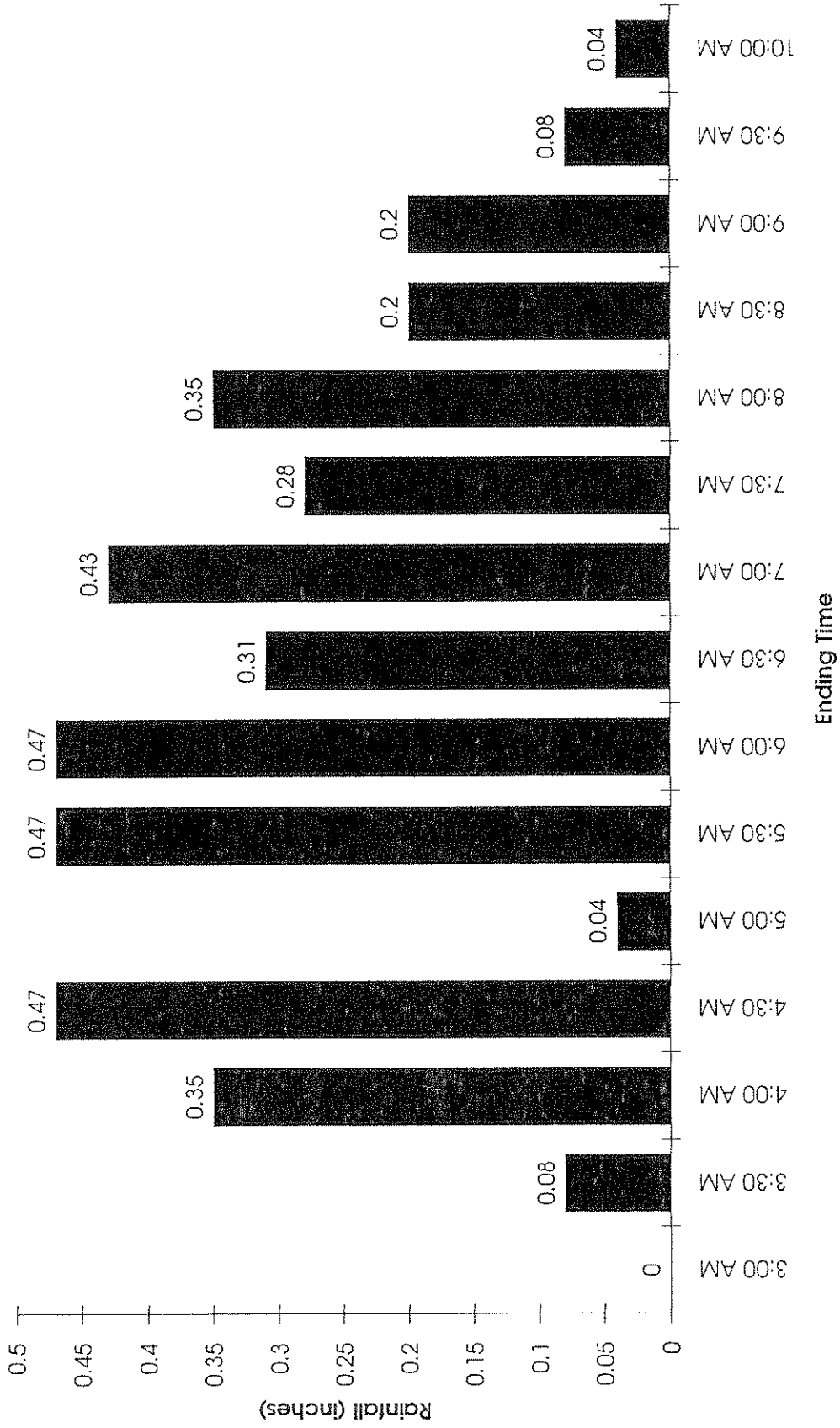
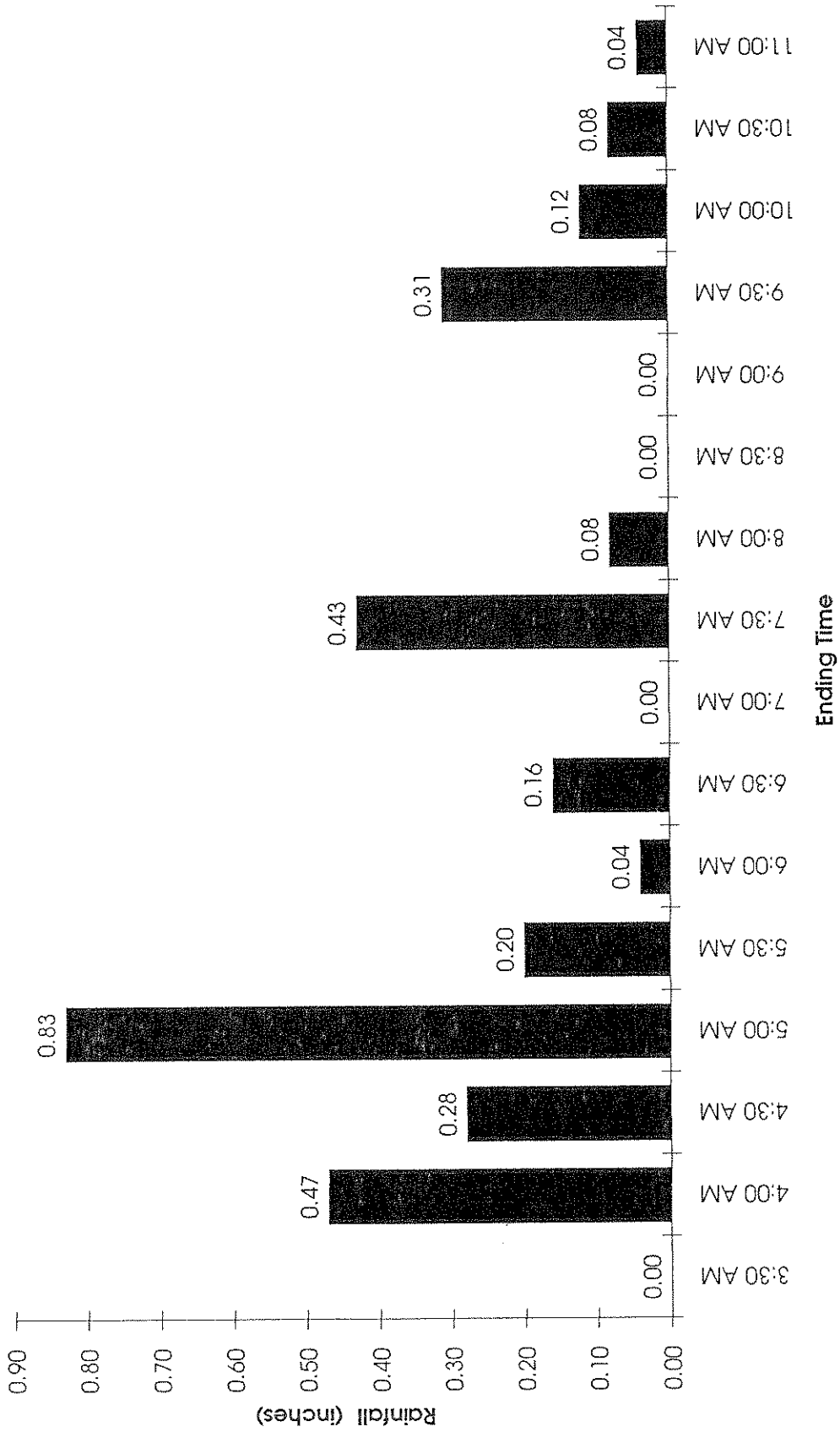


Figure 3
Rainfall Intensity-Duration-Frequency Relation
(Phoenix Metro Area)

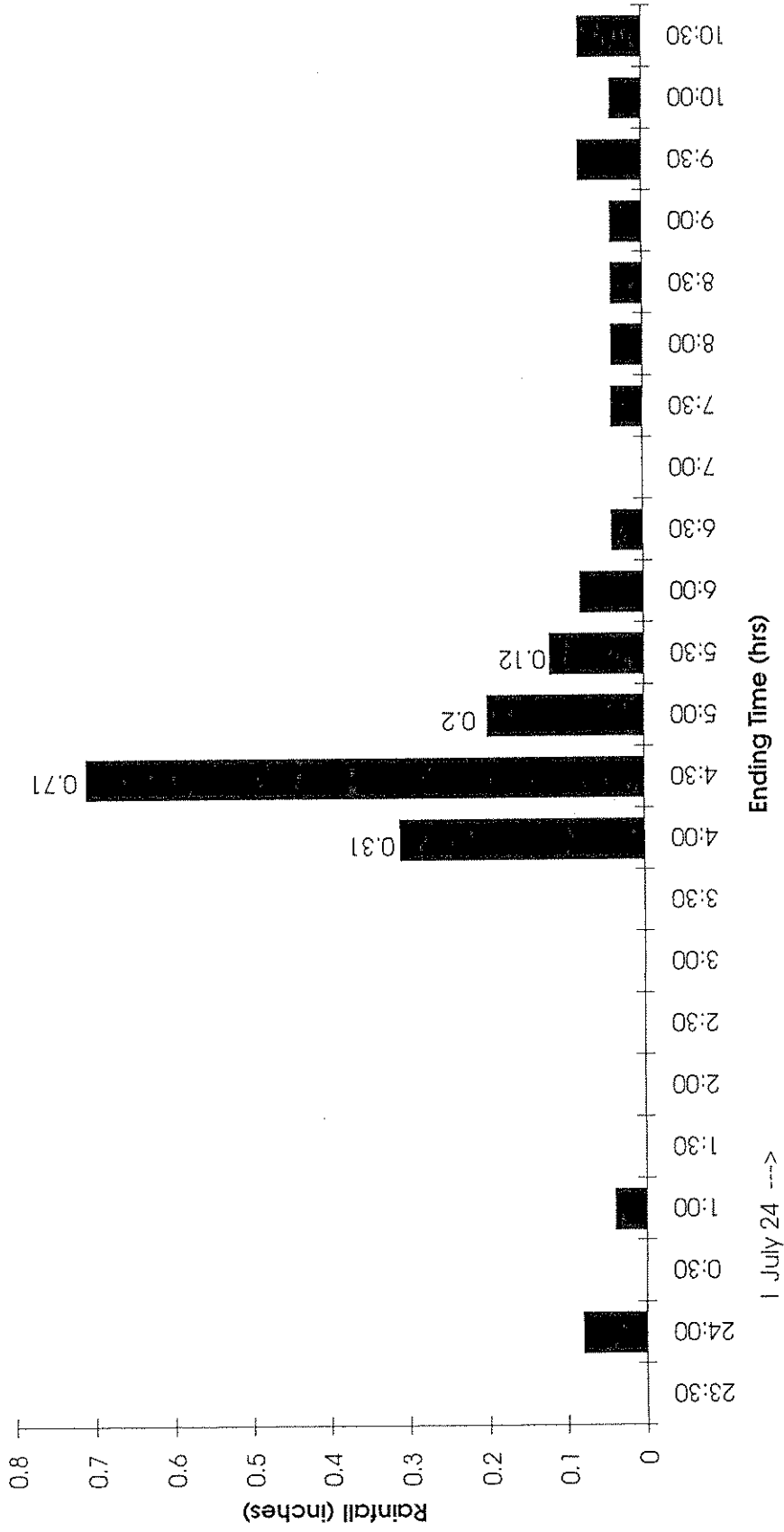
Storm of July 24, 1992 - Maryvale Muni Golf Course Rainfall Distribution



Storm of July 24, 1992 - Durango Complex Rainfall Distribution



Storm of July 23-24, 1992 - Dreamy Draw Rainfall Distribution



Storm Report July 23-24, 1992

Fig. 6

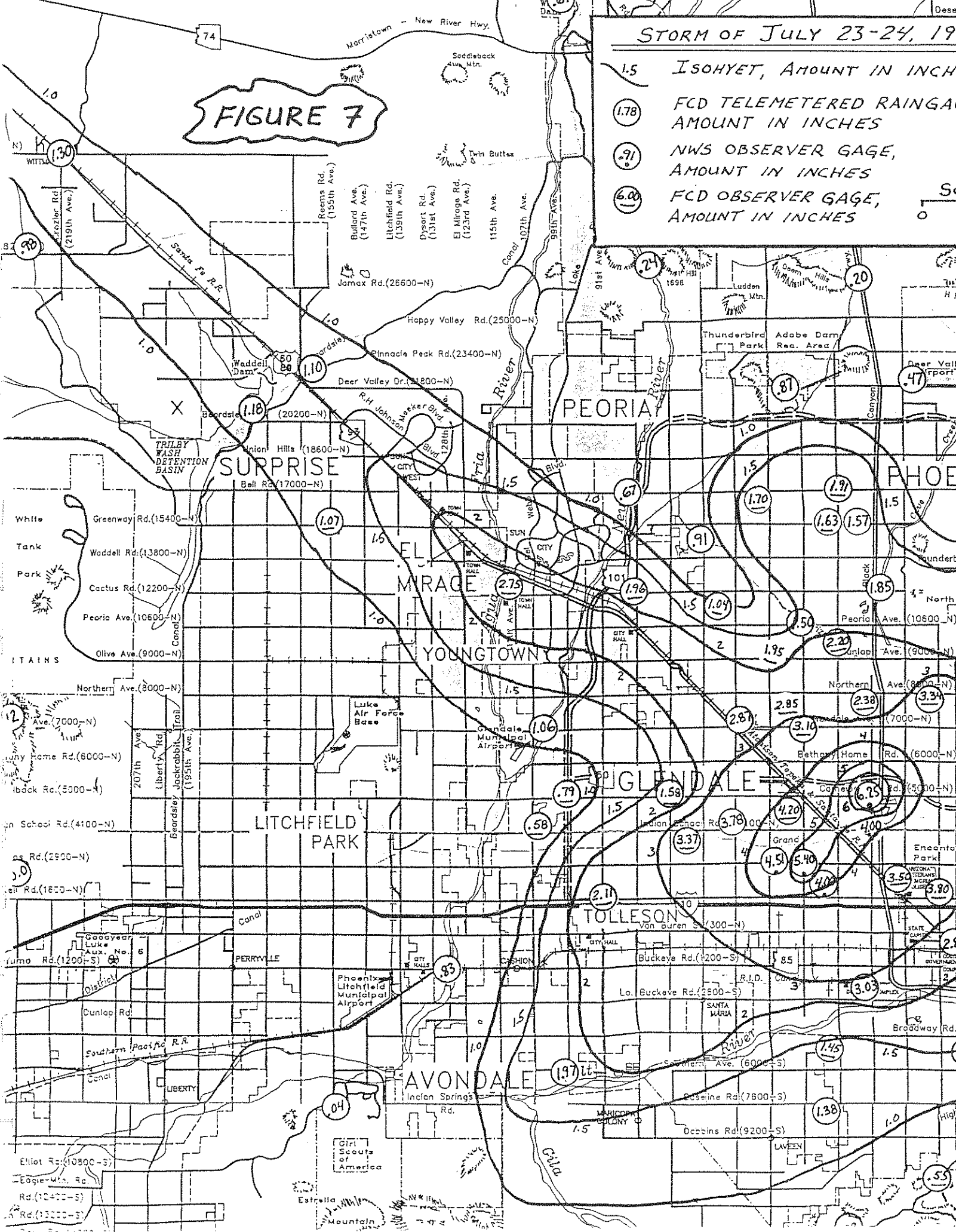
Figure 7 is an Isohyetal (lines of equal rainfall) map for the Phoenix metro area, where the greatest amounts of rainfall were recorded. Data plotted on the map include rainfall measurements by FCD telemetered raingages, FCD rainfall observers, and NWS rainfall observers. There appears to be an interesting correlation between the areas of high rainfall depth and the urbanized areas where nighttime temperatures remain high in comparison to the surrounding desert and agricultural areas.

Rainfall rate alarms were common throughout the storm, and are listed in Tables 2 and 3 of the ALERT System Performance Section in this report.

STORM OF JULY 23-24, 19

FIGURE 7

- 1.5 ISOHYET, AMOUNT IN INCH
- 1.78 FCD TELEMETERED RAINGAO AMOUNT IN INCHES
- .91 NWS OBSERVER GAGE, AMOUNT IN INCHES
- 6.00 FCD OBSERVER GAGE, AMOUNT IN INCHES



Scale: 0 to 50 miles

Runoff

The FCD ALERT system recorded runoff at 16 of its 50 water level stations, three of which were dams and thirteen were channels or rivers (see Table 2). Nine of the sixteen gages had flows or stage which exceeded alarm criteria established in the ALERT system (see Tables 3 and 4 in the ALERT System Performance section of this report). Graphical data for three stations with significant runoff (Dreamy Draw dam, ACDC at 67th Ave., and Indian Bend Wash at McKellips road) are presented in Figures 8, 9, and 10. Since the storm, the United States Geological Survey has used the slope-area method to estimate a peak discharge of 3,500 cfs for the Indian Bend Wash at Indian Bend Road crossing. According to the most recent Flood Insurance Study for Indian Bend Wash, this represents approximately a 10-year recurrence interval runoff event.

There were no reports of water overtopping any FCD structures or channels, and no reports of structure damage to our facilities or gages.

TABLE 2

Runoff Summary - Storm of July 23-24, 1992

Station	Stage (ft)	Discharge (cfs)
Agua Fria River at Buckeye Road	1.5	4,375
New River at Glendale Ave.	2.5	1,350
Skunk Creek at Interstate 17	1.8	130
Vekol Wash at I-8 (east of Gila Bend)	2.7	66
Sweetwater Wash at Sweetwater	2.5	100
Indian Bend Wash at Indian Bend Road	5.8	3,500
Indian Bend Wash at McKellips Rd.	5.0	3,120
Cave Creek at Cactus Rd.	6.9	190
ACDC at 43rd Ave.	2.7	1,000
ACDC at 67th Ave.	4.6	1,300
East Maricopa Floodway at Broadway Rd.	2.2	950
East Maricopa Floodway at Arizona Ave.	0.6	80
Dreamy Draw Dam	17.9	150
Spookhill Dam	2.0	25
Rittenhouse Dam	1.1	8

FIGURE 8

Storm of July 24, 1992 - Dreamy Draw Stage Gage

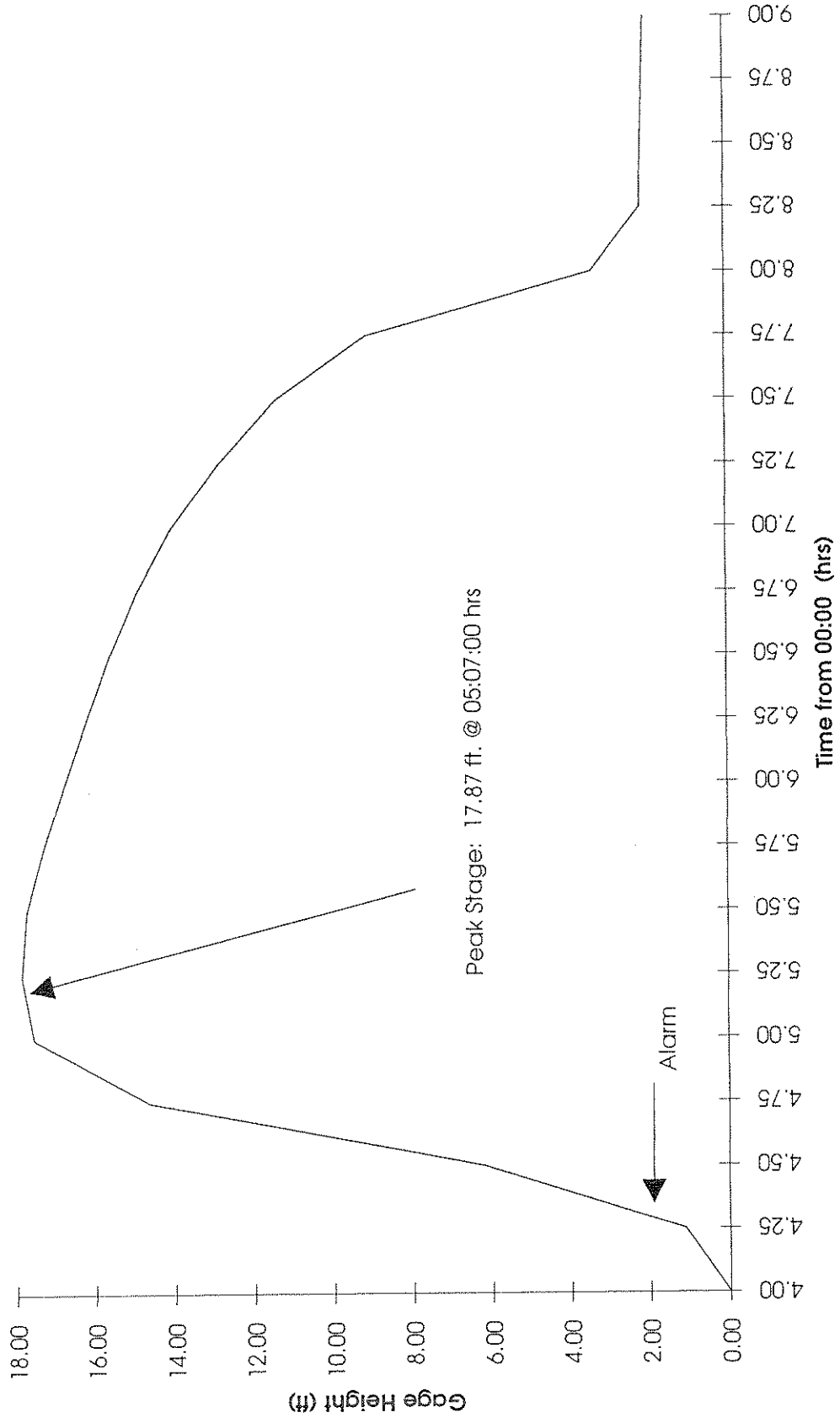


FIGURE 9

Storm of July 23-24, 1992 - ACDC @ 67th Ave Streamgauge

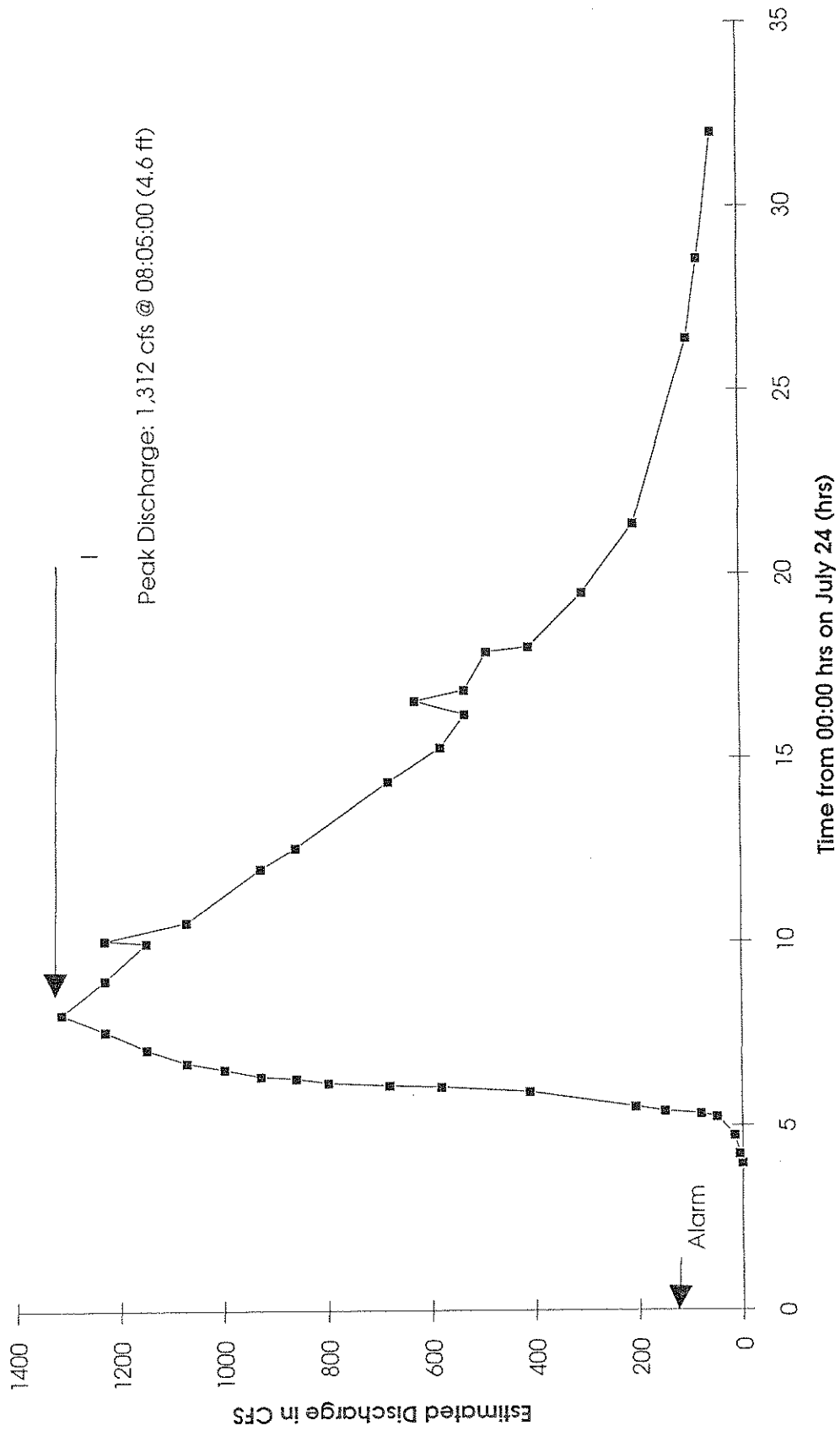
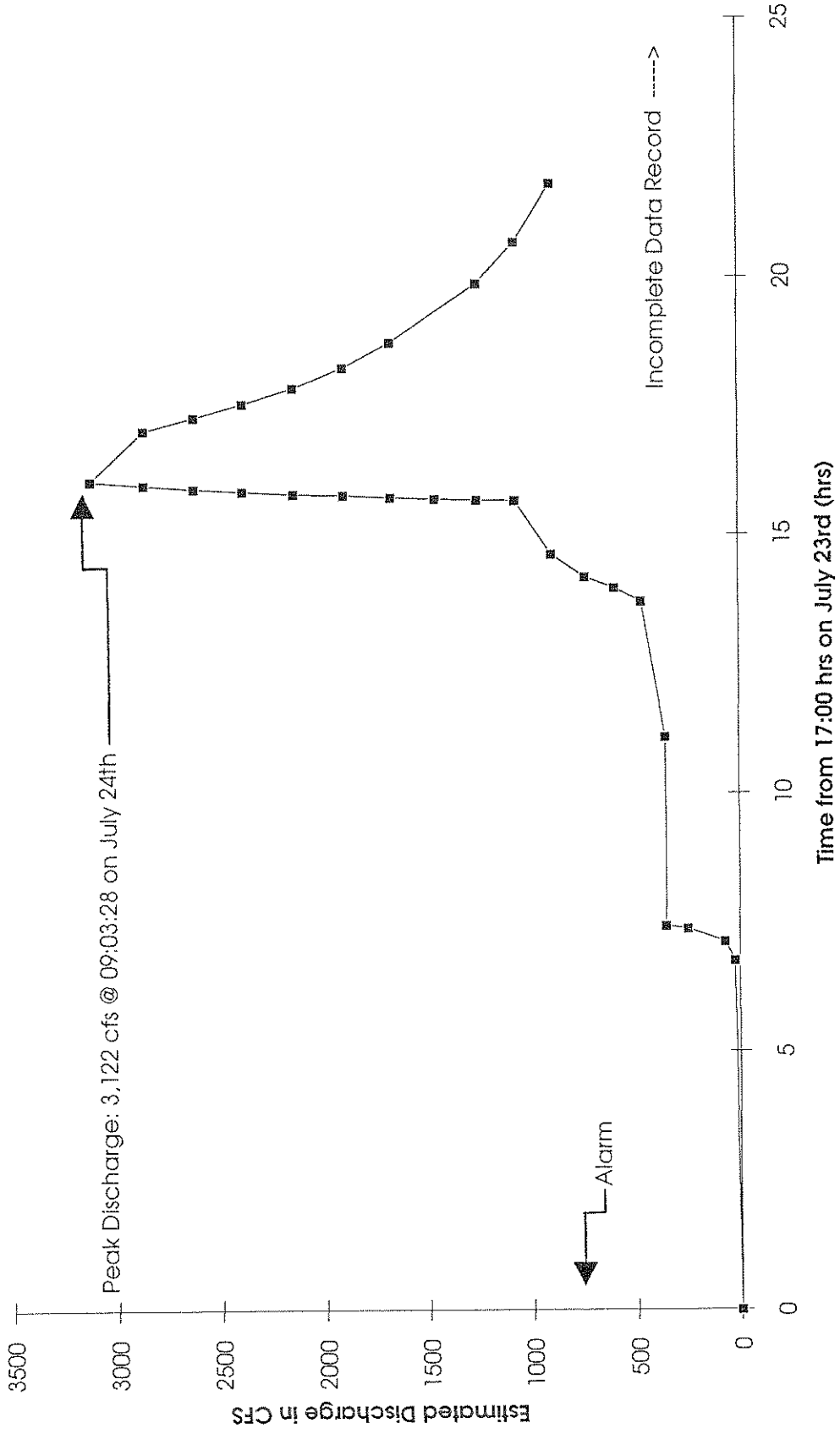


FIGURE 10

Storm of July 23-24, 1992 - IBW @ McKellips Streamgauge



ALERT System Performance

The overall performance of the ALERT system during this storm event was excellent. As mentioned previously, only three of the 125 telemetered raingages returned questionable data, and all of the water level gages performed as expected well past peak stage. Originally during the event the ALERT operator reported a peak discharge of 9,300 cfs for Indian Bend Wash at Indian Bend Road. This inaccuracy was traced to unusually high grass in the channel which slowed the velocity of the water and raised the depth. Steps are currently being taken to remedy this situation.

A record of ALERT alarms is presented in Tables 3 and 4. All alarms sounding when the system was not manned (previous to 6:30 am on the 24th) were transferred to the voice synthesizer dial-out system, and operators were alerted to the alarm conditions at home. The Chief Hydrologist was notified when Dreamy Draw dam stage reached 8.0 feet at approximately 4:40 am on the 24th (see Table 5), as outlined in the "Flood Control District Flood Emergency Procedures Flowchart" (Figure 11) and the "Emergency Notification Elevations" (Table 6). The Chief Hydrologist immediately notified the Chief of Construction/Operations, who dispatched a crew to monitor the dam. The County Department of Emergency Services was notified by telephone when Dreamy Draw stage reached 17 feet at approximately 5:00 am, but the water only rose another foot then quickly receded.

TABLE 3 : SYSTEM ALARM LOG

IHS: show_alarm_log			Date/Time of Alarm	
Sensor	Sensor Name	Cause of Alarm		
1510	precip	A.C.D.C. & 67th Ave	Failed to report on time	7/29/92 6:14:00
1635	precip	White Tanks 3	Failed to report on time	7/29/92 5:51:00
6610	precip	Queen Creek Rd.	Failed to report on time	7/29/92 5:31:00
5490	precip	Castle Hot Springs	Failed to report on time	7/29/92 5:18:00
5455	precip	Wittmann	Failed to report on time	7/29/92 4:51:00
2510	precip	Grapevine	Failed to report on time	7/29/92 3:10:00
3770	precip	Perry Park	Failed to report on time	7/29/92 3:04:00
1625	precip	Buckeye FRS	Failed to report on time	7/29/92 3:01:00
1630	precip	White Tanks 4	Failed to report on time	7/29/92 2:38:00
5435	precip	McMicken Floodway	Failed to report on time	7/29/92 2:25:00
6980	precip	Vekol Wash	Failed to report on time	7/29/92 2:07:00
6050	precip	Mountain View Park	Failed to report on time	7/29/92 1:48:00
5220	precip	Morristown	Failed to report on time	7/29/92 1:43:00
3750	precip	Greenway & 32nd Ave	Failed to report on time	7/29/92 1:10:00
6920	precip	Sauceda Wash	Failed to report on time	7/28/92 23:38:00
640	precip	Centennial Levee	Failed to report on time	7/28/92 17:44:00
5380	precip	Mt. Union	Failed to report on time	7/28/92 6:04:00
6413	river	Cave Creek	Above absolute maximum	7/27/92 19:24:44
5385	rptbat	Mt. Union	Below absolute minimum	7/27/92 0:23:56
6940	precip	Sand Tanks Wash	Failed to report on time	7/26/92 14:03:00
5450	precip	Patton Rd.	Failed to report on time	7/26/92 13:23:00
5000	precip	Mt. Oatman	Failed to report on time	7/26/92 11:23:00
5475	precip	Circle City	Failed to report on time	7/26/92 9:33:00
6900	precip	Upper Waterman	Failed to report on time	7/26/92 5:17:00
6920	precip	Sauceda Wash	Failed to report on time	7/25/92 22:27:00
5385	rptbat	Mt. Union	Failed to report on time	7/25/92 13:56:00
5004	rptbat	Mt. Oatman	Failed to report on time	7/25/92 12:23:00
1619	rptbat	White Tanks	Failed to report on time	7/25/92 11:04:00
5194	rptbat	Smith Peak	Failed to report on time	7/25/92 8:21:00
5344	rptbat	Towers Mtn.	Failed to report on time	7/25/92 7:57:00
5949	rptbat	Thompson Peak	Failed to report on time	7/24/92 18:43:00
1543	river	A.C.D.C. & 43rd Ave	Above absolute maximum	7/24/92 11:17:05
5385	rptbat	Mt. Union	Below absolute minimum	7/24/92 10:53:04
6659	river	Sweetwater	Above absolute maximum	7/24/92 10:23:37
2820	precip	Holly Acres	Rainfall rate exceeded	7/24/92 8:27:57
6659	river	Sweetwater	Above absolute maximum	7/24/92 7:21:12
6099	river	IBW @ McKellips Rd.	Above absolute maximum	7/24/92 7:11:28
5508	river	NewRiver @ Glendale	Above absolute maximum	7/24/92 6:51:27
6299	river	Dreamy Draw	Above absolute maximum	7/24/92 6:38:22
4620	precip	Garfias Mt. Ranch	Rainfall rate exceeded	7/24/92 6:14:56
6113	river	IBW @ Indian Bend	Above absolute maximum	7/24/92 5:29:32
1500	precip	City of Glendale	Rainfall rate exceeded	7/24/92 5:27:31
1513	river	A.C.D.C. & 67th Ave	Above absolute maximum	7/24/92 5:24:47
1543	river	A.C.D.C. & 43rd Ave	Above absolute maximum	7/24/92 5:16:37
1500	precip	City of Glendale	Rainfall rate exceeded	7/24/92 5:03:26
6659	river	Sweetwater	Above absolute maximum	7/24/92 4:57:21
6210	precip	Phoenix Municipal	Rainfall rate exceeded	7/24/92 4:56:31
1553	river	Cave Creek & Cactus	Above absolute maximum	7/24/92 4:56:03
1500	precip	City of Glendale	Rainfall rate exceeded	7/24/92 4:53:06
1510	precip	A.C.D.C. & 67th Ave	Rainfall rate exceeded	7/24/92 4:50:25
6200	precip	Durango Complex	Rainfall rate exceeded	7/24/92 4:48:35
3750	precip	Greenway & 32nd Ave	Rainfall rate exceeded	7/24/92 4:46:43
1550	precip	Cave Creek & Cactus	Rainfall rate exceeded	7/24/92 4:42:08
6645	precip	P.V. Country Club	Rainfall rate exceeded	7/24/92 4:31:05
6300	precip	Dreamy Draw	Rainfall rate exceeded	7/24/92 4:23:52
6299	river	Dreamy Draw	Above absolute maximum	7/24/92 4:23:38
6130	precip	Thunderbird Academy	Rainfall rate exceeded	7/24/92 4:17:39

TABLE 4

6520 precip Carrage Lane Park	Rainfall rate exceeded	7/24/92	3:49:51
6568 river Broadway EMF	Above absolute maximum	7/24/92	1:27:50
3730 Sensor is not established	Failed to report on time	7/23/92	13:46:05
5450 precip Patton Rd.	Failed to report on time	7/23/92	13:22:00
5380 precip Mt. Union	Failed to report on time	7/23/92	4:05:00
6960 precip Bender Wash	Failed to report on time	7/22/92	17:44:00
6880 precip Waterman Wash	Failed to report on time	7/22/92	7:37:00
1530 Sensor is not established	Failed to report on time	7/22/92	4:23:00
5004 rptbat Mt. Oatman	Failed to report on time	7/20/92	23:08:00
6565 precip Broadway EMF	Failed to report on time	7/19/92	0:57:00
1530 Sensor is not established	Failed to report on time	7/18/92	2:48:00
5380 precip Mt. Union	Failed to report on time	7/18/92	2:07:00
6568 river Broadway EMF	Above absolute maximum	7/17/92	8:30:32
5385 rptbat Mt. Union	Below absolute minimum	7/17/92	1:10:42
5000 precip Mt. Oatman	Rainfall rate exceeded	7/16/92	10:09:26
5000 precip Mt. Oatman	Rainfall rate exceeded	7/16/92	10:08:32
5000 precip Mt. Oatman	Rainfall rate exceeded	7/16/92	10:07:47
6520 precip Carrage Lane Park	Failed to report on time	7/16/92	6:40:00
5380 precip Mt. Union	Failed to report on time	7/16/92	1:19:00
6920 precip Saucedada Wash	Failed to report on time	7/14/92	5:54:00
5004 rptbat Mt. Oatman	Failed to report on time	7/13/92	10:22:00
1540 precip A.C.D.C. & 43rd Ave	Rainfall rate exceeded	7/13/92	8:11:31
3633 river Sunset Dam	Above absolute maximum	7/11/92	23:57:59
6923 river Saucedada Wash	Above absolute maximum	7/11/92	13:45:11
3633 river Sunset Dam	Above absolute maximum	7/11/92	8:51:21
1513 river A.C.D.C. & 67th Ave	Above absolute maximum	7/11/92	5:47:12
3630 precip Sunset Dam	Rainfall rate exceeded	7/11/92	1:47:53
3635 precip Sunny Cove Dam	Rainfall rate exceeded	7/11/92	1:46:44
533 Sensor is not established	Above absolute maximum	7/11/92	1:40:19
1620 precip Jackrabbit Wash 2	Rainfall rate exceeded	7/11/92	0:54:27
5400 precip Agua Fria @ Buckeye	Rainfall rate exceeded	7/11/92	0:21:20
3770 precip Perry Park	Rainfall rate exceeded	7/10/92	23:41:50
3710 Sensor is not established	Rainfall rate exceeded	7/10/92	23:27:40
2510 precip Grapevine	Rainfall rate exceeded	7/10/92	22:59:29
6880 precip Waterman Wash	Rainfall rate exceeded	7/10/92	21:35:13
6880 precip Waterman Wash	Rainfall rate exceeded	7/10/92	21:23:39
3635 precip Sunny Cove Dam	Rainfall rate exceeded	7/10/92	20:55:22
2600 precip Mt. Ord	Rainfall rate exceeded	7/10/92	18:07:16
5340 precip Towers Mtn.	Rainfall rate exceeded	7/10/92	16:46:03
4510 precip Horsethief Basin	Rainfall rate exceeded	7/10/92	16:37:28
5340 precip Towers Mtn.	Rainfall rate exceeded	7/10/92	16:31:17
4530 precip Crown King	Rainfall rate exceeded	7/10/92	16:27:44
3610 precip O'Brian	Rainfall rate exceeded	7/10/92	16:13:29
533 Sensor is not established	Above absolute maximum	7/10/92	15:43:10
6920 precip Saucedada Wash	Failed to report on time	7/10/92	8:45:00
6654 Sensor is not established	Failed to report on time	7/10/92	6:35:54
660 precip Saddleback FRS	Failed to report on time	7/09/92	15:43:00
4625 precip Dewey	Failed to report on time	7/09/92	15:41:00
6670 precip Apache FRS	Failed to report on time	7/09/92	15:35:00
6550 precip South Mountain West	Failed to report on time	7/09/92	15:30:00
4530 precip Crown King	Failed to report on time	7/09/92	15:15:00
6120 precip IBW Interceptor	Failed to report on time	7/09/92	15:10:00
6110 precip IBW @ Indian Bend	Failed to report on time	7/09/92	15:08:00
5565 precip Skunk Creek & I-17	Failed to report on time	7/09/92	14:54:00
5445 precip McMicken Dam	Failed to report on time	7/09/92	14:48:00
6880 precip Waterman Wash	Failed to report on time	7/09/92	14:40:00
6630 Sensor is not established	Failed to report on time	7/09/92	14:22:00
5340 precip Towers Mtn.	Failed to report on time	7/09/92	14:22:00
620 precip Gladden	Failed to report on time	7/09/92	14:21:00
4520 precip Sunset Point	Failed to report on time	7/09/92	14:14:00

TABLE 5 : SYSTEM LOGON RECORD

ILE wholog.1

1	sdw	0	0:00:01	Jul-15	6:50 am	----	who
1	sdw	0	0:00:01	Jul-15	1:18 pm	----	who
1	sdw	0	0:00:00	Jul-15	2:25 pm	----	who
1	sdw	0	0:00:00	Jul-16	6:43 am	----	who
1	tjk	5	0:00:01	Jul-16	7:36 am	----	who
1	tjk	5	0:00:01	Jul-16	7:52 am	----	who
1	sdw	0	0:00:00	Jul-16	7:57 am	----	who
1	cfk	0	0:00:00	Jul-16	2:44 pm	----	who
1	rde	5	0:00:01	Jul-17	6:10 am	----	who
1	rde	5	0:00:00	Jul-17	6:23 am	----	who
1	tmd	0	0:00:00	Jul-17	7:04 am	----	who
1	tmd	0	0:00:00	Jul-17	9:02 am	----	who
1	sdw	0	0:00:00	Jul-17	1:12 pm	----	who
1	tmd	9	0:00:00	Jul-17	5:20 pm	----	who
1	cfk	7	0:00:01	Jul-18	8:02 pm	----	who
1	sdw	0	0:00:00	Jul-20	6:37 am	----	who
1	sdw	0	0:00:01	Jul-20	8:51 am	----	who
1	sdw	0	0:00:01	Jul-20	11:22 am	----	who
1	cfk	7	0:00:00	Jul-20	3:25 pm	----	who
1	cfk	7	0:00:00	Jul-20	3:34 pm	----	who
1	rde	5	0:00:01	Jul-21	5:38 am	----	who
1	cfk	12	0:00:01	Jul-21	6:16 am	----	who
1	cfk	0	0:00:00	Jul-21	6:20 am	----	who
1	sdw	0	0:00:00	Jul-21	7:07 am	----	who
1	jjt	0	0:00:00	Jul-21	9:22 am	----	who
1	sdw	0	0:00:00	Jul-21	9:39 am	----	who
1	sdw	0	0:00:00	Jul-21	10:41 am	----	who
1	tmd	0	0:00:01	Jul-21	11:28 am	----	who
1	sdw	0	0:00:01	Jul-21	11:40 am	----	who
1	rde	5	0:00:00	Jul-21	3:09 pm	----	who
1	rde	5	0:00:01	Jul-22	5:38 am	----	who
1	rde	5	0:00:01	Jul-22	5:41 am	----	who
1	sdw	0	0:00:00	Jul-22	6:38 am	----	who
1	tjk	5	0:00:00	Jul-22	9:59 am	----	who
1	tjk	5	0:00:00	Jul-22	10:02 am	----	who
1	rde	5	0:00:00	Jul-22	4:05 pm	----	who
1	rde	5	0:00:01	Jul-23	5:48 am	----	who
1	rde	5	0:00:01	Jul-23	5:57 am	----	who
1	sdw	0	0:00:00	Jul-23	6:37 am	----	who
1	sdw	0	0:00:01	Jul-23	10:26 am	----	who
1	sdw	0	0:00:00	Jul-23	1:26 pm	----	who
1	sdw	5	0:00:00	Jul-24	4:34 am	----	who
1	sdw	5	0:00:00	Jul-24	4:46 am	----	who
1	sdw	5	0:00:00	Jul-24	5:07 am	----	who
1	tmd	5	0:00:01	Jul-24	5:41 am	----	who
1	sdw	0	0:00:00	Jul-24	6:26 am	----	who
1	tjk	5	0:00:01	Jul-24	6:36 am	----	who
1	sdw	12	0:00:01	Jul-24	7:20 am	----	who
1	sdw	13	0:00:00	Jul-24	7:21 am	----	who
1	cfk	5	0:00:00	Jul-24	8:00 am	----	who
1	sdw	0	0:00:00	Jul-24	3:25 pm	----	who
1	sdw	0	0:00:00	Jul-24	3:29 pm	----	who
1	sdw	0	0:00:00	Jul-25	6:39 pm	----	who
1	sdw	0	0:00:00	Jul-25	6:43 pm	----	who
1	sdw	5	0:00:01	Jul-25	7:20 pm	----	who
1	sdw	5	0:00:00	Jul-26	9:37 am	----	who
1	sdw	5	0:00:00	Jul-26	5:19 pm	----	who
1	cfk	7	0:00:00	Jul-26	8:12 pm	----	who

Figure 11

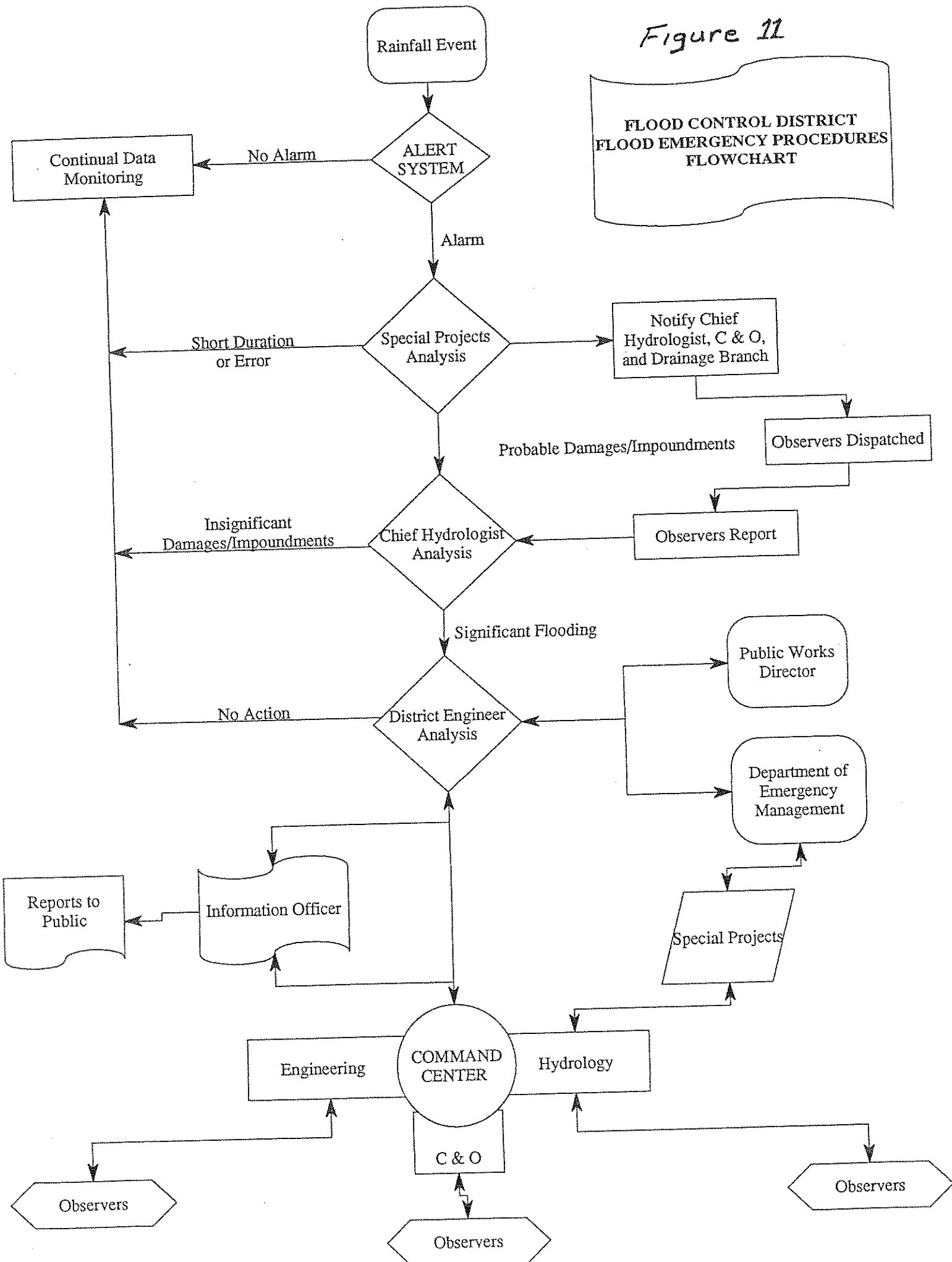


TABLE 6

EMERGENCY NOTIFICATION ELEVATIONS (TO BE USED BY DISTRICT STAFF TO NOTIFY CIVIL DEFENSE)

Civil Defense/Emergency Services 24 hr phone # 273-1411

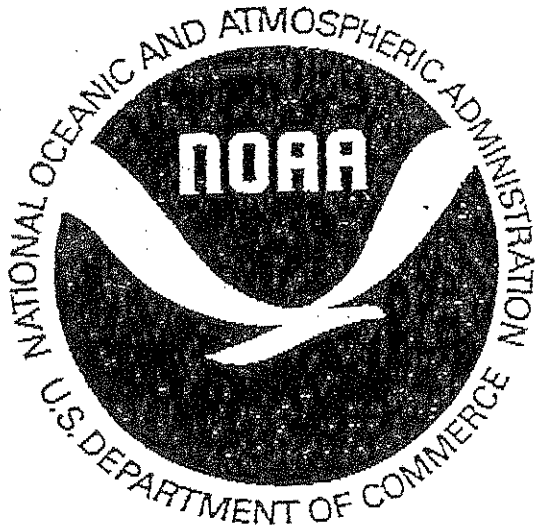
Depths of impoundment and operation of the emergency spillway were measured from the invert of the principal outlet.

Please keep in mind, that C&O field observers should more than likely be notified and sent out to check on the structure impoundments prior to reaching the notification elevations.

STRUCTURE	IMPOUNDMENT NOTIFICATION DEPTH CIVIL DEFENSE	C & O NOTIFICATION	SPILLWAY OPERATION DEPTH
SUNSET	10 FT.	4 FT. & RISING	20 FT.
SUNNYCOVE	19 FT.	6 FT. & RISING	37 FT.
MCMICKEN	13 FT.	6 FT. & RISING	19 FT.
NEW RIVER	45 FT.	15 FT. "	67 FT.
ADOBE	26 FT.	10 FT. "	40 FT.
CAVE BUTTES	65 FT.	15 FT. "	97 FT.
DREAMY DRAW	17 FT.	8 FT. "	35 FT.
GUADALUPE	10 FT.	5 FT. "	15 FT.
SPOOKHILL	11 FT.	6 FT. "	16 FT.
SIGNAL BUTTES	8 FT.	4 FT. "	11 FT.
APACHE JUNCTION	11 FT.	6 FT. "	16 FT.
WHITE TANKS #3	13 FT.	7 FT. "	20 FT.
WHITE TANKS #4	9 FT.	5 FT. "	13 FT.
RITTENHOUSE	13 FT.	7 FT. "	19.4 FT.
SADDLEBACK	8 FT.	5 FT. "	N/A
VINEYARD	8 FT.	5 FT. "	11.8 FT.
BUCKEYE #1	13 FT.	7 FT. "	19.8 FT.

Summary

This report presented rainfall, runoff, and statistical data from the Flood Control District's ALERT system for the Storm of July 23-24, 1992. This particular storm appeared to slowly move in a south to north direction, and intensified as it moved over the metro area. By the time the NWS had issued a Flash Flood Warning, Dreamy Draw Dam had reached 8 feet of stage. Thirteen FCD telemetered raingages measured more than 2 inches of rain over an average duration of 7 hours. Significant runoff events were monitored at Dreamy Draw Dam, Indian Bend Wash, and the Arizona Canal Diversion Channel. The ALERT system performance was exemplary, allowing the operators to make required safety notifications according to District policy.



APPENDIX A
National Oceanic
and Atmospheric
Administration

National Weather Service

Fax Transmittal

National Weather Service Forecast Office
PAB 500
PO Box 52025
Phoenix, Arizona 85072-2025

From: Tom ZICKUS

To: STEVE WATERS

Time: 2 pm Date: 7/29/92

Sent By: [Signature]

To transmit messages to this office: (602) 267-2051
For inquiries concerning this message: (602) 379-4807 or FTS 261-4607

Pages sent (including this cover sheet): 10

Subject: Watches & Warnings
7/23-24/92

ZCZD PHXFFAFHX ALL 240330
TTAA00 KPHX DDHMM
AZC001-003-005-007-009-011-013-017-019-021-023-240330-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
133 PM MST THU JUL 23 1992

...FLASH FLOOD WATCH FOR EAST HALF ARIZONA THIS AFTERNOON AND EVENING
UNTIL 9 PM...

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A FLASH
FLOOD WATCH UNTIL 9 PM TO INCLUDE THE EASTERN ARIZONA COUNTIES OF
APACHE...NAVAJO...EASTERN COCONINO...GILA...GRAHAM...GREENLEE...FAR
EAST MARICOPA...FINAL...EASTERN PIMA...SANTA CRUZ AND COCHISE.

TUCSON IS INCLUDED IN THE WATCH...BUT PHOENIX AND FLAGSTAFF ARE NOT
INCLUDED.

ABUNDANT SUBTROPICAL MOISTURE COVERS THE EAST HALF OF ARIZONA.
SCATTERED SHOWERS AND THUNDERSTORMS BEGAN IN THE EARLY MORNING. BY
MIDDAY STRONG THUNDERSTORMS WITH LOCALLY HEAVY RAIN WERE DEVELOPING...
MAINLY IN THE CENTRAL PORTION OF THE STATE FROM WEST OF TUCSON TO GILA
COUNTY TO THE LAKE POWELL AREA.

THE PUBLIC REPORTED A RAIN SHOWER AT CHRISTOPHER CREEK THAT DUMPED
ABOUT TWO INCHES OF RAIN IN 45 MINUTES DURING THE NOON HOUR. CREEKS
AND NORMALLY DRY CROSSINGS WERE RUNNING HEAVILY.

SOME PORTIONS IN THE WATCH AREA WERE MOSTLY SUNNY IN THE EARLY
AFTERNOON. HOWEVER...THE STRONGER HEATING WHICH IS ALLOWED MAY BRING
VERY HEAVY THUNDERSTORMS TO THOSE SAME AREAS IN LATE AFTERNOON AND
EARLY EVENING.

A FLASH FLOOD WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR HEAVY RAIN
WHICH COULD LEAD TO FLASH FLOODING. PERSONS IN EASTERN ARIZONA SHOULD
TAKE WHATEVER MEASURES POSSIBLE TO PROTECT PROPERTY AND LIVES FROM THE
POTENTIAL OF FLOODS THE REMAINDER OF TODAY. REMEMBER NEVER TO CROSS
FLOODED WASHES AND HIGHWAY DIPS.

BJOREM

NNNN

ZCZC PHXSPGPHX ALL 240345
 TTAA00 KPHX DDHHMM
 AZC013-240345-

SPECIAL WEATHER STATEMENT
 NATIONAL WEATHER SERVICE PHOENIX ARIZONA
 745 PM MST THU JUL 23 1992

...THUNDERSTORMS DEVELOPING AROUND METRO PHOENIX...

RADAR AT PHOENIX AIRPORT SPOTTED SOME NEWLY DEVELOPING THUNDERSTORMS AROUND THE SALT RIVER VALLEY AT 730 PM THIS EVENING. ONE FAIRLY STRONG CELL WAS DEVELOPING NEAR GOODYEAR AND AVONDALE. OTHERS WERE DEVELOPING FURTHER SOUTH...IN THE REGION EAST OF GILA BEND. VISUAL REPORTS OF CLOUD DEVELOPMENT INDICATE OTHER THUNDERSTORMS MAY BE ABOUT TO DEVELOP OVER OTHER PARTS OF THE METRO AREA.

THERE HAVE BEEN SOME HEAVY RAINS AND HAIL FROM THUNDERSTORMS IN OTHER PARTS OF ARIZONA TODAY...INCLUDING SOME THAT OCCURRED THIS EVENING. SOME HAVE DUMPED OVER TWO INCHES OF RAIN IN A SHORT TIME, SO HEAVY RAIN AND STREET FLOODING COULD OCCUR IN PHOENIX TONIGHT.

SO FAR NONE OF TODAY'S THUNDERSTORMS HAVE CAUSED DAMAGING WINDS OR LARGE HAIL, BUT THERE IS ALWAYS A RISK OF THESE IN THE LARGER STORMS. LISTEN TO RADIO OR TV FOR THE LATEST WEATHER UPDATES AND POSSIBLE WARNINGS.

TENHARKEL

ZCZC PHXFFAPHX ALL 240700
 TTAA00 KPHX DDHHMM
 AZC003-007-009-011-013-019-021-023-240700-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
 FLASH FLOOD WATCH
 NATIONAL WEATHER SERVICE PHOENIX ARIZONA
 840 PM MST THU JUL 23 1992

...FLASH FLOOD WATCH EXTENDED FOR MUCH OF SOUTHERN ARIZONA...

THE FLASH FLOOD WATCH FOR NORTHEAST ARIZONA EXPIRES AT 9 PM...BUT THE WEATHER SERVICE HAS EXTENDED THE WATCH UNTIL MIDNIGHT FOR SOUTHEAST ARIZONA. ALSO...THE WATCH HAS BEEN EXTENDED FURTHER WEST TO COVER THE PHOENIX AREA AND WESTERN PIMA COUNTY.

A GIANT THUNDERSTORM COMPLEX HAS DEVELOPED OVER SOUTHEAST ARIZONA AND A LARGE PART OF SONORA MEXICO...SPREADING OVER MOST OF OUR STATE EAST AND SOUTH OF PHOENIX AND IN MEXICO FROM THE SIERRA MADRE TO THE SEA OF CORTEZ. SOUTHEAST WINDS ARE MOVING THIS MASS OF THUNDERSTORMS TOWARD THE NORTHWEST AROUND 10 MPH.

SATELLITE INFRA RED IMAGES SHOW THE CLOUD TOPS BEGINNING TO WARM UP...INDICATING THE SYSTEM IS BEGINNING TO WEAKEN AS IT MOVES FURTHER INTO ARIZONA. BUT IT COULD STILL CAUSE AN INCH OR TWO OF RAIN IN SOME OF ITS HEAVIER INDIVIDUAL SHOWERS...ESPECIALLY DURING THE FIRST HALF OF THE NIGHT. LIGHT TO MODERATE SHOWERS MAY THEN PERSIST FOR MOST OF THE REMAINDER OF THE NIGHT AND INTO THE MORNING FRIDAY.

TENHARKEL

NNNN

PHXFFSPHX
TTAA00 KPHX 240736
AZC003-007-009-011-013-019-021-023-240900-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
1235 AM MST FRI JUL 24 1992

...THE FLASH FLOOD WATCH THAT WAS IN EFFECT FOR
SOUTHCENTRAL...EASTCENTRAL AND SOUTHEAST ARIZONA HAS EXPIRED...

NATIONAL WEATHER SERVICE RADAR AND SATELLITE PICTURES SHOW A DECREASE IN
SHOWERS AND THUNDERSTORMS IN MOST OF CENTRAL AND EASTERN ARIZONA AS OF
MIDNIGHT. HOWEVER...SOME STREET FLOODING HAS BEEN REPORTED IN THE
EASTERN PORTION OF THE GREATER PHOENIX AREA INCLUDING SOUTHERN
SCOTTSDALE NEAR MCKELLIPS AND MCDOWELL ROADS...AND IN PORTIONS OF
MESA. AT 1215 AM...THE SCOTTSDALE POLICE DEPARTMENT REPORTED THAT
SOME ROAD CLOSURES MAY TAKE PLACE.

IT IS POSSIBLE THAT SOME WASHES ARE RUNNING IN THE FORMER WATCH AREA...
SO MOTORISTS DRIVING OFF THE MAIN INTERSTATE HIGHWAYS SHOULD WATCH OUT
FOR WATER AND MUD IN DIPS AND LOW SPOTS.

PLEASE USE EXTRA CAUTION IF DRIVING TONIGHT AND AVOID FLOODED ROADS
IF POSSIBLE. IF YOU DO NOT KNOW WHETHER OR NOT IT IS SAFE FOR YOUR
VEHICLE TO CROSS A FLOODED ROAD...DRIVE AWAY FROM THE FLOODED AREA...
BETTER TO PLAY IT SAFE.

CRAIG ELLIS

ZCZC PHXFFAPHX ALL 241400
TTAA00 KPHX DDHMM
AZC007-013-021-025-241400-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
150 AM MST FRI JUL 24 1992

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A FLASH
FLOOD WATCH FOR CENTRAL ARIZONA INCLUDING THE GREATER PHOENIX AREA.
THE WATCH IS IN EFFECT UNTIL 7 AM MST THIS MORNING. THE FLASH FLOOD
WATCH INCLUDES THE EASTERN HALF OF MARICOPA COUNTY...NORTHERN PINAL
COUNTY...EASTERN YAVAPAI COUNTY...AND NORTHWESTERN GILA COUNTY
INCLUDING PAYSON.

NATIONAL WEATHER SERVICE RADAR WAS INDICATING REDEVELOPMENT OF
THUNDERSTORMS WITH HEAVY RAIN IN THE FLASH FLOOD WATCH AREA AS OF
130 AM MST THIS MORNING. IT IS UNUSUAL FOR THUNDERSTORMS WITH HEAVY
RAIN TO BE DEVELOPING SO EARLY IN THE MORNING. THIS INDICATES HOW
MOIST AND UNSTABLE THE AIRMASS IS.

AN OBSERVER AT NEW RIVER REPORTED 1.25 INCHES OF RAIN IN LESS
THAN 45 MINUTES AT 150 AM MST THIS MORNING. ALSO...NATIONAL WEATHER
SERVICE RADAR INDICATED THUNDERSTORMS WITH VERY HEAVY RAIN DEVELOPING
OVER THE SOUTHEAST GREATER PHOENIX AREA NEAR CHANDLER AND ALSO OVER
SAGUARO LAKE NORTH OF APACHE JUNCTION. THE THUNDERSTORMS WERE MOVING
FROM THE SOUTH TOWARD THE NORTH AT 10 MILES PER HOUR.

A FLASH FLOOD WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR HEAVY RAIN
WHICH COULD LEAD TO FLASH FLOODING. IF YOU ARE IN THE FLASH FLOOD
WATCH AREA OF CENTRAL ARIZONA INCLUDING THE GREATER PHOENIX AREA...
YOU ARE URGED TO TAKE WHATEVER MEASURES POSSIBLE TO PROTECT PROPERTY
AND YOUR LIFE FROM THE POTENTIAL OF FLASH FLOODING THROUGH EARLY THIS
MORNING.

PLEASE USE EXTRA CAUTION IF DRIVING IN CENTRAL ARIZONA THROUGH EARLY
THIS MORNING AND AVOID FLOODED ROADS. IF YOU DO NOT KNOW WHETHER OR
NOT IT IS SAFE FOR YOUR VEHICLE TO CROSS A FLOODED ROAD...DRIVE AWAY
FROM THE FLOODED AREA...BETTER TO PLAY IT SAFE. IF YOU OBSERVE A
FLOODED ROAD...CALL YOUR NEAREST LAW ENFORCEMENT AGENCY TO INFORM
THEM.

07/29/92 14:01
TTAA00 KPHX 241023
AZC013-021-241400-

URBAN AND SMALL STREAM FLOOD ADVISORY
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
319 AM MST FRI JUL 24 1992

...URBAN AND SMALL STREAM FLOOD ADVISORY FOR EASTERN MARICOPA AND
NORTHERN PINAL COUNTIES...INCLUDING THE GREATER PHOENIX AREA
UNTIL 7AM MST...

SHOWERS AND THUNDERSTORMS CONTINUED TO DEVELOP ACROSS THE FLASH FLOOD
WATCH AREA OF CENTRAL ARIZONA AT 310 AM MST. AT 305 AM MST AN OBSERVER
IN APACHE JUNCTION HAD RECEIVED 0.69 INCHES OF RAIN IN ONLY 15 MINUTES
AND IT WAS STILL POURING. THERE WAS ALSO A REPORT FROM THE GILBERT
POLICE DEPARTMENT OF MINOR STREET FLOODING IN THE TOWN OF GILBERT.

RADAR WAS SHOWING THAT STRONG THUNDERSTORMS WITH HEAVY DOWNPOURS ARE
LIKELY TO CONTINUE FOR THE NEXT SEVERAL HOURS...OR ABOUT UNTIL 7 AM OR
SO. THIS WILL LIKELY CONTRIBUTE TO AREAS OF POOR DRIVING CONDITIONS
FOR THE UPCOMING RUSH HOUR IN AND AROUND THE GREATER PHOENIX AREA.

MORNING COMMUTERS SHOULD BE SURE TO ALLOW EXTRA DRIVE TIME TO WORK
...AS FLOODED INTERSECTIONS AND ROADWAY DIPS WILL BE ENCOUNTERED ACROSS
MUCH OF THE SALT RIVER VALLEY.

REMEMBER...A FLASH FLOOD WATCH REMAINS IN EFFECT FOR MUCH OF CENTRAL
ARIZONA UNTIL 7 AM MST.

STAY TUNED TO NOAA WEATHER RADIO OR COMMERCIAL RADIO AND T.V.
BROADCASTS FOR THE LATEST WEATHER INFORMATION REGARDING THESE
THUNDERSTORMS.

ESTLE

TTAA00 KPHX DDHHMM
AZC007-013-021-241400-

BULLETIN - EBS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
440 AM MST FRI JUL 24 1992

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A
FLASH FLOOD WARNING EFFECTIVE UNTIL 700 AM MST
FOR THE FOLLOWING LOCATIONS...

IN EAST CENTRAL ARIZONA

...WESTERN GILA COUNTY

IN SOUTH CENTRAL ARIZONA

...EASTERN MARICOPA COUNTY...NORTHWESTERN PINAL COUNTY

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A FLASH FLOOD
WARNING FOR EASTERN MARICOPA COUNTY...NORTHWEST PINAL COUNTY...AND
WESTERN GILA COUNTY UNTIL 7 AM MST. THE FLASH FLOOD WARNING INCLUDES
THE GREATER PHOENIX AREA.

NATIONAL WEATHER SERVICE RADAR...SATELLITE PICTURES AND COOPERATIVE
OBSERVER REPORTS INDICATE VERY HEAVY RAIN IN THE FLASH FLOOD WARNING
AREA. SEVERAL REPORTS OF WELL OVER AN INCH OF RAIN HAVE BEEN RECEIVED.
MANY ROADS ARE BECOMING FLOODED. RAINFALL IS EXPECTED TO CONTINUE
HEAVY UNTIL 6 OR 7 AM MST THIS MORNING THEN DECREASE THEREAFTER.

THIS IS A SERIOUS SITUATION. PLEASE USE DISCRETION WHEN TRAVELLING
THIS MORNING. CHECK THE LATEST ROAD REPORTS AS SOME ROADS MAY BE
CLOSED OR IMPASSABLE. FLOODING HAS BEEN REPORTED ON HIGHWAY 98 BETWEEN
GLOBE AND ROOSEVELT LAKE IN GILA COUNTY. STAY AWAY FROM FLOODED ROADS.

URBAN FLOODING IS OVERFLOW OF CITY STREETS AND DRAINAGE SYSTEMS...
ENOUGH TO FLOOD RESIDENCES AND BUSINESSES AND CLOSE CITY STREETS.
POSTPONE ANY UNNECESSARY DRIVING UNTIL THE STORM IS OVER.

MOST DEATHS IN FLASH FLOODING OCCUR IN AUTOMOBILES. DONT TRY TO CROSS
FLOODING WASHES OR STREAMS. NEVER DRIVE ONTO A BRIDGE COVERED BY
WATER. STAY OFF FLOODED CITY STREETS. OUTSIDE THE CITY...STAY ON MAIN
HIGHWAYS. AVOID SECONDARY ROADS AND FARM ROADS...ESPECIALLY AT NIGHT.

PHXFFLPHX
TTAA00 KPHX 241416 COR
AZC007-013-021-241800-

BULLETIN - EBS ACTIVATION REQUESTED
FLASH FLOOD WARNING...CORRECTION FOR ISSUANCE TIME
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
700 AM MST FRI JUL 24 1992.

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A
FLASH FLOOD WARNING EFFECTIVE UNTIL 900 AM MST
FOR THE FOLLOWING LOCATIONS...

IN EAST CENTRAL ARIZONA

...WESTERN GILA COUNTY

IN SOUTH CENTRAL ARIZONA

...EASTERN MARICOPA COUNTY...PINAL COUNTY

IN NORTH CENTRAL ARIZONA

...SOUTHEAST HALF OF YAVAPAI COUNTY

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS EXTENDED A FLASH FLOOD
WARNING FOR EASTERN MARICOPA COUNTY...PINAL COUNTY...AND WESTERN GILA
COUNTY UNTIL 9 AM MST. IN ADDITION...THE FLASH FLOOD WARNING HAS BEEN
EXTENDED TO INCLUDE THE SOUTHEAST HALF OF YAVAPAI COUNTY.

NATIONAL WEATHER SERVICE RADAR...SATELLITE PICTURES AND COOPERATIVE
OBSERVER REPORTS INDICATE VERY HEAVY RAIN HAS OCCURRED OR WAS STILL
OCCURRING IN THE WARNING AREA. SEVERAL REPORTS OF OVER 2 INCHES OF RAIN
HAVE BEEN RECEIVED. THE GREATEST REPORT OF OVERNIGHT RAIN RECEIVED AS
OF 700 AM WAS A WHOPPING 6.05 INCHES AT 27TH AVENUE AND CAMELBACK ROAD.

RAINFALL IS EXPECTED TO CONTINUE HEAVY AT LEAST IN THE NORTHERN PORTION
OF THE FLASH FLOOD WARNING AREA UNTIL 8 OR 9 AM MST THIS MORNING. EVEN
LIGHT RAIN ON ALREADY SATURATED GROUND AND FLOODED AREAS CAN AGGRAVATE
THE SITUATION.

THE ARIZONA DEPARTMENT OF TRANSPORTATION REPORTED 2 TO 3 FEET OF WATER
ON THE BLACK CANYON FREEWAY AT THE CAMELBACK ROAD UNDERPASS AT 630 AM
MST. AT THE SAME TIME...A FOOT OF WATER WAS REPORTED AT THE BELL ROAD
UNDERPASS. THE DEPARTMENT OF PUBLIC SAFETY REPORTED THAT THE BLACK
CANYON FREEWAY SOUTHBOUND WAS CLOSED AT CAMELBACK ROAD DUE TO FLOODING.
THIS REPORT WAS AT 650 AM MST. AT 640 AM MST...THE GILA COUNTY SHERIFFS
OFFICE REPORTED FLOODING ALONG STATE HIGHWAY 88 NORTH OF GLOBE AND
NORTH AND SOUTH OF ROOSEVELT LAKE.

THIS IS A SERIOUS SITUATION. PLEASE USE YOUR BEST JUDGEMENT WHEN
TRAVELING THIS MORNING. LEAVE HOME EARLY AS IT MAY TAKE YOU LONGER
THAN NORMAL TO GET TO YOUR DESTINATION. CHECK THE LATEST ROAD REPORTS
SINCE SOME ROADS MAY BE CLOSED OR IMPASSABLE. STAY AWAY FROM FLOODED
ROADS.

CRAIG ELLIS

ZCZC PHXFFSPHX ALL 241700
TTAA00 KPHX DDHMM
AZC007-013-021-025-241700-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
902 AM MST FRI JUL 24 1992

...FLASH FLOOD WARNING EXPIRES...

THE FLASH FLOOD WARNING FOR CENTRAL ARIZONA INCLUDING THE PHOENIX METROPOLITAN AREA WILL EXPIRE AT 9 AM.

RAINS BEGAN DECREASING IN THE PHOENIX AREA AFTER 8 AM. RADAR AND SATELLITE OBSERVATIONS INDICATED MODERATE RAINS WERE CONTINUING IN NORTH CENTRAL PINAL COUNTY WHICH INCLUDES FLORENCE AND SUPERIOR.

URBAN STREET FLOODING IN THE PHOENIX AREA WAS EXTENSIVE IN THE LATE NIGHT HOURS. THOUGH THE FLOODING HAD NOT YET CLEARF AS OF 8.30 AM. THE FLOODING WAS ABATING AND NO NEW FLOODING IS EXPECTED.

THE FLASH FLOOD WARNING IS BEING ALLOWED TO EXPIRE AS SCHEDULED AT 9 AM. HOWEVER...THE AIR OVER CENTRAL ARIZONA IS NEAR SATURATION AND HEAVY SHOWERS MAY OCCUR LATER IN THE DAY. A FLASH FLOOD WATCH WILL BE IMPLEMENTED FOR MUCH OF CENTRAL AND EAST ARIZONA BECAUSE OF THE CONTINUING POTENTIAL FOR HEAVY RAINS OVER MUCH OF THE STATE. THAT WATCH IS COVERED UNDER A SEPERATE STATEMENT.

BJOREM

NNNN

ZCZC PHXFFAPHX ALL 250430
TTAA00 KPHX DDHMM
AZC001-005-007-013-017-019-021-023-025-250430-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
925 AM MST FRI JUL 24 1992

...FLASH FLOOD WATCH FOR SOUTH CENTRAL AND NORTHEAST ARIZONA UNTIL 9 PM...

THE WATCH INCLUDES SANTA CRUZ...PIMA...PINAL...MARICOPA...GILA...YAVAPAI...EASTERN COCONINO...NAVAJO AND APACHE COUNTIES. FLAGSTAFF IS NOT INCLUDED IN THE WATCH AREA.

THE AIRMASS OVER CENTRAL AND EASTERN ARIZONA IS NEAR SATURATION AND THE LEAST DISTURBANCES IN THE ATMOSPHERE HAVE BEEN SETTING OFF LOCALLY HEAVY SHOWERS AND THUNDERSTORMS.

HEAVY RAINS OVERNIGHT IN CENTRAL ARIZONA...INCLUDING THE PHOENIX METROPOLITAN AREA...RESULTED IN LOCAL FLOODING AND A FLASH FLOOD WARNING WAS IN EFFECT FROM 4.40 AM UNTIL 9 AM. SEVERAL REPORTS OF FOUR INCHES OF RAIN AND ONE REPORT OF SIX INCHES OF RAIN WERE RECORDED IN THE PHOENIX AREA DURING THE NIGHT.

THERE HAS BEEN TWO DAYS OF LOCALLY HEAVY RAINS IN NORTHEAST ARIZONA...AND WIDESPREAD GENERAL RAIN...LOCALLY HEAVY...WAS OCCURRING AS OF EARLY MORNING AND IS EXPECTED THROUGH THE DAY.

SATELLITE IMAGES INDICATE A RIVER-LIKE FLOW OF MOISTURE COMING OUT OF MEXICO ACROSS THE BORDER AND NORTHWARD ACROSS THE STATE. THE HEAVIEST FLOW IS FROM THE SOUTH CENTRAL BORDER TO CENTRAL ARIZONA AND TURNING NORTHEAST ACROSS THE NORTHEAST PLATEAU. THEREFORE...THESE SAME AREAS ARE BEING INCORPORATED INTO A FLASH FLOOD WATCH FOR THE REMAINDER OF TODAY.

A FLASH FLOOD WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR HEAVY RAIN WHICH COULD LEAD TO FLASH FLOODING. PERSONS IN THE FLASH FLOOD WATCH AREA SHOULD TAKE WHATEVER PRECAUTIONS POSSIBLE TO PROTECT PROPERTY AND LIVES FROM SUDDEN FLOODING. MOTORISTS MUST REMEMBER NOT TO CROSS FLOODED HIGHWAY FLOODED BY MOVING WATER.

ZCZC PHXFFSPHX ALL 242130
TTAA00 KPHX DDHMM
AZC005-007-013-019-021-023-025-242130-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
1129 AM MST FRI JUL 24 1992

...HEAVY RAINS IN THE FLASH FLOOD WATCH AREA...

THE FLASH FLOOD WATCH FOR SOUTH CENTRAL AND NORTHEAST ARIZONA TO 9 PM CONTINUES. THE WATCH INCLUDES THE COUNTIES OF SANTA CRUZ...PIMA... PINAL...MARICOPA...YAVAPAI...EASTERN COCONINO...APACHE AND NAVAJO.

MODERATE RAINS CONTINUED IN THE PHOENIX AREA IN THE MID MORNING HOURS. PHOENIX SKY HARBOR AIRPORT HAD ANOTHER 0.43 INCHES BETWEEN 8 AM AND 11

HEAVY RAINS HAVE BEEN REPORTED IN THE HOLBROOK AREA. HOWEVER...THE WIN AIRPORT REPORTED A LITTLE LESS THAN TWO TENTHS INCHES BETWEEN 8 AM AND 11 AM. THE PETRIFIED FOREST NATIONAL MONUMENT REPORTED SEVERAL FUNNEL CLOUDS BETWEEN 9 AM AND 11 AM.

RADAR AND SATELLITE OBSERVATIONS INDICATED CONTINUED MODERATE RAINS THROUGH THE MORNING HOURS FROM PHOENIX NORTH AND NORTHEAST TO NEAR THE MOGOLLON RIM. PAYSON REPORTED MODERATE RAIN AT 10 AM WITH A STORM TOTAL OF A HALF INCH UP TO 8 AM.

THUNDERSTORMS WERE DEVELOPING IN SOUTH CENTRAL ARIZONA WEST OF TUCSON AS OF 10.20 AM.

RESIDENTS IN THE WATCH AREA SHOULD TAKE WHATEVER PRECAUTIONS POSSIBLE TO PROTECT PROPERTY AND LIVES FROM THE THREAT OF FLASH FLOODING. MOTORISTS MUST AVOID TRYING TO CROSS FLOODED STREAM CROSSINGS AND HIGHWAY DIPS WHERE WATER IS MOVING AND THE DEPTH IS NOT CERTAIN.

BJOREM

ZCZC PHXFFSPHX ALL 242030
TTAA00 KPHX DDHMM
AZZ004-007-242030-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
1227 PM MST FRI JUL 24 1992

...RAINFALL IN THE FLASH FLOOD WATCH AREA...

FOLLOWING ARE RAINFALL REPORTS RECEIVED AT THE NATIONAL WEATHER SERVICE IN PHOENIX DURING THE MORNING HOURS. MOST OF THE REPORTS WERE RECEIVED BEFORE THE RAIN HAD ENDED AND THEREFORE DO NOT NECESSARILY CONSTITUTE THE STORM TOTAL. LOCATIONS IN THE PHOENIX AREA ARE REFERRED BY THE NEAREST MAJOR CROSS STREETS.

83RD AVE AND THUNDERBIRD.....	1.97 INCHES
49TH AVE AND THOMAS.....	3.14
37TH AVE AND MONTE VISTA.....	4.00
43RD AVE AND THOMAS.....	5.40
42ND ST AND BETHANY HOME.....	4.15
31ST AVE AND CAMELBACK.....	4.00
27TH AVE AND CAMELBACK.....	6.25
POWER ROAD AND BASELINE.....	2.30
MCCLINTOCK AND BASELINE.....	2.60
SUN LAKES.....	1.54
SKY HARBOR AIRPORT.....	1.76
BARTLETT DAM.....	2.04
MORMON FLAT DAM.....	2.45
ROOSEVELT DAM.....	0.28

THE GREAT MAJORITY OF THE RAIN FELL BETWEEN 11 PM LAST NIGHT AND 8 AM THIS MORNING.

BJOREM

NNNN

ZCZC PHXFFWPHX ALL 250645
TTAA00 KPHX DDHMM
AZC005-251245-

BULLETIN - EBS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
545 PM MST FRI JUL 24 1992

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A
FLASH FLOOD WARNING EFFECTIVE UNTIL FURTHER NOTICE
FOR THE FOLLOWING LOCATIONS.....

IN NORTH CENTRAL ARIZONA

...NORTHWESTERN COCONINO COUNTY

...FLASH FLOOD WARNING FOR HAVASUPAI CANYON...

A FLASH FLOOD HAS BEEN REPORTED IN HAVASUPAI CANYON. THE REPORT COMES
FROM A TOURIST AIRCRAFT FLYING OVER THE AREA...AND WAS RELAYED TO THE
PARK DISPATCHER AT GRAND CANYON NATIONAL PARK. IT IS NOT KNOWN JUST
WHERE IN THE CANYON THE FLOOD IS OCCURRING...OR WHETHER IT IS UPSTREAM
OR DOWNSTREAM FROM THE VILLAGE OF SUPAI. HOWEVER...THUNDERSTORMS IN
THE REGION FURING THE LAST 24 HOURS HAVE PRODUCED VERY HEAVY RAIN AND
MAJOR FLASH FLOODING HAS ALREADY OCCURRED IN SOME PLACES...SO THIS
REPORT MUST BE TAKEN SERIOUSLY.

ANYONE HEARING THIS ADVISORY ON THE RADIO IN SUPAI...IN THE
CAMPGROUNDS OR ON TRAILS IN THE AREA...PLEASE RELAY IT TO OTHERS.
HIKERS AND CAMPERS...AS WELL AS RESIDENTS ...SHOULD BE READY TO MOVE
TO HIGH GROUND AWAY FROM THE STREAM IF FLOODING DEVELOPS.

UNTIL MORE DETAILS ARE AVAILABLE...WE WILL LEAVE THIS WARNING IN
EFFECT FOR HAVASUPAI CANYON INDEFINATELY THIS EVENING.

TENHARKEL

NNNN

REGULAR FASTS
ARE NOT INCLUDED
HERE ☺ call me if you need more

GOOD LUCK

APPENDIX B

Maricopa County ALERT System

Sensor #	5000	Group Name			Date	Time
		510	670	660	7/28/92	1017
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.00
0530	0.00	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.00	0.00	0.00	0.00	0.00

Mt. DATHAN

Gila Bend Mtns.

Centennial RR

Saddleback FRS

Centennial Levee

Maricopa County ALERT System
 Group Name Date Time
 Upper Centennial 7/28/92 1018

Sensor #	630	620	5180	5190
StatType	dif	dif	dif	dif
DataType	precip	precip	precip	precip
Units	in	in	in	in
7/24/92				
1600	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00
0530	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00
7/23/92				
2400	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.00	0.00	0.00

Upper Tiger Wash

Gladden

Centennial Wash 3

Smith Peak

Maricopa County ALERT System
 Group Name Date Time
 Lower Hassayampa 7/28/92 1022

Sensor #	1625	1620	5220	3630	3635	3645	3625
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.00	0.24	0.12	0.04	0.39	0.00

Buckeye FRS #1

Jackrabbit Wash

Morristown 4hrs.

Sunset FRS 2 hrs.

Sunnycove FRS 1/2 hr.

Vulture Mine 2.5 hrs

Sols Wash

Maricopa County ALERT System
 Group Name Date Time
 Upper Hassayampa 7/28/92 1023

Sensor #	5290	3660	3610	3650	5340	3670	5365	5365
StatType	dif	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in	in
7/24/92								
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.16	0.08	0.04	0.04	0.04	0.08	0.08	0.08
0730	0.04	0.00	0.04	0.08	0.08	0.24	0.08	0.08
0700	0.00	0.04	0.31	0.08	0.28	0.08	0.08	0.08
0630	0.28	0.00	0.35	0.04	0.08	0.08	0.08	0.04
0600	0.00	0.04	0.31	0.12	0.00	0.31	0.00	0.00
0530	0.00	0.12	0.24	0.00	0.00	0.08	0.04	0.20
0500	0.00	0.00	0.04	0.04	0.04	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
0330	0.16	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
0230	0.00	0.00	0.08	0.04	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92								
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.63	0.28	1.46	1.34	0.91	0.87	0.43	

Yarnell Hill 5.5 hrs

Box Canyon 3 hrs.

O' Brian 7 hrs.

Minnehaha 8 hrs

Towers Mtn. 7 hrs.

Hassy BRIDGE 5.5 hrs

Wilhoit 4.5 hrs

BAD RECORD - Mt. Union

Maricopa County ALERT System
 Group Name Date Time
 AF1: McMicken 7/28/92 1025

Sensor #	5400	1635	1615	5435	5445	5450
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.08	0.08	0.00
0900	0.12	0.00	0.00	0.04	0.04	0.00
0830	0.28	0.00	0.04	0.00	0.00	0.00
0800	0.20	0.00	0.00	0.00	0.04	0.00
0730	0.24	0.00	0.00	0.24	0.28	0.00
0700	0.00	0.00	0.00	0.16	0.16	0.00
0630	0.00	0.00	0.00	0.04	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.04	0.00
0530	0.00	0.00	0.04	0.39	0.16	0.00
0500	0.00	0.00	0.00	0.16	0.35	0.83
0430	0.00	0.00	0.00	0.00	0.04	0.00
0400	0.00	0.00	0.04	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.16
0100	0.00	0.00	0.00	0.00	0.00	
0030	0.00	0.00	0.00	0.00	0.00	
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	
2330	0.00	0.00	0.00	0.00	0.00	
2300	0.00	0.00	0.00	0.00	0.00	
2230	0.00	0.00	0.00	0.00	0.00	
2200	0.00	0.00	0.00	0.00	0.00	
2130	0.00	0.00	0.00	0.00	0.00	
2100	0.00	0.00	0.00	0.00	0.00	
2030	0.00	0.00	0.00	0.00	0.00	
2000	0.00	0.00	0.00	0.00	0.00	
1930	0.00	0.00	0.00	0.00	0.00	
1900	0.00	0.00	0.00	0.00	0.00	
1830	0.00	0.00	0.00	0.00	0.00	
1800	0.00	0.00	0.00	0.00	0.00	
1730	0.00	0.00	0.00	0.00	0.00	
TOTALS:	0.83	0.00	0.12	1.10	1.18	0.98

Aqua Fria @ Buckeye Rd. 2 hrs

White Tanks 3

White Tanks Peak 5 hrs.

McMicken Floodway 5 hrs.

McMicken Dam 5.5 hrs

Patton Rd.

BAD RECORD

Maricopa County ALERT System
 Group Name Date Time
 AF2: Circle City 7/28/92 1029

Sensor #	5455	5460	5475	5490	5505	1510
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.04	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.04	0.00
0900	0.00	0.00	0.00	0.00	0.16	0.00
0830	0.00	0.00	0.00	0.00	0.39	0.00
0800	0.00	0.04	0.04	0.04	0.00	0.00
0730	0.00	0.08	0.08	0.08	0.00	0.00
0700	0.04	0.20	0.08	0.04	0.00	0.00
0630	0.00	0.04	0.00	0.20	0.00	0.00
0600	0.04	0.08	0.04	0.55	0.04	0.00
0530	0.43	0.43	0.47	0.51	0.08	0.20
0500	0.71	0.47	0.35	0.04	0.00	0.39
0430	0.00	0.00	0.00	0.00	0.24	0.31
0400	0.00	0.00	0.00	0.00	0.12	0.00
0330	0.04	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.30	1.34	1.06	1.46	1.06	0.91

Tr (years)

3

4

Wittmann 7 hrs

Chrysler Proving Grounds 3.5 hrs

Circle City 3.5 hrs

Castle Hot Springs 3.5 hrs

New River @ Glendale Rd. 6 hrs

ACDC @ 67th Ave. 1.5 hrs

Maricopa County ALERT System

Sensor #	2650	3720	5565	2630	5595	2700	2605	5640
StatType	dif	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in	in
7/24/92								
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.04	0.12	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.04	0.04	0.00	0.00	0.00	0.00	0.04	0.00
0900	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.08
0830	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
0730	0.04	0.04	0.04	0.04	0.00	0.00	0.04	0.00
0700	0.04	0.04	0.04	0.04	0.00	0.00	0.04	0.00
0630	0.04	0.04	0.04	0.04	0.00	0.00	0.04	0.00
0600	0.00	0.04	0.00	0.00	0.08	0.04	0.00	0.00
0530	0.63	0.04	0.00	0.00	0.20	0.08	0.00	0.00
0500	0.00	0.04	0.00	0.00	0.24	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.04
0100	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92								
2400	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.12
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.87	0.47	0.20	1.73	0.67	0.24	0.75	0.35

Adobe Dam 5.5 hrs

Deer Valley Airport 6 hrs.

Skunk Creek @ I-17 5 hrs.

Upper Skunk Creek 10.5 hrs.

New River @ Bell Rd. 5.5 hrs.

New River Dam 3 1/2 hrs.

Sunup Ranch 8 hrs.

Cooks Mesa 9.5 hrs.

Maricopa County ALERT System
 Group Name Date Time

AF4: Lake Pleasant 7/28/92 1030

Sensor #	2660	4620	4635	4510	4530	4520
StatType	dif	dif	dif	dif	dif	dif
Data Type	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.04	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.04	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.04	0.04	0.04
0900	0.00	0.00	0.00	0.04	0.04	0.04
0830	0.08	0.08	0.08	0.04	0.08	0.04
0800	0.04	0.04	0.04	0.12	0.08	0.08
0730	0.04	0.04	0.08	0.00	0.08	0.00
0700	0.00	0.12	0.12	0.00	0.08	0.00
0630	0.00	1.02	1.10	0.00	0.00	0.00
0600	0.00	0.94	0.28	0.00	0.00	0.04
0530	0.00	0.04	0.08	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.08	0.04	0.00
0430	0.00	0.00	0.00	0.08	0.20	0.00
0400	0.00	0.00	0.00	0.00	0.00	0.00
0330	0.12	0.00	0.00	0.00	0.04	0.12
0300	0.00	0.00	0.00	0.00	0.00	0.47
0230	0.00	0.04	0.00	0.00	0.00	0.00
0200	0.24	0.00	0.00	0.00	0.00	0.00
0130	0.16	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.12	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.67	2.28	1.89	0.51	0.67	0.79

Lake Pleasant 7.5 hrs

Garfias Mtn. 6.5 hrs

Columbia Hill 8 hrs.

Horse Thief Basin ≈ 10 hrs.

Crown King 7 hrs

Sunset Point 7. hrs.

Maricopa County ALERT System

Sensor #	4615	4605	4610	4600	4625	3520
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
Date	7/28/92					
Time	1031					
Group Name	AF5: Upper Agua Fria					
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.04	0.00	0.00	0.00
1000	0.04	0.00	0.08	0.04	0.00	0.04
0930	0.04	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.04	0.00	0.00	0.00
0830	0.00	0.00	0.08	0.00	0.04	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.00
0730	0.04	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.00
0530	0.00	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.04	0.00	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.04	0.00	0.00	0.00	0.00
0200	0.00	0.04	0.00	0.08	0.00	0.00
0130	0.00	0.08	0.00	0.39	0.00	0.00
0100	0.00	0.04	0.00	0.08	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.16	0.20	0.31	0.59	0.04	0.04

Horseshoe Ranch 7.5 hrs

Horner Mtn. Ranch 2 hrs

Az Hunt Club 3.5 hrs

I-17@ ST. 169 9.5 hrs

Dewey .5 hrs

Prescott Valley .5 hrs

Maricopa County ALERT System

Sensor #	6690	6695	6685	5945	2600
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
Group Name	Verde River				
Date	7/28/92				
Time	1032				
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.04
1030	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.04	0.00	0.04
0930	0.00	0.00	0.00	0.00	0.08
0900	0.04	0.04	0.04	0.08	0.08
0830	0.04	0.04	0.04	0.00	0.04
0800	0.04	0.04	0.04	0.12	0.12
0730	0.08	0.04	0.16	0.04	0.12
0700	0.08	0.04	0.12	0.12	0.08
0630	0.08	0.04	0.04	0.08	0.16
0600	0.04	0.04	0.04	0.04	0.16
0530	0.08	0.04	0.00	0.00	0.00
0500	0.00	0.00	0.04	0.12	0.04
0430	0.00	0.00	0.08	0.35	0.20
0400	0.08	0.04	0.47	0.00	0.12
0330	0.00	0.04	0.31	0.00	0.00
0300	0.00	0.00	0.04	0.00	0.00
0230	0.04	0.04	0.00	0.00	0.00
0200	0.28	0.08	0.00	0.00	0.00
0130	0.12	0.04	0.00	0.00	0.00
0100	0.04	0.00	0.04	0.08	0.00
0030	0.04	0.04	0.16	0.00	0.00
7/23/92					
2400	0.08	0.00	0.00	0.00	0.00
2330	0.39	0.00	0.00	0.00	0.00
2300	0.12	0.00	0.08	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.65	0.59	1.69	1.14	1.26

Asher Hills 10.5 hrs

McDowell Mtn. Park 9 hrs

Fraesfield Mtn. 11 hrs

Thompson Peak 8 1/2 hrs

Mt. Ord 7.5 hrs

Maricopa County ALERT System

Sensor #	6000	6010	5900	6030	6040	6050	5645
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
	CCS1: Salt R. South						
	Date 7/28/92 Time 1034						
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.24	0.00	0.00	0.04	0.00
1030	0.12	0.04	0.00	0.04	0.04	0.00	0.00
1000	0.20	0.04	0.00	0.04	0.00	0.04	0.04
0930	0.16	0.00	0.12	0.00	0.04	0.00	0.00
0900	0.00	0.00	0.04	0.00	0.04	0.00	0.08
0830	0.00	0.04	0.04	0.04	0.04	0.08	0.04
0800	0.00	0.08	0.12	0.04	0.00	0.04	0.08
0730	0.39	0.00	0.00	0.08	0.08	0.04	0.04
0700	0.31	0.00	0.00	0.31	0.08	0.08	0.08
0630	0.00	0.00	0.00	0.35	0.12	0.08	0.04
0600	0.00	0.08	0.00	0.08	0.12	0.39	0.00
0530	0.04	0.39	0.04	0.28	0.12	0.39	0.12
0500	0.04	0.67	0.24	0.24	0.12	0.04	0.08
0430	0.12	0.16	0.16	0.59	0.51	0.00	0.00
0400	0.00	0.00	0.00	0.31	0.51	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.04	0.04	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92							
2400	0.00	0.00	0.00	0.00	0.04	0.00	0.00
2330	0.00	0.00	0.00	0.04	0.43	0.04	0.00
2300	0.00	0.00	0.00	0.08	0.63	0.24	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.08	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.38	1.50	0.98	2.52	2.91	1.65	0.67
Tr (yrs)	2	3		20	35	3	

Alvord Park 7.5 hrs

Roeser @ 2nd St. 7 hrs

Salt River @ 24TH St. 7.5 hrs

Kleinman Park 11.5 hrs

Fitch Park 12 hrs

Mtn. View Park 13 hrs

Spookhill FRS 8 1/2 hrs.

Maricopa County ALERT System
 Group Name Date Time
 CCS2: Indian Bend 7/28/92 1037

Sensor #	6100	6110	6120	6130	6660	6640	6655
StatType	dif	dif	dif	dif	dif	dif	dif
Data Type	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.04	0.00	0.00	0.00	0.08	0.08	0.00
1030	0.00	0.00	0.00	0.00	0.04	0.08	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.12	0.00
0930	0.04	0.00	0.00	0.04	0.08	0.04	0.00
0900	0.00	0.00	0.00	0.00	0.08	0.04	0.04
0830	0.04	0.08	0.12	0.00	0.00	0.04	0.08
0800	0.08	0.12	0.04	0.00	0.04	0.04	0.04
0730	0.12	0.04	0.00	0.04	0.08	0.04	0.12
0700	0.08	0.04	0.00	0.00	0.00	0.04	0.08
0630	0.04	0.08	0.00	0.00	0.04	0.04	0.12
0600	0.04	0.28	0.31	0.08	0.16	0.04	0.04
0530	0.12	0.08	0.12	0.12	0.12	0.08	0.00
0500	0.00	0.12	0.08	0.98	0.24	0.00	0.04
0430	0.16	0.59	0.55	0.35	0.08	0.00	0.28
0400	0.12	0.12	0.04	0.24	0.00	0.00	0.16
0330	0.00	0.00	0.00	0.00	0.00	0.12	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.12	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.04	0.00	0.04	0.00	0.00	0.00
7/23/92							
2400	0.04	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.04	0.00	0.04	0.00	0.00	0.04
2300	0.00	0.08	0.00	0.12	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.91	1.81	1.14	2.32	1.02	0.91	1.10

Tr (yrs)

4

30

Maricopa County ALERT System
 Group Name Date Time
 CCS3: Phx Metro 1 7/28/92 1037

Sensor #	6200	6210	6220	3770	6240
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00
1100	0.04	0.04	0.04	0.04	0.04
1030	0.08	0.08	0.08	0.04	0.00
1000	0.12	0.12	0.08	0.04	0.04
0930	0.31	0.20	0.08	0.04	0.04
0900	0.00	0.04	0.04	0.00	0.00
0830	0.00	0.04	0.00	0.08	0.04
0800	0.08	0.08	0.12	0.04	0.08
0730	0.43	0.35	0.16	0.04	0.08
0700	0.00	0.12	0.04	0.00	0.08
0630	0.16	0.00	0.00	0.00	0.04
0600	0.04	0.00	0.00	0.20	0.08
0530	0.20	0.28	0.35	0.12	0.12
0500	0.83	1.02	0.31	0.20	0.20
0430	0.28	0.28	0.39	0.35	0.16
0400	0.47	0.00	0.20	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.12	0.00
0100	0.00	0.00	0.00	0.12	0.08
0030	0.00	0.04	0.00	0.12	0.08
7/23/92					
2400	0.00	0.08	0.16	0.20	0.16
2330	0.00	0.00	0.00	0.12	0.16
2300	0.00	0.00	0.00	0.20	0.04
2230	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	3.03	2.80	2.01	1.93	1.42
Tr (yrs)	50	25	7	10	2

Durango Complex 7.5 hrs

Phoenix Municipal Bldg. 12.5 hrs

Thomas @ 16TH ST. 11.5 hrs

Perry Park 12 hrs.

Papago Park 12.5 hrs

Maricopa County ALERT System
 Group Name Date Time
 CCS4: Phx Metro 2 7/28/92 1038

Sensor #	6250	6575	1500	6280	6645
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.04	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.04	0.00	0.00	0.04	0.00
1100	0.00	0.00	0.00	0.08	0.04
1030	0.08	0.00	0.00	0.12	0.12
1000	0.00	0.04	0.00	0.20	0.00
0930	0.08	0.08	0.08	0.08	0.08
0900	0.00	0.20	0.04	0.00	0.00
0830	0.00	0.20	0.20	0.12	0.08
0800	0.08	0.35	0.20	0.12	0.08
0730	0.12	0.28	0.04	0.04	0.00
0700	0.04	0.43	0.00	0.04	0.00
0630	0.08	0.31	0.12	0.04	0.00
0600	0.00	0.47	0.28	0.12	0.08
0530	0.16	0.47	0.71	0.31	0.08
0500	0.12	0.04	0.75	0.12	0.43
0430	0.12	0.47	0.04	0.28	0.94
0400	0.16	0.35	0.00	0.16	0.20
0330	0.00	0.08	0.00	0.00	0.00
0300	0.00	0.00	0.08	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.24	0.04	0.00
0030	0.00	0.00	0.08	0.20	0.08
7/23/92					
2400	0.51	0.00	0.00	0.24	0.47
2330	0.47	0.00	0.00	0.00	0.16
2300	0.31	0.00	0.00	0.00	0.04
2230	0.00	0.00	0.00	0.00	0.04
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	2.36	3.78	2.87	2.20	2.83
Tr(yrs)	20	>100	30	10	25

Thomas @ 48TH ST. 13 hrs.

Maryvale Muni Golf 7 hrs.

City of Glendale 12.5 hrs

Missouri @ 16TH ST. 11.5 hrs

Paradise Valley C.C. 12.5 hrs

Maricopa County ALERT System

Sensor #	6300	1550	1540	1510	3750
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in

Group Name Date Time
 CCS5: ACDC 7/28/92 1039

7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00
1030	0.08	0.00	0.00	0.00	0.04
1000	0.04	0.08	0.08	0.00	0.08
0930	0.08	0.16	0.04	0.00	0.00
0900	0.04	0.00	0.04	0.00	0.08
0830	0.04	0.04	0.00	0.00	0.00
0800	0.04	0.04	0.04	0.00	0.04
0730	0.04	0.00	0.00	0.00	0.00
0700	0.00	0.08	0.04	0.00	0.04
0630	0.04	0.00	0.04	0.00	0.04
0600	0.08	0.04	0.04	0.00	0.00
0530	0.12	0.04	0.31	0.20	0.04
0500	0.20	0.43	0.12	0.39	0.59
0430	0.71	0.87	0.28	0.31	0.59
0400	0.31	0.04	0.12	0.00	0.04
0330	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.04	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.04	0.00	0.00
0100	0.04	0.00	0.12	0.00	0.00
0030	0.00	0.00	0.20	0.00	0.00

Dreamy Draw 11 hrs

Cave Creek @ Cactus 8 hrs

ACDC @ 43RD AVE. 10 hrs

ACDC @ 67TH AVE. 1.5 hrs

Greenway @ 32nd Ave. 7 hrs

7/23/92					
2400	0.08	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00

TOTALS: 1.93 1.85 1.50 0.91 1.57

Tr(yrs) 6 10 3 4

Maricopa County ALERT System

Sensor #	6620	6410	2510	6430	6440	6450
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
Date	7/24/92				7/28/92	1055
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.04	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.04	0.04	0.00	0.00	0.00	0.04
1000	0.08	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.04	0.00
0900	0.04	0.00	0.00	0.00	0.00	0.08
0830	0.00	0.00	0.00	0.04	0.04	0.04
0800	0.00	0.00	0.00	0.00	0.12	0.12
0730	0.00	0.12	0.12	0.04	0.12	0.16
0700	0.04	0.04	0.12	0.08	0.08	0.04
0630	0.04	0.04	0.00	0.04	0.00	0.00
0600	0.00	0.00	0.04	0.00	0.00	0.00
0530	0.08	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.04	0.00
0400	0.00	0.08	0.00	0.04	0.00	0.00
0330	0.08	0.00	0.00	0.00	0.00	0.00
0300	0.16	0.00	0.00	0.00	0.00	0.04
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.04	0.00	0.00	0.04	0.04
0100	0.00	0.00	0.00	0.12	0.04	0.20
0030	0.00	0.00	0.04	0.00	0.12	0.00
7/23/92						
2400	0.00	0.24	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.08	0.24	0.00	0.00
2300	0.00	0.00	0.16	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.55	0.59	0.59	0.59	0.63	0.75

Cave Buttes Dam 8 hrs.

Cave Creek @ Cave Creek 11 hrs.

Grapevine Wash ~ 9 hrs.

Carefree Ranch 9 1/2 hrs

Humboldt Mtn. 9.5 hrs

Seven Springs 10 hrs

Maricopa County ALERT System
 Group Name Date Time
 GQC1: South Mtn. 7/28/92 1056

Sensor #	6500	6510	6520	6530	6540	6550
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.04	0.04	0.04	0.00	0.00	0.04
1000	0.04	0.04	0.04	0.00	0.00	0.16
0930	0.00	0.04	0.08	0.00	0.04	0.16
0900	0.04	0.00	0.00	0.00	0.00	0.00
0830	0.04	0.00	0.04	0.04	0.08	0.00
0800	0.08	0.00	0.00	0.00	0.00	0.04
0730	0.04	0.04	0.08	0.00	0.00	0.00
0700	0.08	0.08	0.08	0.00	0.04	0.24
0630	0.08	0.16	0.12	0.00	0.08	0.00
0600	0.08	0.08	0.08	0.00	0.12	0.00
0530	0.04	0.00	0.08	0.00	0.04	0.08
0500	0.08	0.04	0.12	0.00	0.12	0.08
0430	0.00	0.04	0.20	0.00	0.16	0.04
0400	0.20	0.08	0.43	0.00	0.24	0.00
0330	0.00	0.00	0.08	0.04	0.28	0.00
0300	0.00	0.00	0.00	0.00	0.04	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.04	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.12	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.87	0.63	1.54	0.08?	1.22	0.83

Guadalupe FRS 9 hrs.

South Mtn. Park 7 hrs

Carriage Lane Park 9 hrs

Pima Wash

Mesa Tower 7 hrs

South Mountain West 6.5 hrs

Maricopa County ALERT System

Sensor #	6565	5650	5660	6610	6625	5625	5635
StatType	dif	dif	dif	dif	dif	dif	dif
Data Type	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
Date	7/24/92						
Time	1057						
Group Name	GQC2: EMF						
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.04	0.00	0.00	0.04	0.00	0.04	0.04
0930	0.04	0.00	0.00	0.00	0.00	0.04	0.00
0900	0.00	0.00	0.00	0.08	0.00	0.04	0.04
0830	0.00	0.04	0.20	0.04	0.00	0.12	0.12
0800	0.00	0.04	0.04	0.04	0.08	0.08	0.12
0730	0.00	0.04	0.12	0.12	0.16	0.12	0.04
0700	0.00	0.20	0.00	0.35	0.16	0.12	0.04
0630	0.12	0.31	0.12	0.39	0.04	0.04	0.08
0600	0.16	0.04	0.04	0.04	0.08	0.08	0.16
0530	0.04	0.04	0.20	0.39	0.00	0.04	0.04
0500	0.12	0.00	0.16	0.04	0.00	0.04	0.04
0430	0.00	0.04	0.04	0.08	0.00	0.04	0.00
0400	0.00	0.00	0.12	0.35	0.00	0.00	0.00
0330	0.00	0.00	0.08	0.00	0.31	0.08	0.04
0300	0.00	0.08	0.35	0.04	0.04	0.00	0.00
0230	0.00	0.00	0.28	0.16	0.00	0.04	0.00
0200	0.20	0.08	0.47	0.00	0.08	0.00	0.00
0130	0.16	0.08	0.04	0.00	0.00	0.00	0.00
0100	0.35	0.08	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.04	0.00	0.00	0.00	0.00	0.00
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.22	1.10	2.32	2.05	1.02	0.79	0.79

Tr(urs)

Maricopa County ALERT System

Sensor #	6670	5610	5700	6715	5600	5605
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
Date	7/28/92					
Time	1057					
Group Name	GQC3: E. Valley Structures					
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.04
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.08	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.04	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.04	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.04	0.04	0.04	0.04	0.12	0.08
0830	0.04	0.16	0.12	0.12	0.04	0.08
0800	0.12	0.00	0.16	0.20	0.08	0.08
0730	0.12	0.08	0.20	0.16	0.12	0.12
0700	0.08	0.12	0.16	0.16	0.08	0.08
0630	0.04	0.12	0.24	0.08	0.04	0.04
0600	0.04	0.12	0.16	0.08	0.00	0.00
0530	0.12	0.00	0.04	0.00	0.00	0.00
0500	0.00	0.00	0.04	0.00	0.00	0.00
0430	0.00	0.00	0.04	0.00	0.00	0.00
0400	0.04	0.00	0.08	0.00	0.00	0.04
0330	0.08	0.12	0.00	0.00	0.12	0.51
0300	0.12	0.35	0.00	0.00	0.04	0.00
0230	0.00	0.31	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.04	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.87	1.50	1.34	0.83	0.67	1.10

Apache FRS 13 hrs

Vineyard FRS 11 hrs

Rittenhouse FRS 11 hrs

Magma FRS 5 1/2 hrs

Rittenhouse 1 8 hrs

Kings Ranch 11.5 hrs

Maricopa County ALERT System
 Group Name Date Time
 Waterman Wash 7/28/92 1058

Sensor #	6800	1630	6840	2820	6880	6900	6850
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	
1530	0.00	0.00	0.00	0.00	0.00	0.00	
1500	0.00	0.00	0.00	0.00	0.00	0.00	
1430	0.00	0.00	0.00	0.00	0.00	0.00	
1400	0.00	0.00	0.00	0.00	0.00	0.00	
1330	0.00	0.00	0.00	0.00	0.00	0.00	
1300	0.00	0.00	0.00	0.00	0.00	0.00	
1230	0.00	0.00	0.00	0.00	0.00	0.00	
1200	0.00	0.00	0.00	0.00	0.00	0.00	
1130	0.00	0.00	0.00	0.00	0.00	0.00	
1100	0.00	0.00	0.00	0.00	0.00	0.00	
1030	0.00	0.00	0.00	0.00	0.00	0.00	
1000	0.00	0.00	0.00	0.00	0.00	0.00	
0930	0.00	0.00	0.00	0.00	0.00	0.00	
0900	0.00	0.00	0.00	0.00	0.00	0.00	
0830	0.00	0.00	0.00	0.00	0.00	0.00	
0800	0.00	0.00	0.00	0.00	0.00	0.00	
0730	0.00	0.00	0.00	0.00	0.00	0.00	
0700	0.00	0.00	0.00	0.00	0.00	0.00	
0630	0.00	0.00	0.00	0.00	0.00	0.00	
0600	0.00	0.00	0.00	0.00	0.00	0.00	
0530	0.00	0.00	0.00	0.00	0.00	0.00	
0500	0.00	0.00	0.00	0.00	0.00	0.00	
0430	0.00	0.00	0.00	0.00	0.00	0.00	
0400	0.00	0.00	0.00	0.00	0.00	0.00	
0330	0.00	0.00	0.00	0.00	0.00	0.00	
0300	0.00	0.00	0.00	0.00	0.00	0.00	
0230	0.00	0.00	0.00	0.00	0.00	0.00	
0200	0.00	0.00	0.00	0.00	0.00	0.00	
0130	0.00	0.00	0.00	0.00	0.00	0.00	
0100	0.00	0.00	0.00	0.00	0.00	0.00	
0030	0.00	0.00	0.00	0.00	0.00	0.00	
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00	0.00	
2330	0.00	0.00	0.00	0.00	0.00	0.00	
2300	0.00	0.00	0.00	0.00	0.00	0.00	
2230	0.00	0.00	0.00	0.00	0.00	0.00	
2200	0.00	0.00	0.00	0.00	0.00	0.00	
2130	0.00	0.00	0.00	0.00	0.00	0.00	
2100	0.00	0.00	0.00	0.00	0.00	0.00	
2030	0.04	0.00	0.00	0.00	0.00	0.00	
2000	0.00	0.00	0.00	0.00	0.00	0.00	
1930	0.00	0.00	0.00	0.00	0.00	0.00	
1900	0.00	0.00	0.00	0.00	0.00	0.00	
1830	0.00	0.00	0.00	0.00	0.00	0.00	
1800	0.00	0.00	0.00	0.00	0.00	0.00	
1730	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS:	0.08	0.04	0.04	1.97	0.00	0.00	

Gila e St. 85 8 hrs

White Tanks 4 .5 hr

Estrella Park .5 hr

Holly Acres 14.5 hr

Waterman Wash

Upper Waterman

Gila @ Estrella Pkwy.

NOT YET INSTALLED

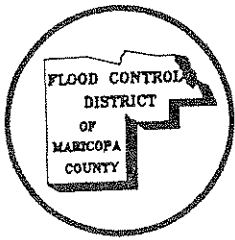
Sensor #	6920	6940	6960	6980
StatType	dif	dif	dif	dif
DataType	precip	precip	precip	precip
Units	in	in	in	in
7/24/92				
1600	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00
1430	0.00	0.08	0.00	0.00
1400	0.00	0.08	0.00	0.00
1330	0.00	0.00	0.00	0.00
1300	0.00	0.04	0.00	0.00
1230	0.00	0.12	0.00	0.00
1200	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.04
1030	0.00	0.00	0.00	0.04
1000	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00
0600	0.00	0.04	0.00	0.00
0530	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.04
7/23/92				
2400	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.12
2030	0.00	0.00	0.00	0.04
2000	0.00	0.00	0.00	0.16
1930	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.35	0.00	0.43

Saucedo Wash

Sand Tanks Wash 9 hrs

Bender Wash

Vekol Wash 15.5 hrs.



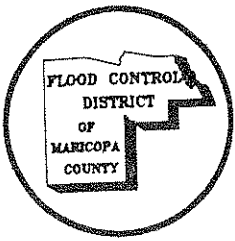
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

PROJECT STORM REPORT July 23-24, 1992 PAGE _____ OF _____
DETAIL APPENDIX C COMPUTED _____ DATE _____
CHECKED BY _____ DATE _____

FCD RAINFALL OBSERVER TOTALS

<u>Amount (in)</u>	<u>Closest Major Intersection</u>
1.03	40TH ST. / Baseline
2.11	91ST Ave / McDowell
1.58	75TH Ave. / Camelback
1.80	Elliot / Alma School
1.96	Cactus / 83RD Ave
6.00	27TH Ave. / Camelback
0.79	99TH Ave / Camelback
2.84	24TH ST. / McDowell
3.80	7TH Ave / McDowell
2.82	7TH ST / McDowell
2.63	Thomas / 32nd ST.
3.34	7TH Ave. / Glendale
2.92	24TH ST. / Glendale
3.50	19TH Ave / Encanto
2.38	27TH Ave / Northern
4.20	47TH Ave / Campbell
2.85	47TH Ave / Orangewood
3.10	43RD Ave / Glendale
1.45	35TH Ave / Broadway
2.04	College / Southern
1.95	51ST Ave / Dunlap
1.89	Superstition / Priest
1.60	Pima / Indian Bend
2.05	Pima / Jackrabbit
2.65	Pima / Oak ST.
2.27	47TH Ave / Htn. View
2.25	43RD Ave / Peoria
2.20	ACDC / 35TH Ave
1.63	35TH Ave / Greenway
1.70	51ST Ave / Bell Rd
1.04	Cholla / 63RD Ave.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY



PROJECT _____ PAGE 2 OF _____
 DETAIL _____ COMPUTED _____ DATE _____
 _____ CHECKED BY _____ DATE _____

<u>AMOUNT (in)</u>	<u>Closest Major Intersection</u>
1.91	Bell Rd. / 135 TH Ave.
1.25	CAVE CREEK / Cactus
1.50	32 nd ST. / Shea Blvd.
1.28	56 TH ST. / Sweetwater
2.75	Cactus / 111 TH Ave
2.62	Peoria / 111 TH Ave
1.07	Reems Rd / Greenway
0.55	S. Mtn. Park HQ
0.93	16 TH ST. / Debbins
1.03	40 TH ST / Warner
1.83	university / Stapely
0.58	Indian School / 107 TH Ave.
3.37	67 TH Ave. / Indian School