

Skunk Creek at Dixileta Dr., photo courtesy of ABC 15 News

Flood Control District of Maricopa County

Engineering Division, Flood Warning Branch

Storm Report : August 19, 2014



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METEOROLOGY

A very unique and uncharacteristic weather pattern for mid-August developed across AZ on August 19th. This event was highlighted by forcing from an approaching upper-level trough co-located over an unstable and moist atmosphere across south-central AZ. Multiple waves of training thunderstorms dropped heavy rainfall across the high terrain and lower deserts of central Maricopa County over a 12-hr period leading to a widespread flooding event.

Synopsis:

The synoptic setup on the morning of the event is shown in below in Figure 1. In the upper levels, a weakening Monsoon ridge can be seen centered over southern NM/west TX. Further to the west, an unseasonably strong upper-level trough was digging south off the coast of central CA. Additional inspection of the 500mb and 300mb maps also reveals a shortwave disturbance rotating around the base of the upper-level trough across the Lower Colorado River Valley into western and central portions of AZ. Forcing from this feature served as a catalyst to help initiate thunderstorms during the early morning hours of the event. Looking at the mid-levels, strong southwesterly flow was evident in both the 700mb and 850mb maps along with a distinct moisture axis located along the CA/AZ border. Surface moisture values were unseasonably high with surface dewpoints running in the upper 60s to low 70s across much of southern AZ. Precipitable water values were reported in the 1.87”-2.07” range through the morning or 1.75 times higher than normal for mid-August (NWS PHX). [Water vapor imagery](#) (courtesy of the NWS PHX) on the morning of the event depicted the aforementioned large scale features and distribution of moisture around the Desert Southwest.

The atmospheric profile over Phoenix during the early morning hours was highly unstable as shown in the 12Z (5:00am MST) Phoenix sounding (Figure 2, below). Thermodynamic variables/indices of note include: the high CAPE/low CIN profile, negative lifted indices and highly elevated moisture variables. The wind profile was characterized by favorable vertical and directional wind shear, i.e. increasing magnitude and veering with height (clockwise turn), which is conducive for organized multi-cell thunderstorm development as opposed to typical Monsoon air-mass thunderstorms. Table 1 (below) shows values from the District’s hourly Convective Quantitative Precipitation Forecast at 5:06am MST. It was generated before the development of the first wave of thunderstorms that traversed the County. Of note, are the rather large 1-hr, 30-min, and 10-min potential rainfall rates throughout the District’s 16 forecast zones. These rain rates were indicative of the storm environment through the remainder of the morning and suggested heavy rainfall capable of widespread flash flooding.

The large-scale setup and atmospheric profile discussed above closely resemble a Type IV transitional severe weather/flooding pattern most often seen during September at the end of the Monsoon season or during the fall months (uncommon for mid-August). One key component to this pattern worth noting again was strong mid and upper level southwesterly flow out ahead of the trough. On the day of the event, southwesterly steering flow provided two key mechanisms for storm enhancement: cell training (storms continuously redevelop over the same area) and orographic upslope enhancement (moist low-level flow is lifted up along the higher terrain areas to fuel developing thunderstorms). Both of these characteristics were observed through radar imagery and are referenced in subsequent sections. More information on severe weather/flooding patterns during the Monsoon season can be found [here](#) or by viewing [Maddox et al. \(1995\)](#).

Storm Summary and Radar Imagery:

The heavy rain that fell across the high terrain and lower deserts of central Maricopa County on August 19th came in approximately three waves roughly spanning a 12-hr period. A radar loop covering most of the event (3:00am-5:00pm MST) can be viewed using the following links (download format: [.avi](#), [.gif](#)). The first wave of storms developed shortly after 5:00am MST west of the Loop 303 corridor and extended southeast into the Sierra Estrella range. Over the next 90 minutes these storms rapidly intensified as they moved northeast into the central Phoenix corridor. Further intensification occurred, aided by orographic lift, over the next hour as storms congealed into a well-organized cluster moving upslope into the higher terrain areas of north Phoenix, New River, Cave Creek, and north Scottsdale. Rainfall rates with this cluster peaked around 1.00"-2.50" per hour ([image](#)). The bulk of this wave moved east into the Verde River Valley by 8:30am MST.

The second wave of thunderstorm activity was already underway by 8:00am. Thunderstorm initiation was occurring to the southwest of US 60/93 corridor from Wickenburg through the Wittmann area. Mid-level steering flow had shifted slightly from southwesterly to the west/southwesterly. This change in the flow created an optimal environment for continuous storm training and further orographic enhancement. Radar imagery (download format: [.avi](#), [.gif](#)) from 8:30am-11:00am MST clearly showed a near steady-state pattern of continuous storms moving up and over the southern reaches of the Bradshaw Mountain range (Wickenburg and Hieroglyphic Mountains) east/northeast into the New River watershed. A secondary line of strong thunderstorms developed shortly after 11:00am MST extending from the Cave Creek Watershed southwest through the I-10 corridor in Glendale. These storms rapidly intensified as they moved east/southeast across the central and east Valley. Rainfall rates along this line peaked around the 0.75"-1.50" range per hour ([image](#)) before storms weakened passing through the Southeast Valley by 2:00pm MST. A radar loop covering the southern half of the second wave can be viewed using the following links (download format: [.avi](#), [.gif](#)).

A third wave of activity brought intermittent heavy rainfall from clusters of storms moving from west to east across the County. The leading edge of this third wave began moving through the Upper Centennial and Wickenburg areas by 2:00pm MST and then passed over New river by 3:00pm MST. Isolated clusters of storms then continued for the next four to six hours moving along the I-10 corridor from Tonopah through Tempe. The most notable round of storms in this wave developed over the White Tank Mountains around 6:00pm. Images of these storms as viewed from the District office can be view [here](#). A Severe Thunderstorm Warning was issued by NWS Phoenix for these storms as they produced 50mph winds near Luke Air Force Based and dropped brief heavy rainfall over the El Mirage, Litchfield Park, Avondale and Laveen areas between 6:00pm-8:00pm MST.

4-Panel 12Z (5:00 AM) Synoptic Setup 08/19/2014

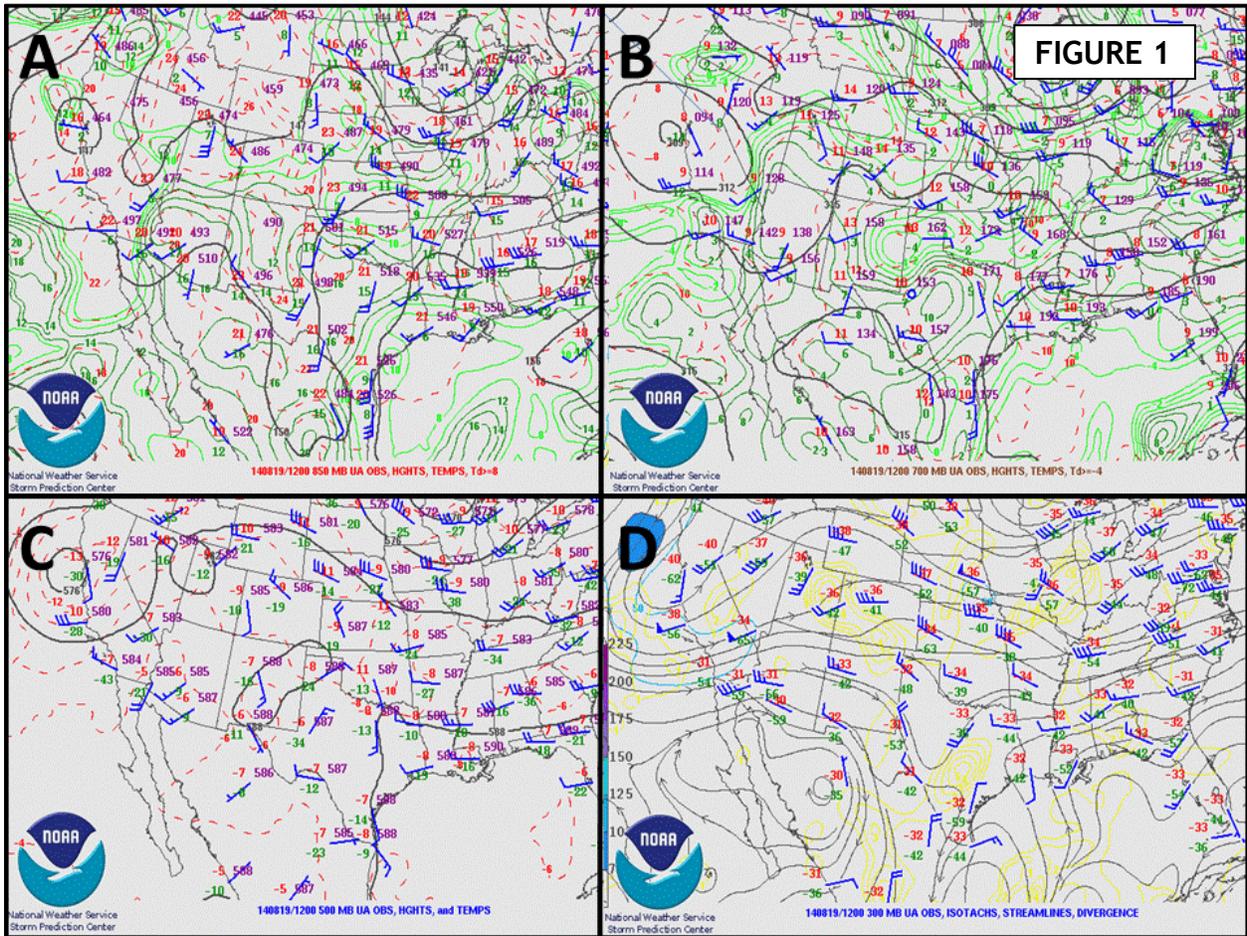


Figure 1 depicts the synoptic setup at 12Z (5:00 PM MST) on August 19th 2014. The images are from the Storm Prediction Center upper air maps archive. **A)** is the 850mb map: the black lines are heights, the red dashed lines are isotherms, the green lines are isodrosotherms, blue barbs are wind speed, and station observations are plotted at each available location. **B)** is the 700mb map: variables colored the same as A. **C)** is the 500mb map: variables colored the same as in A. **D)** is the 300mb map: the black lines are streamlines, the yellow lines are divergence, and station observations are plotted at each available location.

12Z (5:00 AM) KPSR Sounding For 08/19/2014

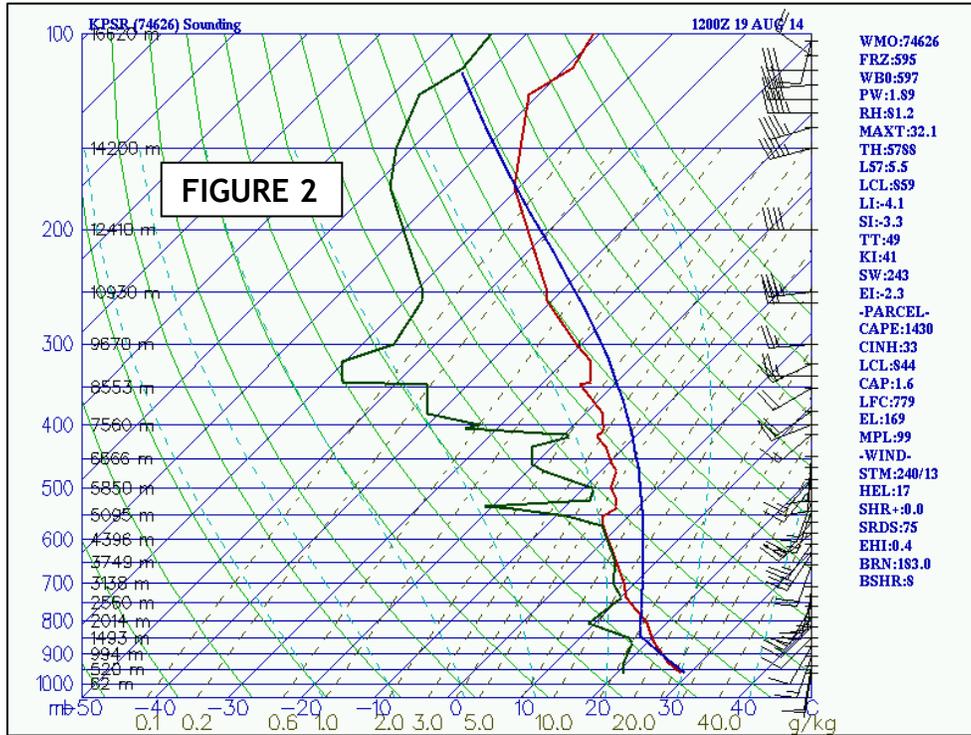


Figure 2: Skew-T/log P (vertical profile of the atmosphere above Phoenix) diagram at 5:00am MST on August, 19th, 2014. The vertical axis is pressure in (hPa) and the horizontal axis is temperature in (°C). The thick solid red line is the temperature profile and the thick solid blue line is the parcel lapse rate. The thick solid green line is the moisture profile. The vertical axis on the right displays the wind speed and direction at each level in knots. Green lines sloping from upper left to lower right are constant potential temperature (°K). Thin blue lines sloping from right to left are isotherms (°C). Dashed thin brown lines are constant mixing ratio (g/Kg). Light dashed blue lines are moist adiabats (°K).

TABLE I: Hourly Quantitative Precipitation Forecast, Valid 5:06am MST 08/19/14							
MSP Forecast Zone	Convective QPF (in)			Antecedent Zone Avg. Rainfall (in)			
	1-hr	30-min	10-min	3-hr	1-day	2-day	3-day
Gila Bend	2.31	1.62	0.97	0.04	0.04	0.13	0.13
Palo Verde	1.97	1.38	0.83	0.00	0.00	0.09	0.09
Rainbow Valley	2.56	1.79	1.07	0.00	0.00	0.11	0.11
West Valley	2.93	2.05	1.23	0.00	0.00	0.10	0.10
Northwest Valley	2.94	2.06	1.23	0.00	0.03	0.38	0.36
Upper Centennial	1.84	1.29	0.77	0.03	0.21	0.29	0.29
Wickenburg	1.84	1.29	0.77	0.05	0.22	0.22	0.22
New River/Cave Creek	2.13	1.49	0.89	0.01	0.01	0.17	0.17
Sycamore Creek	1.20	0.84	0.51	0.02	0.02	0.39	0.39
Phoenix North	2.46	1.72	1.03	0.00	0.01	0.09	0.09
Phoenix South	2.55	1.78	1.07	0.00	0.00	0.01	0.01
Scottsdale North	2.40	1.68	1.01	0.00	0.00	0.13	0.13
Scottsdale South	2.20	1.54	0.92	0.00	0.00	0.05	0.05
Southeast Valley	2.51	1.76	1.06	0.00	0.00	0.06	0.06
Lower Salt River Lakes	2.60	1.82	1.09	0.00	0.00	0.47	0.47
Superstition	2.60	1.82	1.09	0.00	0.00	0.14	0.14

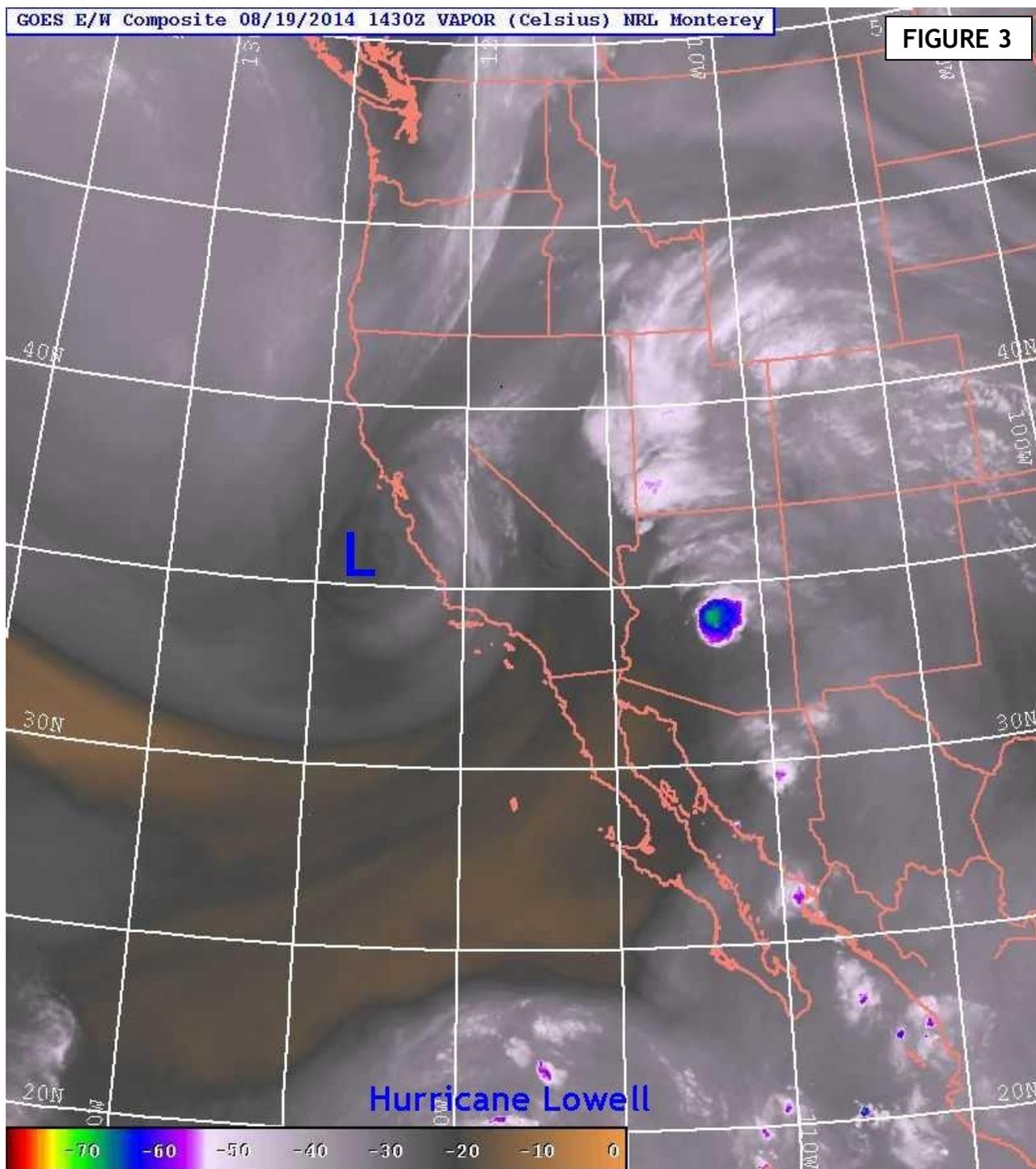


Figure 3: A water-vapor satellite image courtesy of the US Naval Research Laboratory, shows three features of note: 1) cloud tops of the storm over central AZ approached -70°C , 2) the position of the approaching low-pressure system (L), and 3) the position and influence of Hurricane Lowell as an additional moisture source. The image was taken August 19, 2014 at 7:30 AM MST.

PRECIPITATION

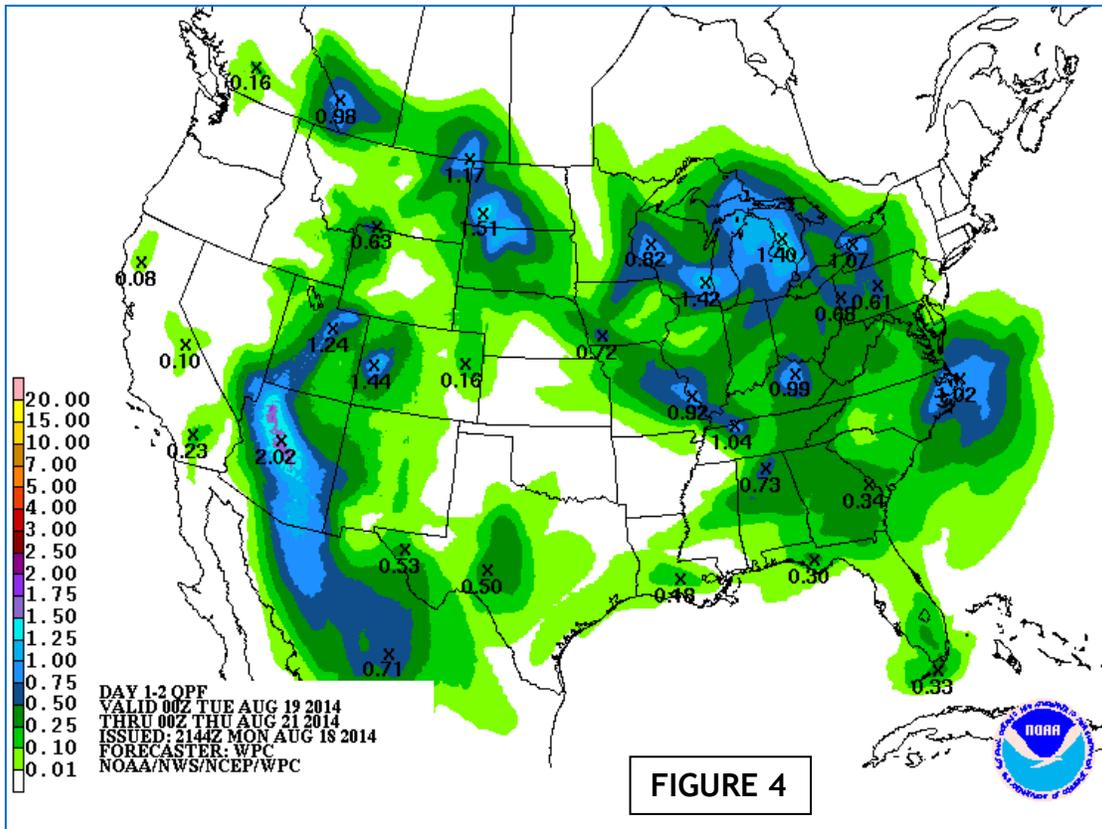
Summary Statistics:

Total FCDMC Automated Rain Gages Installed: 313
 Number of Rain Gages which failed to operate during the storm: 1 (#5640)
 Overall Percent Operational Automated Rain Gages for the Storm: 99.7%

For August 19th, 2014:

Number of FCDMC ALERT gages recording more than:

5.00 inches of precipitation	3
4.00 inches.....	8
3.00 inches.....	17
2.00 inches.....	37
1.00 inch	109
0.50 inch	156
0.10 inch	235



This 24-48 hour rainfall forecast was issued by the National Weather Service’s National Center for Environmental Prediction (NCEP) on August 18th at 2:44 PM MST for the period Monday Aug. 18th 5:00 PM MST through Wednesday Aug. 20th 5:00 PM MST. Although underestimating the rainfall in parts of central AZ, it alerted many emergency responders and the media to the severity of the expected rainfall in the coming days.

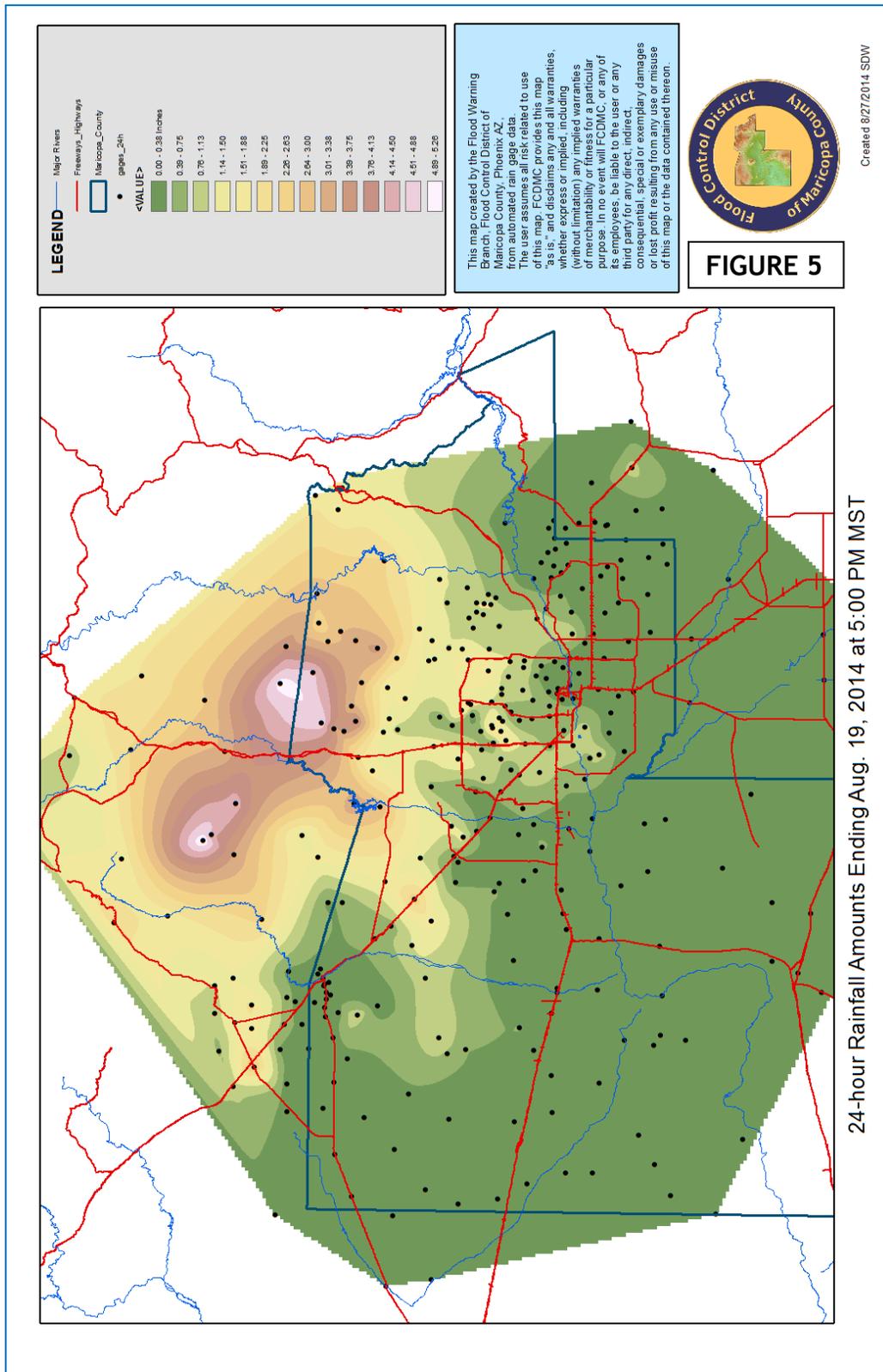
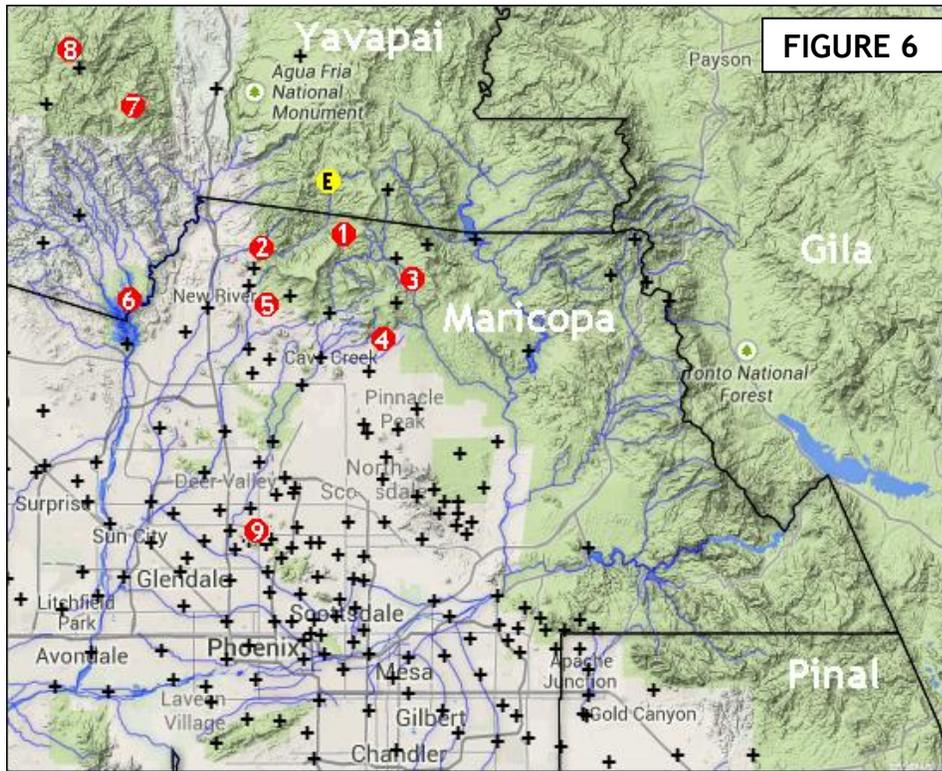


Figure 5 above was created with ESRI ARCMAP® using 24-hour rainfall totals from FCDMC ALERT gages and the “nearest neighbor” method to interpolate amounts between the gages. The estimated rainfall for Cooks Mesa, #5640, is included with the recorded gage amounts. The contours illustrate the effects of orographic lifting in this area of AZ when storms moving generally west to east from the deserts to the foothills dropping larger amounts of precipitation as they move upslope.

RAINFALL STATISTICS - NORTHERN MARICOPA COUNTY



- 1) New River Mesa #4970
- 2) New River Fire #5635
- 3) Camp Creek #5955
- 4) Carefree Ranch # 4930
- 5) Cline Creek #5580
- 6) Lake Pleasant North #5660
- 7) Horsethief Basin #5700
- 8) Towers Mtn. #5340
- 9) Phoenix Dam #7 #4850

As shown in Figure 6 above, nine gages are chosen for detailed frequency analysis. These were chosen to represent the watersheds hit hardest by the storm, with the exception of #9 in the Upper AZ Canal Diversion Channel Watershed. In Tables II-X below, peak rainfall amounts for durations of 15 minutes to 24 hours were calculated for this storm.

Also in Figure 6 is a yellow marker with a black “E”. This is the location of an FCD ALERT gage named “Cooks Mesa”, #5640. Cooks Mesa is at the very top of the New River watershed, and consistently records the highest rainfall amounts in the watershed during storms of this type. This is the only FCD rain gage that failed to operate during the storm. It is marked with an “E” for estimated, because data for this storm was entered into the ALERT database from the distribution for gage 4970 and an increase in depth of 5% - typical of previous storms. The effect of its missing data can be seen in [Appendix A](#), Figure a), which was generated with a real-time data feed. Figure b in Appendix A adds evidence to past experience by showing rainfall estimates in the area unaffected by gage adjustment.

Table II below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [New River Mesa](#) rain gage (4970). This gage is near the boundary between the Upper Cave Creek and Upper New River watersheds. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of slightly more than 500 years, although nearly all of that rain fell in a 4-hour period.



**TABLE II - Precipitation Frequency Estimates (in)
for New River Mesa # 4970; Elev. 3,960 ft.**

AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.57	0.77	0.95	1.10	1.18	1.39	1.69	2.08
5		0.83	1.12	1.39	1.57	1.66	1.89	2.27	2.90
10		1.02	1.37	1.70	1.91	2.00	2.24	2.67	3.48
25		1.26	1.70	2.10	2.36	2.46	2.72	3.18	4.26
50		1.45	1.95	2.41	2.71	2.82	3.09	3.57	4.89
100		1.65	2.22	2.75	3.09	3.22	3.49	3.99	5.56
200		1.85	2.49	3.09	3.47	3.63	3.90	4.39	6.25
500		2.14	2.87	3.56	4.02	4.21	4.46	4.94	7.23
1000		2.37	3.19	3.94	4.46	4.69	4.91	5.40	8.01
Rain	(in)	1.26	1.65	2.24	2.64	2.72	4.49	4.80	4.80
AEP	(years)	25	22	34	44	41	524	396	45

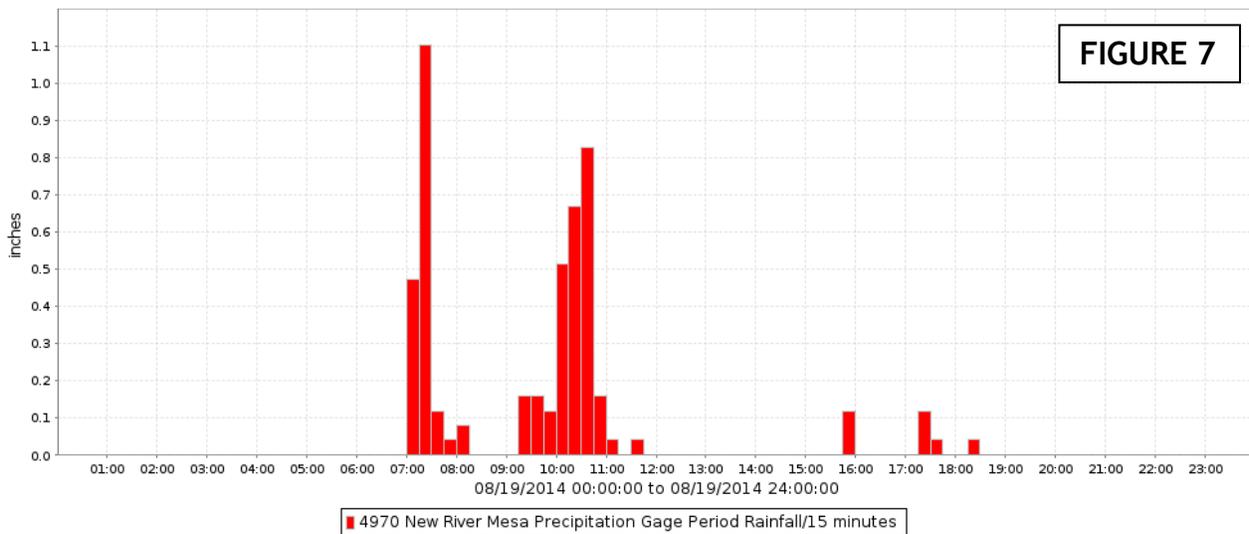


Table III below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [New River Fire](#) rain gage (5635). This gage is in the Upper New River watershed. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of slightly less than 900 years, although nearly all of that rain fell in a 5-hour period.



**TABLE III - Precipitation Frequency Estimates (in)
for New River Fire # 5635; Elev. 2,485 ft.**

AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.55	0.75	0.92	1.07	1.15	1.36	1.66	1.99
5		0.81	1.09	1.35	1.54	1.62	1.86	2.24	2.75
10		0.99	1.33	1.64	1.87	1.96	2.21	2.63	3.28
25		1.22	1.64	2.03	2.30	2.40	2.67	3.15	3.99
50		1.40	1.88	2.33	2.64	2.76	3.03	3.54	4.55
100		1.59	2.14	2.65	3.00	3.14	3.42	3.94	5.15
200		1.78	2.40	2.97	3.36	3.54	3.81	4.34	5.75
500		2.04	2.75	3.40	3.86	4.09	4.35	4.88	6.59
1000		2.25	3.03	3.75	4.26	4.55	4.79	5.32	7.26
Rain	(in)	0.75	1.30	2.09	2.68	2.91	4.72	5.16	5.16
AEP	(years)	4	9	29	54	66	896	777	103

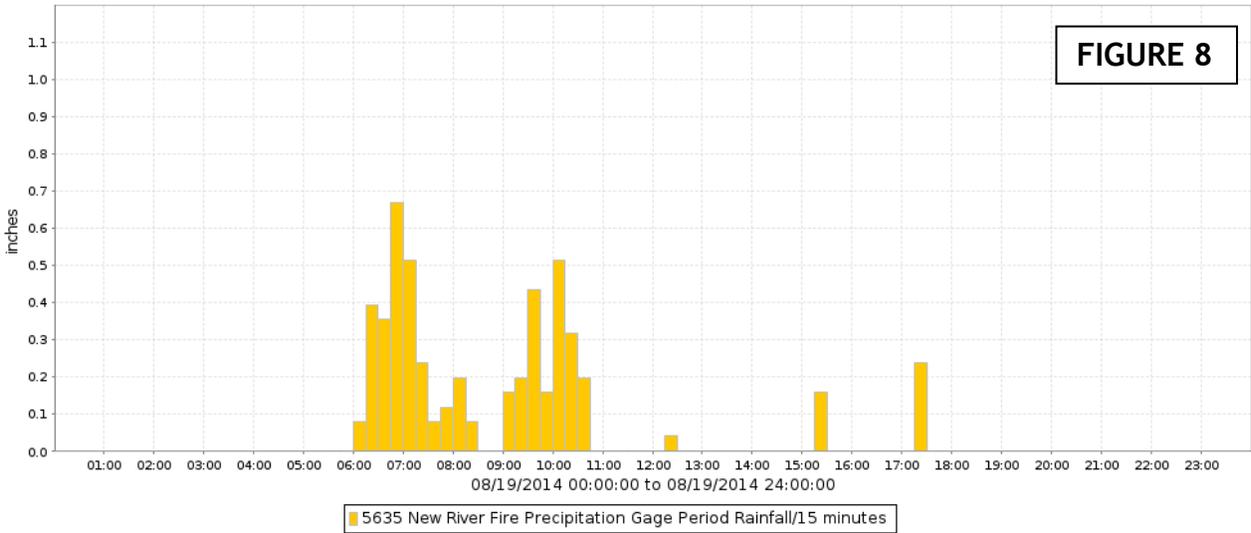


Table IV below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Camp Creek](#) rain gage (5955). This gage is at the very top of the Camp Creek watershed and the NE boundary of the Cave Creek watershed. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of slightly less than 30 years, although nearly all of that rain fell in a 5-hour period.



**TABLE IV - Precipitation Frequency Estimates (in)
for Camp Creek # 5955; Elev. 3,720 ft.**

AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.58	0.77	0.96	1.10	1.18	1.39	1.70	2.27
5		0.84	1.13	1.40	1.57	1.66	1.89	2.29	3.21
10		1.02	1.37	1.70	1.91	1.99	2.24	2.69	3.89
25		1.26	1.69	2.09	2.35	2.45	2.71	3.22	4.82
50		1.44	1.93	2.39	2.68	2.80	3.08	3.62	5.57
100		1.63	2.19	2.71	3.05	3.19	3.47	4.04	6.39
200		1.81	2.44	3.02	3.40	3.58	3.86	4.44	7.24
500		2.07	2.79	3.45	3.90	4.13	4.39	4.99	8.47
1000		2.28	3.07	3.80	4.30	4.58	4.81	5.43	9.47
Rain	(in)	0.91	1.10	1.30	1.34	1.57	2.76	2.99	2.99
AEP	(years)	7	5	4	3	4	28	17	4

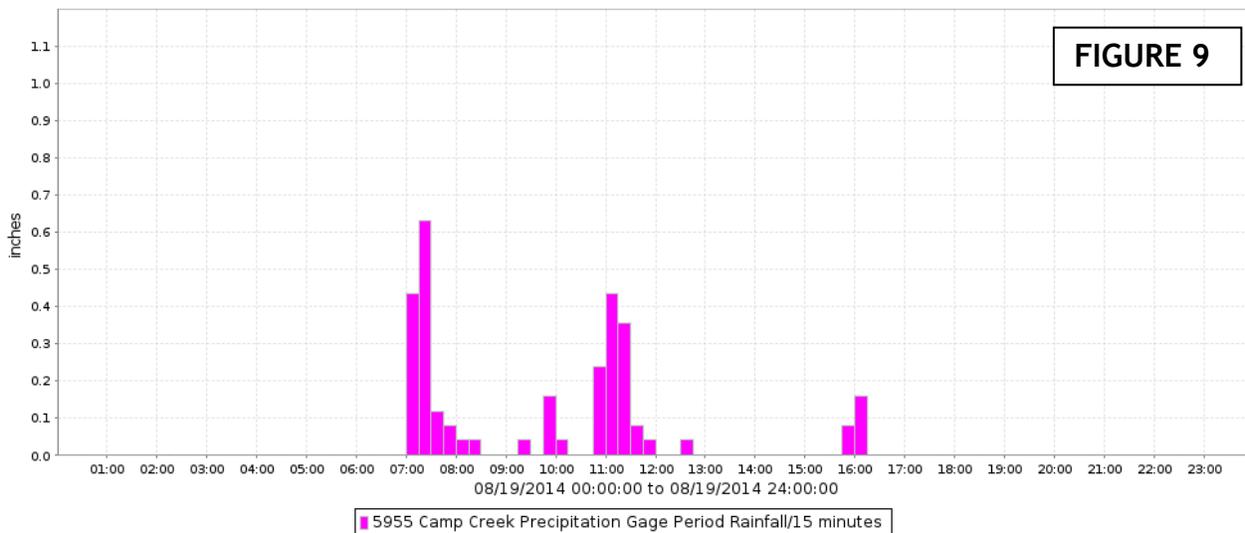


Table V below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Carefree Ranch](#) rain gage (4930). This gage is in the middle of the Upper Cave Creek watershed. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of slightly more than 100 years, although nearly all of that rain fell in a 5-hour period. Also of note is the 2.28 inches in 30 minutes - the highest 30-minute total recorded at any gage during this storm.



**TABLE V - Precipitation Frequency Estimates (in)
for Carefree Ranch # 4930; Elev. 2,960 ft.**

AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.56	0.76	0.94	1.08	1.15	1.35	1.63	1.93
5		0.82	1.10	1.37	1.55	1.62	1.84	2.21	2.73
10		0.96	1.34	1.66	1.87	1.95	2.18	2.60	3.31
25		1.22	1.64	2.03	2.29	2.39	2.64	3.12	4.11
50		1.38	1.86	2.31	2.61	2.73	2.99	3.50	4.76
100		1.56	2.09	2.59	2.94	3.09	3.36	3.91	5.46
200		1.72	2.32	2.87	3.26	3.46	3.72	4.30	6.19
500		1.95	2.62	3.25	3.69	3.96	4.20	4.82	7.24
1000		2.13	2.86	3.55	4.04	4.37	4.58	5.22	8.10
Rain	(in)	1.54	2.28	2.40	2.40	2.40	3.43	3.70	3.70
AEP	(years)	93	177	63	32	26	114	70	16

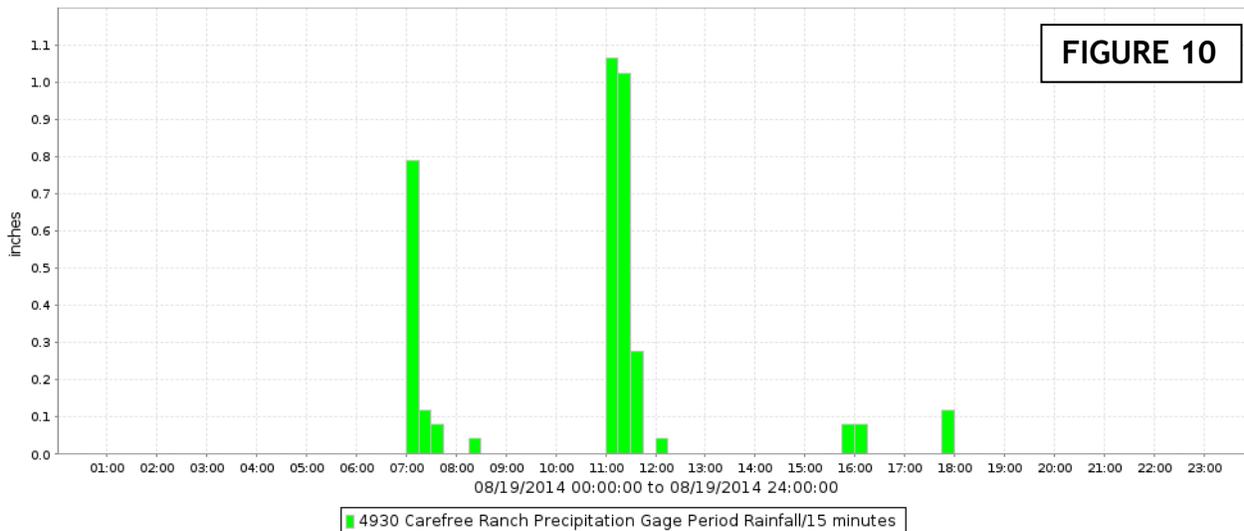


Table VI below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Cline Creek](#) rain gage (5580). This gage is in the Upper Skunk Creek watershed. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of just under 200 years, as did the 12-hour, although a large part of that rain fell in a 5-hour period.



**TABLE VI - Precipitation Frequency Estimates (in)
for Cline Creek # 5580; Elev. 2,170 ft.**

AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.54	0.72	0.89	1.03	1.10	1.28	1.54	1.84
5		0.78	1.05	1.30	1.48	1.56	1.76	2.09	2.56
10		0.95	1.28	1.58	1.80	1.87	2.09	2.46	3.06
25		1.17	1.58	1.95	2.21	2.30	2.53	2.94	3.73
50		1.34	1.80	2.23	2.52	2.63	2.87	3.31	4.26
100		1.51	2.04	2.52	2.85	2.99	3.23	3.69	4.83
200		1.69	2.27	2.81	3.18	3.36	3.59	4.07	5.40
500		1.92	2.59	3.20	3.63	3.87	4.08	4.57	6.21
1000		2.11	2.84	3.52	3.98	4.29	4.47	4.97	6.85
Rain	(in)	1.34	2.01	2.56	2.87	2.99	3.54	4.02	4.06
AEP	(years)	50	92	110	104	100	182	183	39

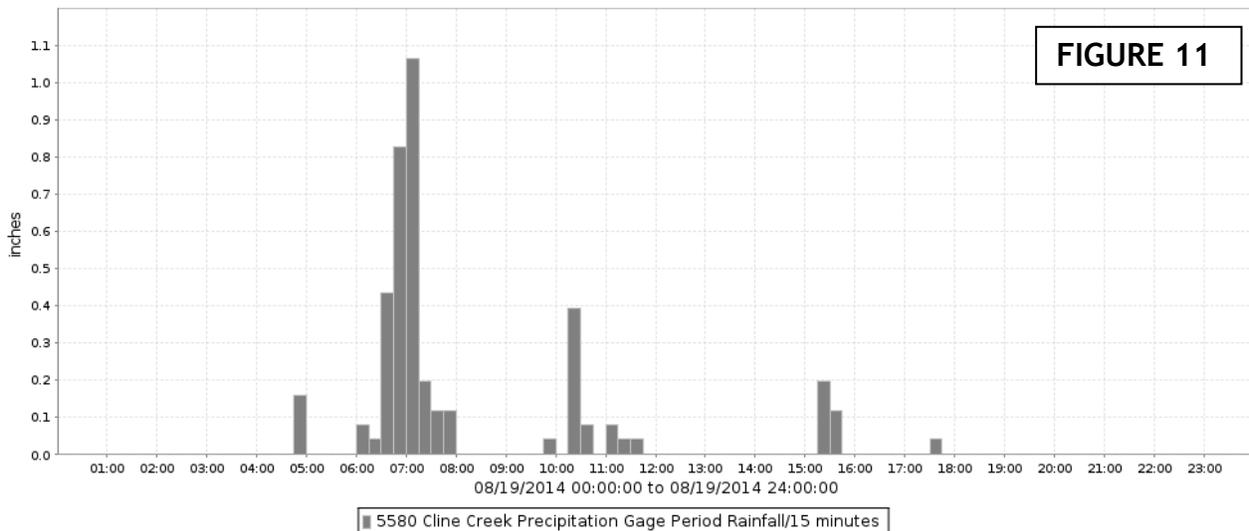


Table VII below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Lake Pleasant North](#) rain gage (5660). This gage is at the bottom of the Upper Agua Fria Watershed. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period near 200 years, as did the 12-hour, although a large part of that rain fell in just a 4 ½ -hour period.



AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.50	0.67	0.83	0.96	1.02	1.19	1.38	1.61
5		0.73	0.98	1.21	1.38	1.45	1.64	1.87	2.23
10		0.88	1.19	1.47	1.68	1.75	1.95	2.21	2.66
25		1.09	1.47	1.82	2.06	2.15	2.36	2.64	3.22
50		1.25	1.69	2.09	2.36	2.46	2.68	2.97	3.66
100		1.42	1.92	2.37	2.67	2.80	3.02	3.31	4.12
200		1.59	2.14	2.65	2.98	3.15	3.36	3.35	4.58
500		1.82	2.45	3.03	3.41	3.63	3.83	4.11	5.22
1000		2.00	2.69	3.33	3.75	4.02	4.21	4.47	5.72
Rain	(in)	0.55	0.75	1.22	1.81	2.40	3.35	3.54	3.62
AEP	(years)	2	3	5	14	44	196	252	47

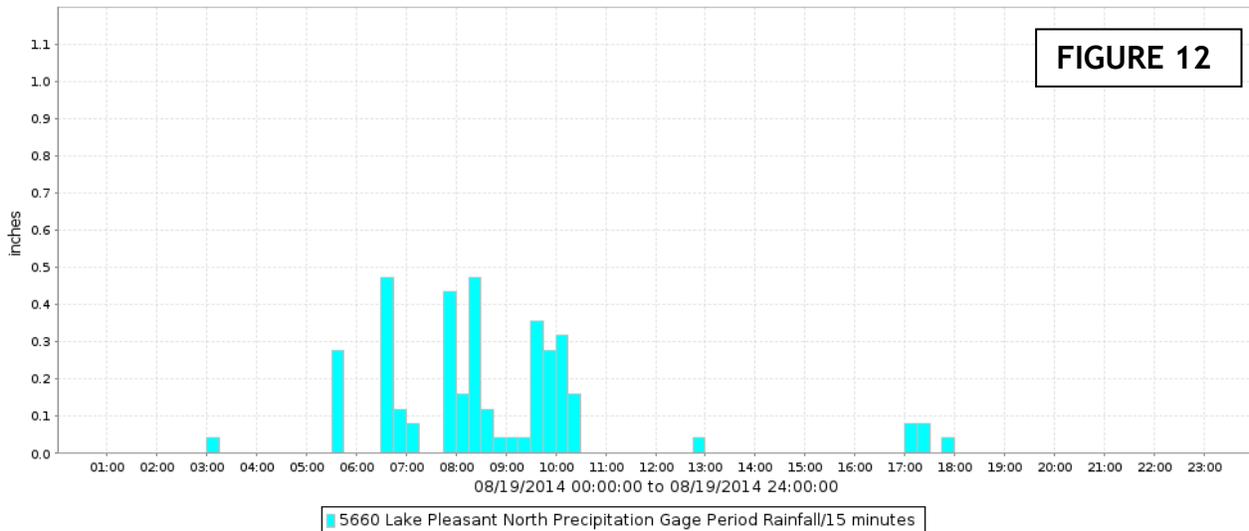


FIGURE 12

Table VIII below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Horsethief Basin](#) rain gage (5700). Runoff from this gage feeds Black Canyon Creek and the Agua Fria River in Yavapai County. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of just over 100 years, and about 60% of that rain fell in a 1-hour period.



AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.64	0.86	1.07	1.23	1.33	1.60	2.00	2.73
5		0.93	1.26	1.56	1.75	1.86	2.16	2.67	3.73
10		1.14	1.53	1.90	2.13	2.24	2.56	3.13	4.42
25		1.41	1.91	2.36	2.64	2.76	3.11	3.73	5.33
50		1.63	2.19	2.71	3.04	3.18	3.54	4.19	6.03
100		1.86	2.50	3.10	3.48	3.63	4.00	4.67	6.78
200		2.09	2.82	3.49	3.93	4.11	4.48	5.15	7.52
500		2.43	3.27	4.04	4.57	4.79	5.14	5.83	8.54
1000		2.70	3.64	4.50	5.10	5.35	5.68	6.34	9.34
Rain	(in)	0.87	1.57	2.36	2.36	2.83	4.02	4.41	4.49
AEP	(years)	4	11	25	15	28	103	69	11

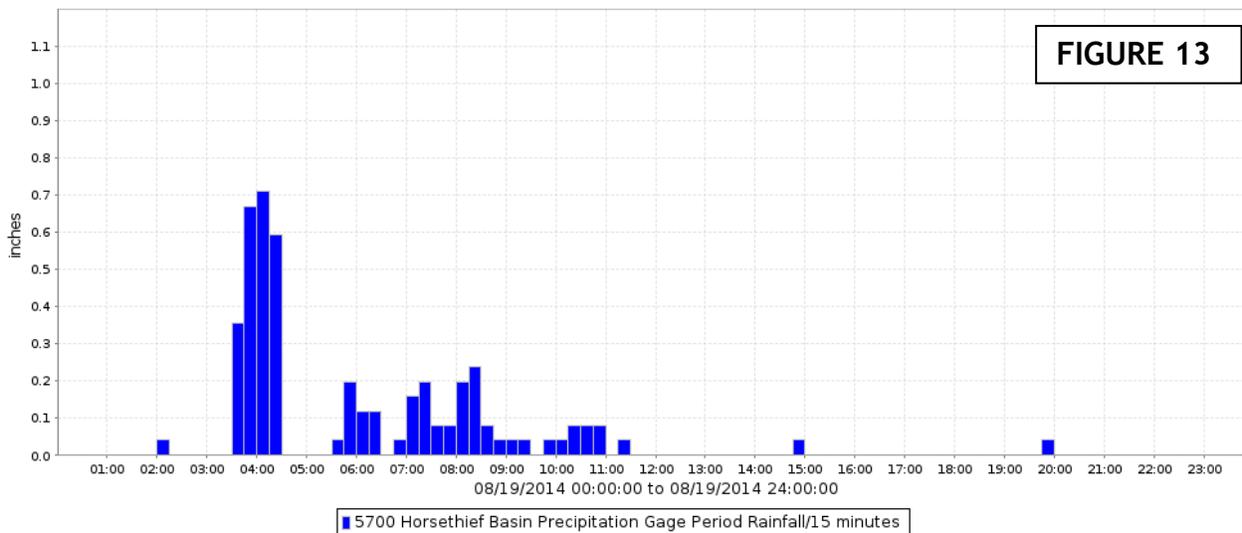


Table IX below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Towers Mountain](#) rain gage (5340). Runoff from this gage feeds Black Canyon Creek and the Agua Fria River in Yavapai County. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of about 160 years.



**TABLE IX - Precipitation Frequency Estimates (in) for
Towers Mountain # 5340; Elev. 7,630 ft.**

AEP (1-in-Y)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2			0.68	0.92	1.14	1.30	1.39	1.66	2.12	3.03
5			1.00	1.34	1.66	1.86	1.95	2.24	2.83	4.13
10			1.22	1.64	2.03	2.26	2.34	2.66	3.32	4.89
25			1.51	2.03	2.51	2.80	2.88	3.23	3.95	5.88
50			1.73	2.33	2.89	3.22	3.32	3.67	4.44	6.65
100			1.97	2.66	3.29	3.68	3.80	4.15	4.95	7.46
200			2.22	2.99	3.70	4.16	4.29	4.64	5.45	8.26
500			2.57	3.46	4.28	4.83	5.00	5.32	6.13	9.35
1000			2.86	3.85	4.76	5.38	5.58	5.88	6.70	10.2
Rain	(in)		0.87	1.26	1.54	1.89	2.44	4.49	5.20	5.35
AEP	(years)		3	4	4	5	12	162	141	15

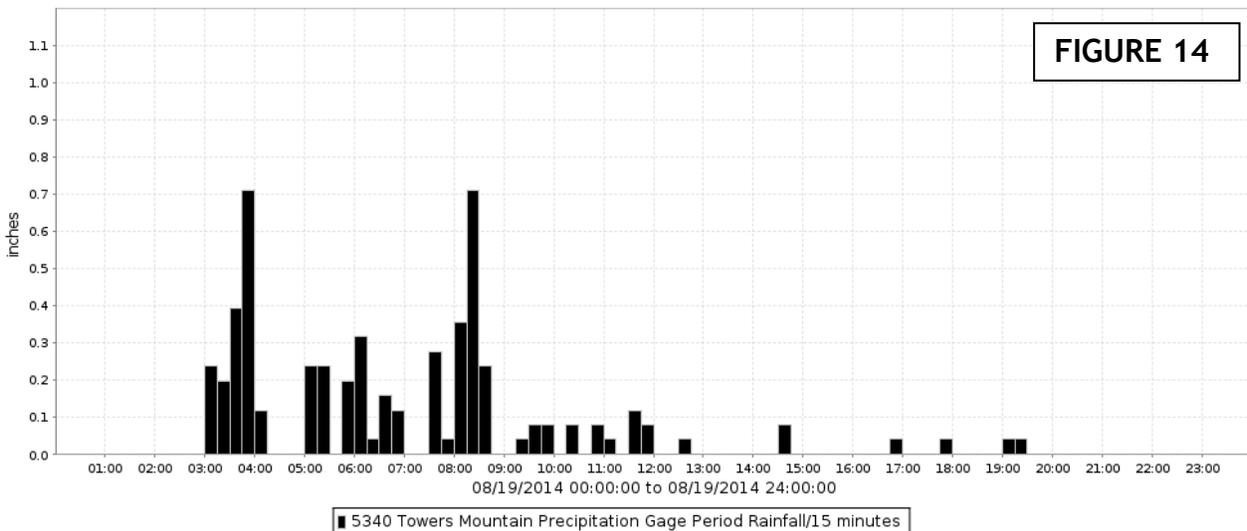
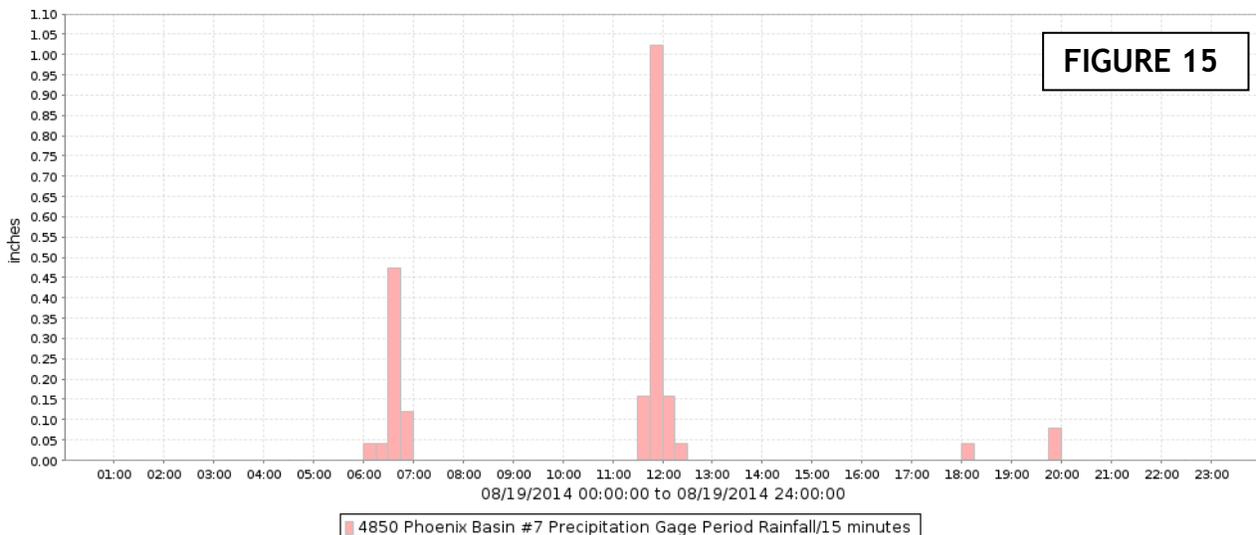


Table X below is the [NOAA Atlas 14](#) Point Precipitation Frequency Estimate Table at the latitude/longitude of the [Phoenix Dam #7](#) rain gage (4850). This gage is in the Upper AZ Canal Diversion Channel watershed. The red row lists the recorded rainfall values from 08/19/2014. The blue row is the interpolated return period in years for each duration from 15 minutes to 24 hours. AEP is “Annual Exceedance Probability”. For this gage, we can surmise that the 6-hour duration rainfall scaled to a return period of about 20 years.



TABLE X - Precipitation Frequency Estimates (in) for Pima Rd. @ Union Hills # 4590; Elev. 1,625 ft.

AEP (1-in-Y)		15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr
2		0.45	0.61	0.76	0.87	0.92	1.08	1.21	1.37
5		0.67	0.90	1.11	1.26	1.30	1.49	1.66	1.92
10		0.81	1.09	1.35	1.52	1.57	1.78	1.96	2.30
25		1.00	1.34	1.66	1.86	1.93	2.15	2.35	2.80
50		1.14	1.53	1.90	2.12	2.21	2.44	2.64	3.20
100		1.28	1.73	2.14	2.39	2.50	2.75	2.95	3.62
200		1.43	1.92	2.38	2.65	2.80	3.05	3.25	4.04
500		1.62	2.18	2.69	3.00	3.22	3.45	3.66	4.62
1000		1.76	2.37	2.94	3.28	3.55	3.78	3.97	5.08
Rain	(in)	1.02	1.30	1.38	1.38	1.38	2.01	2.09	2.17
AEP	(years)	28	22	11	7	6	18	14	8



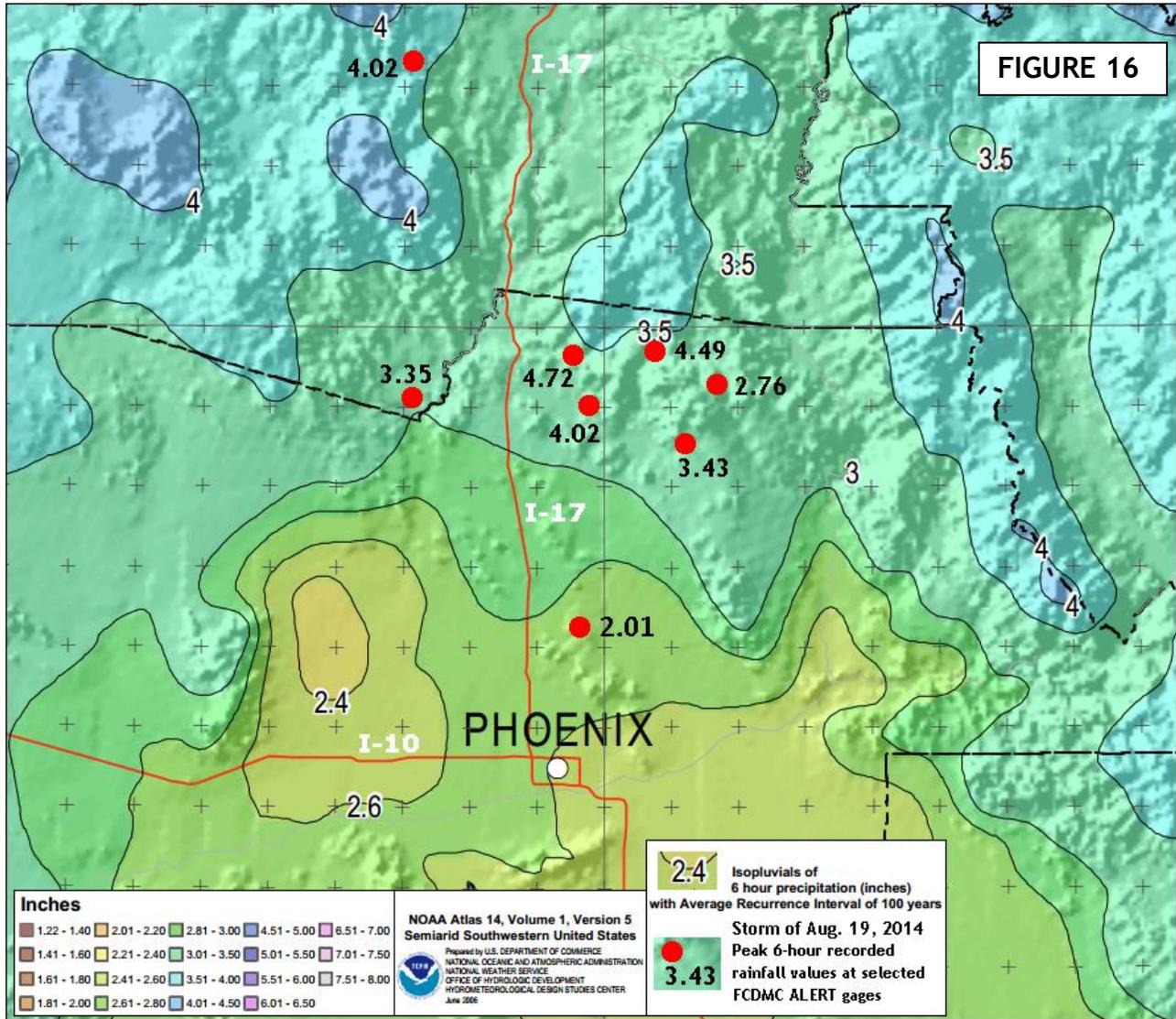


Figure 16 above is a map showing contoured and colored values for the 6-hour, 100-year design rainfall from NOAA Atlas 14, Vol. 1, Version 5. It advises that in north-central Maricopa County the 6-hour, 100-year design rainfall ranges from 3.0 to 3.5 inches. The red dots represent the FCDMC ALERT gage locations from Tables II-X (with the exception of Towers Mountain, which is off the map), and their corresponding peak 6-hour recorded rainfall amounts. As can be seen, several of these gages equaled or exceeded the 100-year frequency amounts.

RUNOFF

Watersheds in the northwestern, northern and northeastern parts of Maricopa County generated the greatest runoff.

Beginning at the upper end of the **New River** Watershed, the FCD New River Fire gage did not record a reliable discharge because it was buried by sediment. High-water marks and a survey of the post-flood cross section suggest a discharge of 32,600 cfs. We can't assign a reasonable return period to this discharge because of the short gage record, but it is by far the largest recorded discharge since the gage was installed in July of 2005. The USGS "New River near Rock Springs, AZ" gage was destroyed by this flood. USGS conducted an indirect measurement survey (IMS) at the gage location and reported a peak discharge of 52,000 cfs. This represents a return period of approximately 320 years interpolating from table values in USGS [StreamStats](#). Further downstream, the USGS conducted another IMS at the New River Elementary School. The result was 39,300 cfs - much higher than the 100-year discharge from the FEMA Flood Insurance Study (FIS) maps at this location of 32,000 cfs. Finally, New River Dam impounded 5,620 acre-feet of water at a stage of 30.38 feet - 12.9% of its emergency spillway capacity.

In the **Skunk Creek** watershed, Skunk Creek near New River recorded a peak discharge of 1,054 cfs representing a return period of 8 years. Cline Creek, the largest tributary to Skunk Creek, had a peak discharge of 5,070 cfs by FCDMC IMS at the gage site - a return period of about 50 years and by far the largest flow recorded at the gage since installation in November of 2001. The USGS conducted an IMS at Cline Creek at New River Road which yielded a peak of 7,200 cfs. The FEMA FIS 100-year discharge at New River Road is 13,747 cfs. Further downstream, Skunk Creek flooded the west-bound approach to Carefree Highway before heading down to Dove Valley Road, where a USGS IMS gave a peak discharge of 18,700 cfs. The FEMA FIS 100-year discharge at Dove Valley Road is approximately 27,000 cfs. Below Dove Valley Road at Dixileta Dr., the flow in Skunk Creek split, with most going down the channel, but some going down the northbound lane of I-17 and some into the CAP Canal. By the time it reached the crossing of I-17, the peak discharge passing the combined FCDMC/USGS gage had dropped to approximately 13,000 cfs - a return period of about 20 years. Finally, Adobe Dam impounded 990 acre-feet of water at a stage of 13.95 feet - 5.3% of its emergency spillway capacity.

Further east in upper **Cave Creek**, the FCDMC gage on Seven Springs Wash measured 1,090 cfs - less than a 2-year event. Discharge picked up further down at the Ashdale Ranger Station, where an FCDMC gage reported a peak of 8,735 cfs. This gage has a short record, but this is the highest recorded discharge since installation in Feb. 2009. Near Spur Cross Road, both the USGS and FCDMC gages failed to operate. An IMS by USGS calculated a peak discharge of 9,240 cfs at this location, representing a return period of 16 years. In the Town of Cave Creek, the FCDMC "Cave Creek" gage returned a peak discharge reading of 17,190 cfs - a return period of nearly 30 years. The previous highest discharge at this site was 15,900 cfs on Jan. 21, 2010. Below Carefree Highway, a FCDMC gage read 14,740 cfs - a bit over a 30-year return period but somewhat lower than the 15,000 cfs registered on Jan. 21, 2010. Lastly, Cave Buttes Dam impounded

1,977 acre-feet of water at a stage of 36.77 feet - 4.3% of its emergency spillway capacity.

A question has been raised concerning these high peak discharges on watercourses feeding the large Corps dams (Adobe, New River and Cave Buttes), but the relatively small amounts of impounded runoff compared to their design capacity (see Table XI). The storm Adobe Dam design storm used a 6-hour local storm much like this event, but it generated 3.53 inches of rainfall excess and a peak inflow discharge of 66,000 cfs. The storm for New River Dam had a 72-hour rainfall distribution that simulated nearly 8 inches of rainfall excess in the upper watershed and 3.8 inches in the lower, generating a peak of 45,000 cfs. For Cave Buttes Dam, the USCOE again used a 72-hour storm generating 4.14 inches of rainfall excess and a peak discharge of 54,000 cfs. For comparison, the average 6-hour rainfall over the Cave Creek Watershed for this storm was about 3 inches, so the rainfall excess would have been about 1.5 inches. To see the areas of greater Phoenix protected by the large Corps dams working in concert with the AZ Canal Diversion Channel as a principal outlet, please see [Appendix B](#).

The **Hassayampa** watershed begins its southward journey in southern Yavapai County. The uppermost gage, Hassayampa River @ Wagoner Rd., showed a discharge of only 307 cfs - less than a 2-year event. North of Wickenburg, the Box Canyon gage recorded a peak of 3,660 cfs, a 2-year event. At Wickenburg, the River is met by a major tributary - Martinez Creek. Martinez Creek itself had a peak flow measurement of 7,600 cfs, nearly a 10-year return period, and its tributary Antelope Creek recorded 3,580 cfs, also an approximate 10-year event. Further down at Morrystown, the Hassayampa River showed a peak flow of about 4,700 cfs by both the FCDMC and USGS gages - a 3-year event.

FCDMC stream gages that were not functional during the event were Cave Creek @ Spur Cross Rd. (4923, failure of USGS recording equipment), New River Dam Outlet (5613, critical electrical component got wet), Hassayampa River at US60 (5228, vandalized), and Stagecoach Wash (4913, unknown - gage tested OK after event).



Figure 17: Standing waves in Cave Creek near School House Road, 8/19/2014 @ 11:33 AM. Photo by Adam Stein, Cave Creek Marshal.

Table XI - Runoff & Impoundment Summary by Watershed									
Watershed	Gage ID	Gage Name	Peak Stage	Peak Discharge	Peak Discharge	Return	Peak	Peak %	Date /
		(in downstream order)	from Gage	from Gage	from IM	Period	Storage	Capacity	Time of Peak
			(ft.)	(cfs)	(cfs)	(years)	(ac-ft)		
New River	5638	New River Fire	11.00		32,600 (4)	Unknown			
	09513780	New River near Rock Springs, AZ			52,000 (3)	320 (1)			
	N/A	New River @ New River Elementary			39,300 (3)	Q ₁₀₀ =32,000			
	5614	New River Dam	30.38				5,620	12.9	8/19/2014 18:41
Skunk Creek	5588	Skunk Creek near New River	3.37	1,054		8 (2)			8/19/2014 7:24
	5583	Cline Creek	7.76	5,953	5,850 (4)	52 (2)			8/19/2014 7:45
	N/A	Cline Creek @ New River Rd.			7,200 (3)	Q ₁₀₀ =13,747			
	N/A	Skunk Creek @ Dove Valley Rd.			18,700 (3)	Q ₁₀₀ =27,000			
	5568	Skunk Creek @ I-17	6.67	13,161 (5)		20			8/19/2014 10:15
	09513860	Skunk Creek near Phoenix, AZ	6.61	12,872 (5)	12,700 (3)	19			
	5539	Adobe Dam	13.95				990	5.3	8/19/2014 15:09
Cave Creek	4963	Seven Springs Wash	5.42	1,090		< 2 (2)			8/19/2014 11:53
	4947	Cave Creek @ Ashdale	11.24	8,735		(7)			8/19/2014 11:39
	4923	Cave Creek @ Spur Cross Rd.	Failed						
	09512280	Cave Creek blw. Cottonwood Cr.	Failed		9,240 (3)	16 (2)			
	4893	Cave Creek	12.75	17,190		28 (2)			8/19/2014 12:28
	4918	Cave Creek near Cave Creek	10.30	14,740	15,000 (4)	36 (2)			8/19/2014 12:47
	4904	Cave Buttes Dam	36.77				1,977	4.3	8/21/2014 19:06
Hassayampa River	5352	Hassayampa R. @ Wagoner	2.18	307		< 2 (2)			8/19/2014 5:38
	5308	Hassayampa R. @ Box Canyon	8.60	3,660		2 (2)			8/19/2014 14:52
	7168	Antelope Creek	4.54	3,580		9 (2)			8/19/2014 14:39
	7013	Martinez Creek	8.93	7,600		8 (2)			8/19/2014 15:00
	5228	Hassayampa R. @ US 60	Failed	(8)					
	5223	Hassayampa R. near Morristown	9.65	4,720		3 (1)			8/19/2014 17:57
09516500	Hassayampa R. near Morristown, AZ	11.12	4,670		3 (1)			8/19/2014 18:00	

Footnotes for Table XI:

- (1) Frequency information from USGS StreamStats
- (2) Frequency information from gage record using HECWRC implementation of Bulletin 17B
- (3) Indirect measurement by USGS; results are provisional and subject to change
- (4) Indirect measurement by FCDMC
- (5) Discharge estimates from extension of USGS rating curve above 6.4 ft.
- (6) As compared to the FEMA 100-year discharge at that point on the watercourse
- (7) Highest flow recorded at gage in record - installed 2/25/2009
- (8) Instrument was vandalized prior to this event

TABLE XII - SUMMARY OF ADDITIONAL IMPOUNDMENTS AT FCD STATIONS

STATION NAME	ID	PEAK Gage Ht. (feet)	PEAK STORAGE (acre-feet)	PEAK CAPACITY (% full)	DATE - TIME
Laveen Basin*	4578	13.18	61.1	43.7	08/19/14 - 23:58
Phoenix Dam 2A	4789	10.72	19.2	32.1	08/19/14 - 13:24
Phoenix Dam # 7	4853	12.37	16.2	18.1	08/19/14 - 12:23
Phoenix West Park Dam	4858	10.47	17.3	15.3	08/19/14 - 12:34
Rittenhouse FRS	6703	8.15	162.0	4.1	08/19/14 - 21:31

* Started the event at 7.0 ft. / 19.6 ac-ft

TABLE XIII - SUMMARY OF ADDITIONAL STREAMFLOW READINGS AT FCD STATIONS

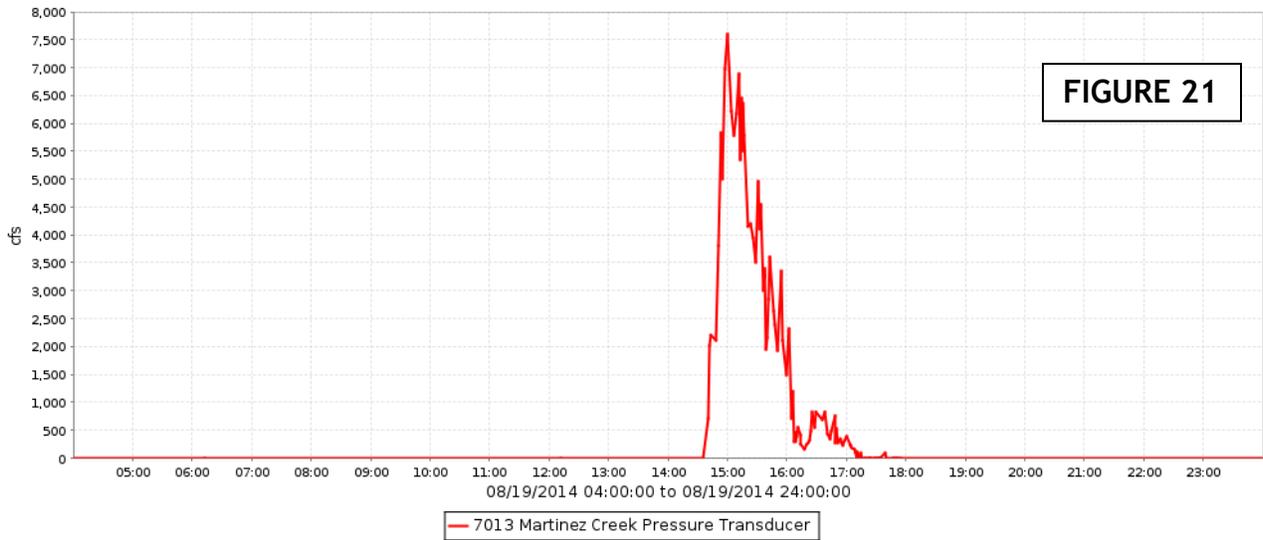
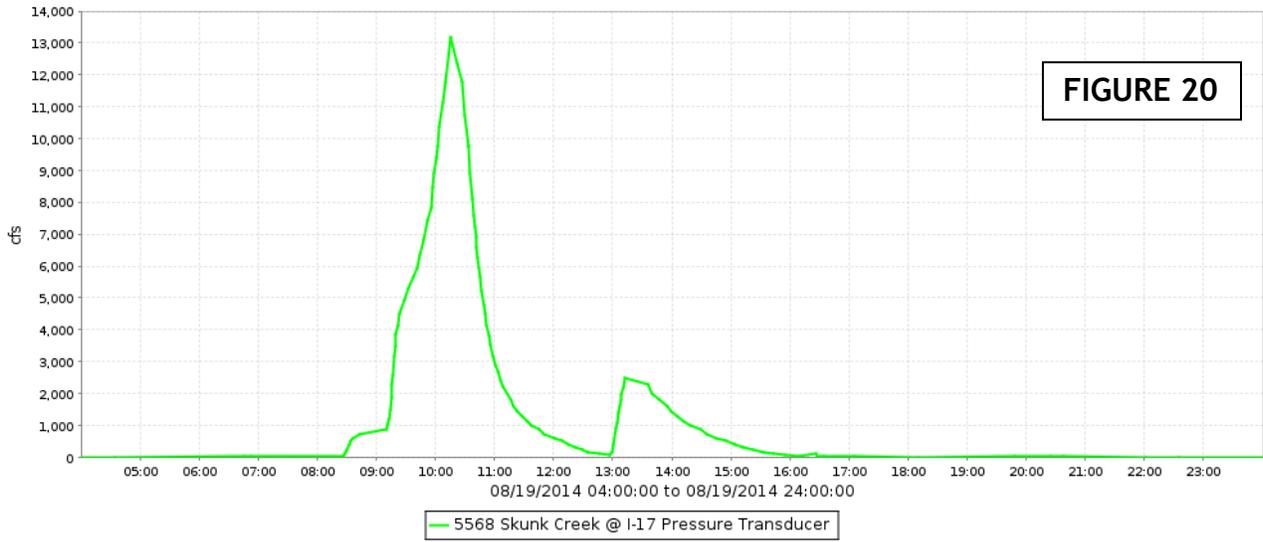
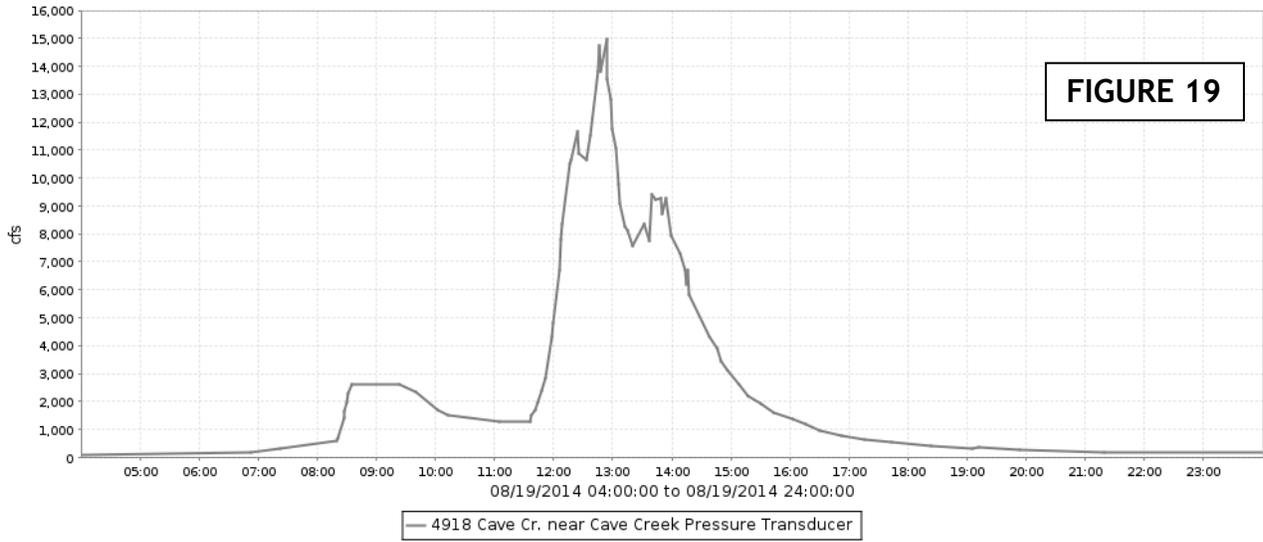
STATION	ID	PEAK STAGE (feet)	PEAK FLOW (cfs)	DATE - TIME
ACDC at 43 rd Avenue	4823	3.20	1,695	08/19/14 - 07:48
ACDC at 67 th Avenue	5523	5.00	1,230	08/19/14 - 09:19
Berneil Wash	4688	2.38	792	08/19/14 - 13:06
Box Wash	5273	2.90	840	08/19/14 - 09:30
Cave Creek @ CAP Canal	4907	0.93	438	08/20/14 - 14:41
Cave Creek at Cactus	4833	11.50	1,373	08/19/14 - 14:14
Daggs Wash	5498	2.10	617	08/19/14 - 12:03
Desert Hills Wash	4898	4.90	252	08/19/14 - 07:22
E.Fork Cave Cr near 7 th Ave.	4668	4.70	1,567	08/19/14 - 13:01
El Mirage Drain	5483	3.16	522	08/19/14 - 16:59
IBW at Sweetwater Ave.	4643	4.40	1,315	08/19/14 - 12:34
IBW at Shea Blvd.	4693	3.35	2,610	08/19/14 - 13:46
IBW near Indian Bend Rd.	4613	4.08	1,180	08/19/14 - 16:28
IBW at Indian School Rd.	4618	4.20	2,335	08/19/14 - 16:52
IBW at McDonald Drive	4628	2.25	1,660	08/19/14 - 16:26
IBW at McKellips Road	4603	4.30	2,418	08/19/14 - 19:30
Jackrabbit Wash	5218	3.17	863	08/19/14 - 12:10
New River at Bell Road	5598	1.77	1,104	08/19/14 - 20:02
Reata Pass Wash	4588	1.35	480	08/19/14 - 08:08
Scatter Wash	5543	2.17	785	08/19/14 - 09:04
Skunk Tank Wash	4888	7.20	277	08/19/14 - 07:33
Stagecoach Wash*	4913	4.50	480	Unknown
Tatum Basin Inflow	4638	0.93	200	08/19/14 - 12:52

* Gage height estimated from high water marks.

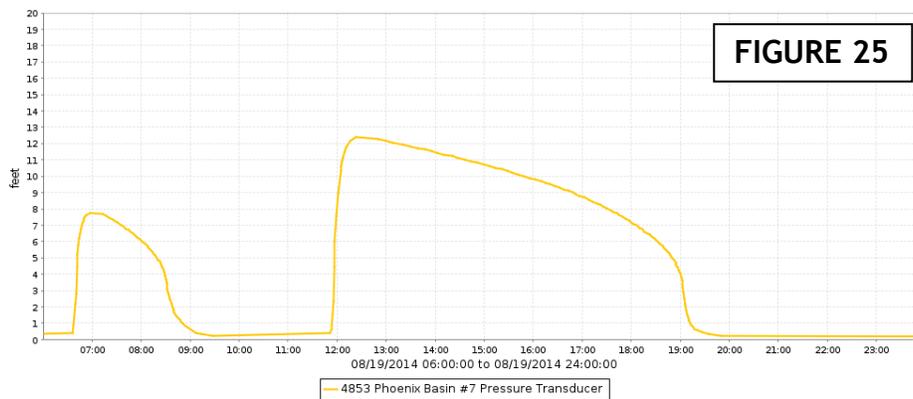
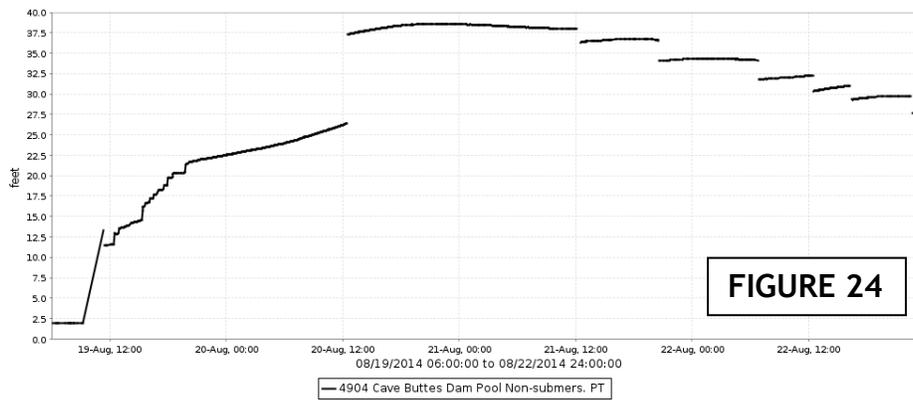
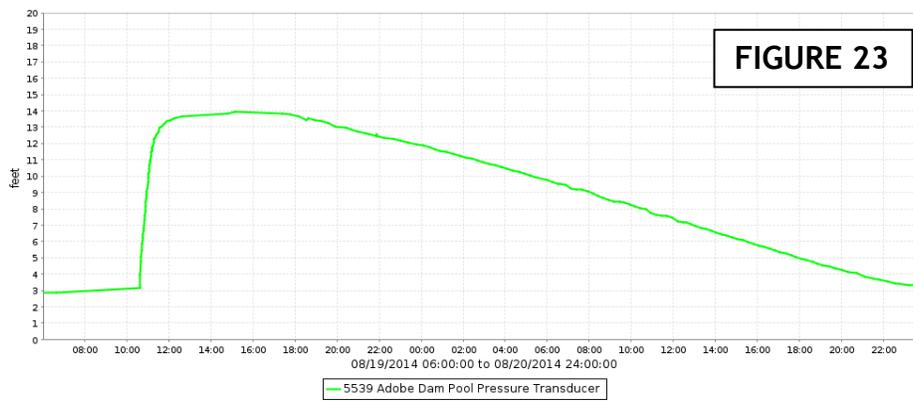
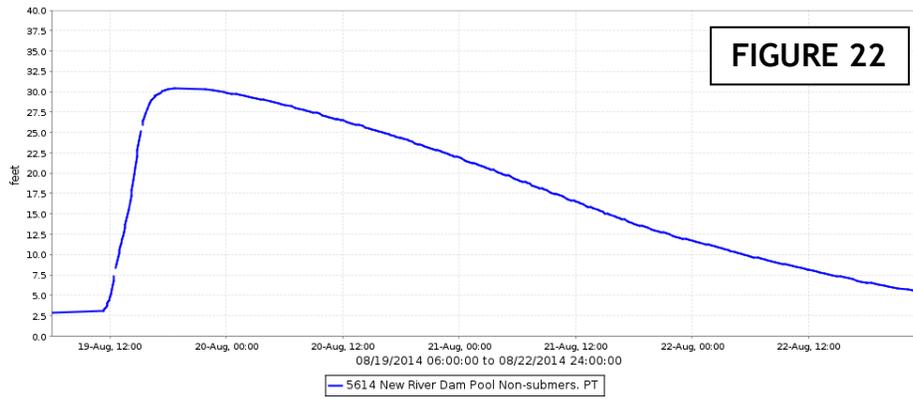


Figure 18: Impounded runoff behind New River Dam early in the storm; 8/19/2014 @ 12:05 AM. FCDMC Staff photo.

SELECTED STREAMFLOW HYDROGRAPHS

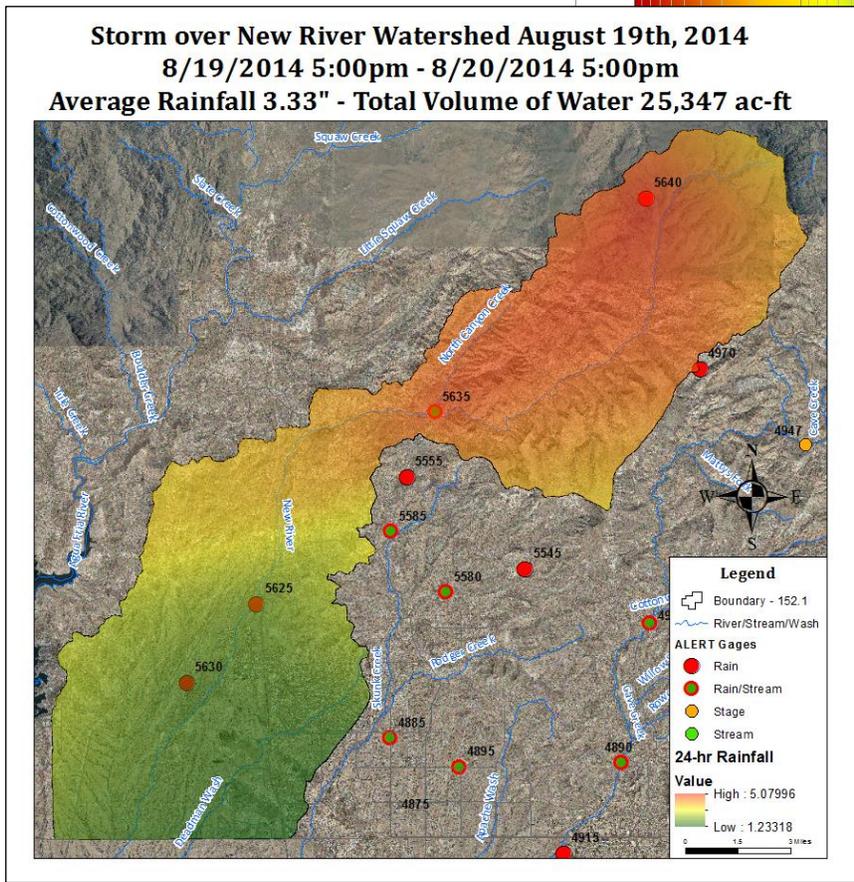
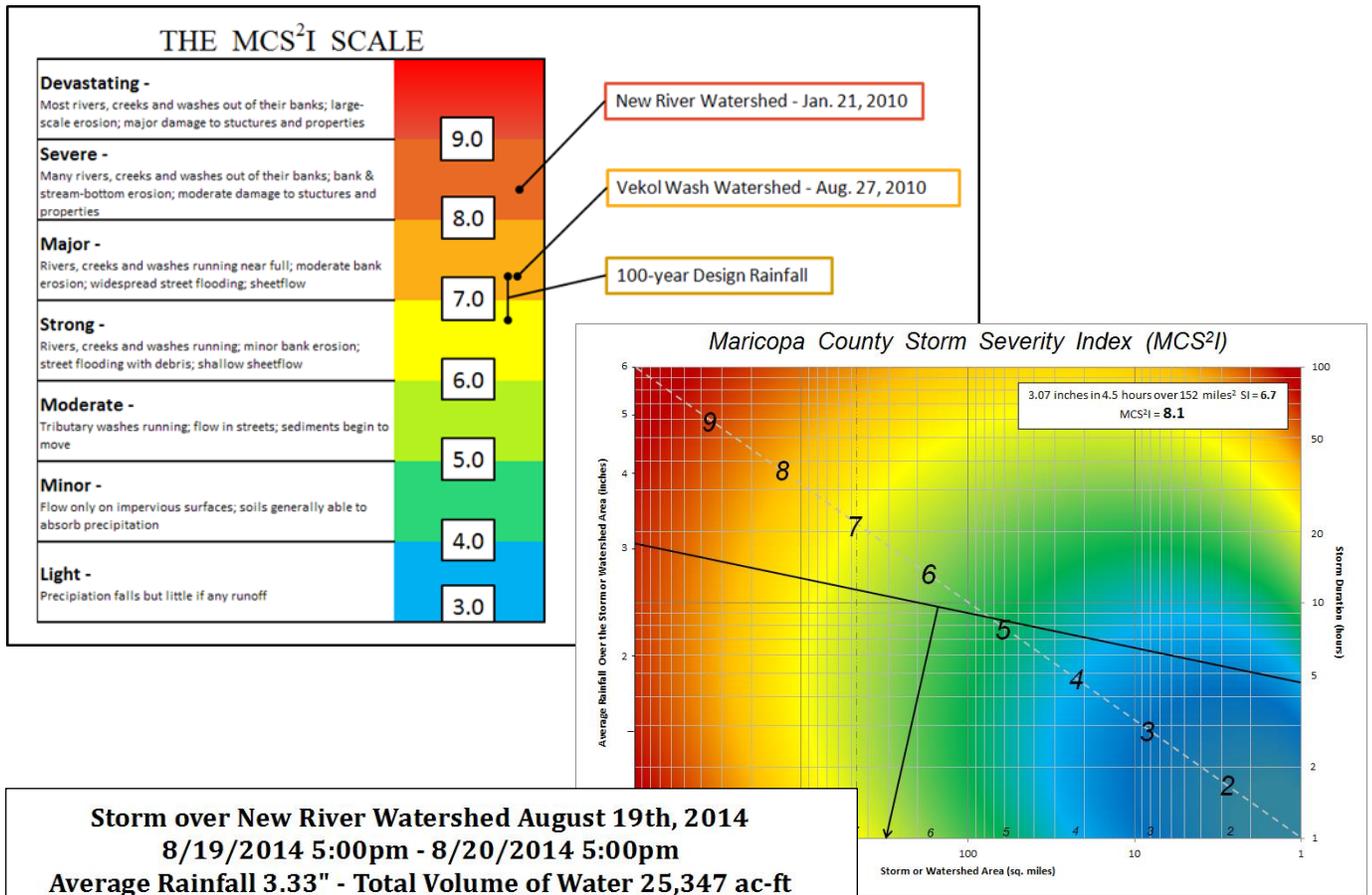


SELECTED IMPOUNDMENT HYDROGRAPHS



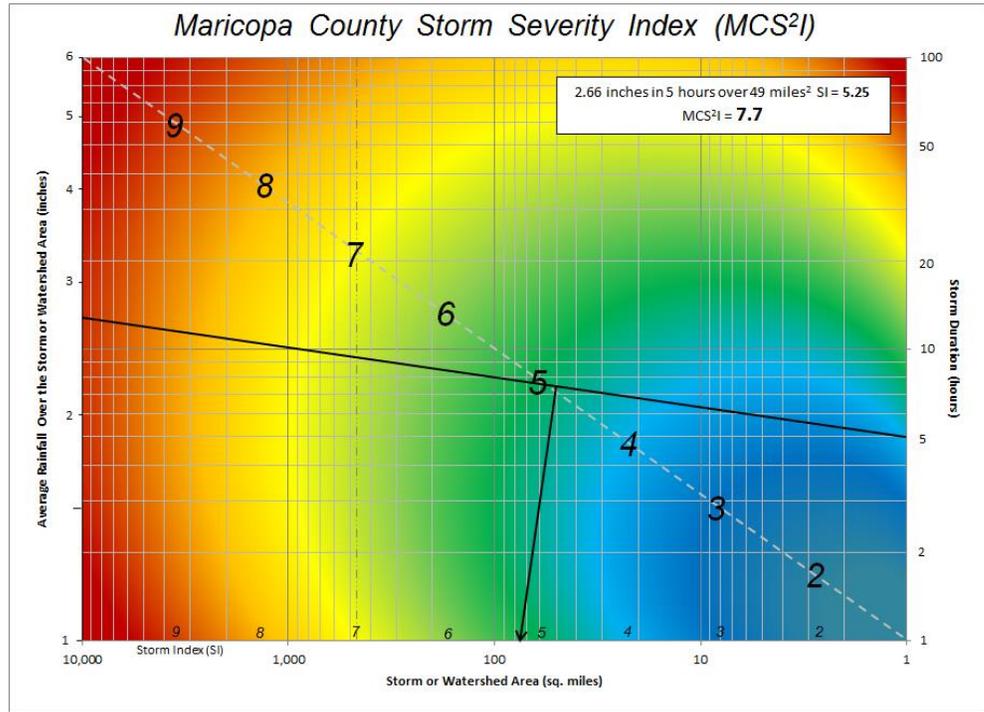
Maricopa County Storm Severity Index (MCS²I), developed by FCDMC

MCS²I is an index that classifies the severity of a storm based on the area covered, the average rainfall over that area (from gage-adjusted radar estimates), and the storm duration. For this storm, we present the three major watercourses in north-central Maricopa County - New River, Skunk Creek and Cave Creek.

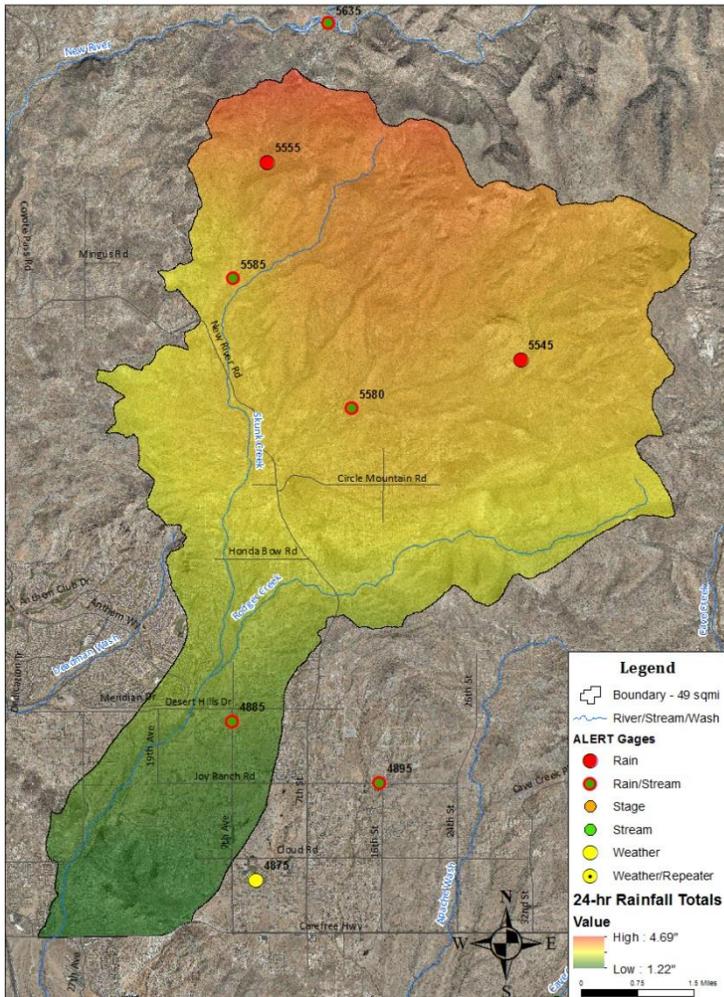


New River above Carefree Hwy.

The rain gages in this watershed had an average duration for the heaviest rainfall of 4.5 hours, with an average of 0.26 inches outside that 4.5 hours. The calculated average rainfall includes the estimated rainfall for gage #5640 at the top of the watershed. The MCS²I parameters are 3.07 inches in 4.5 hours over 152 square miles. Its MCS²I score is 8.1

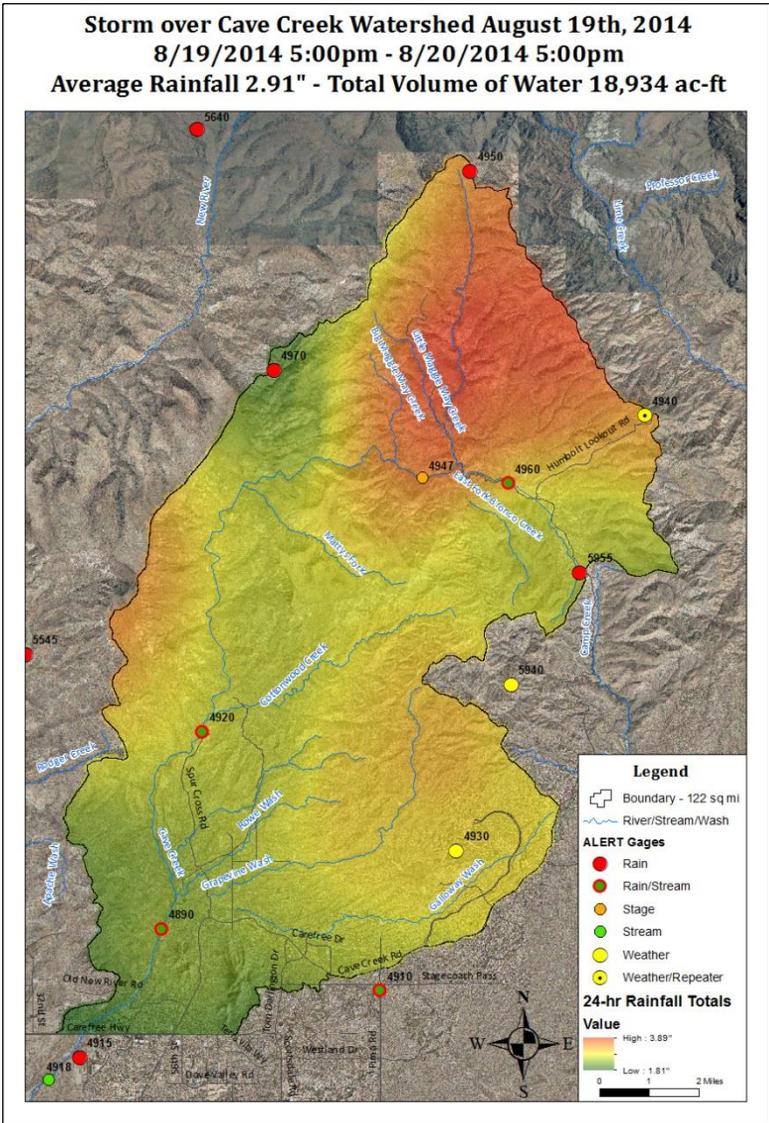
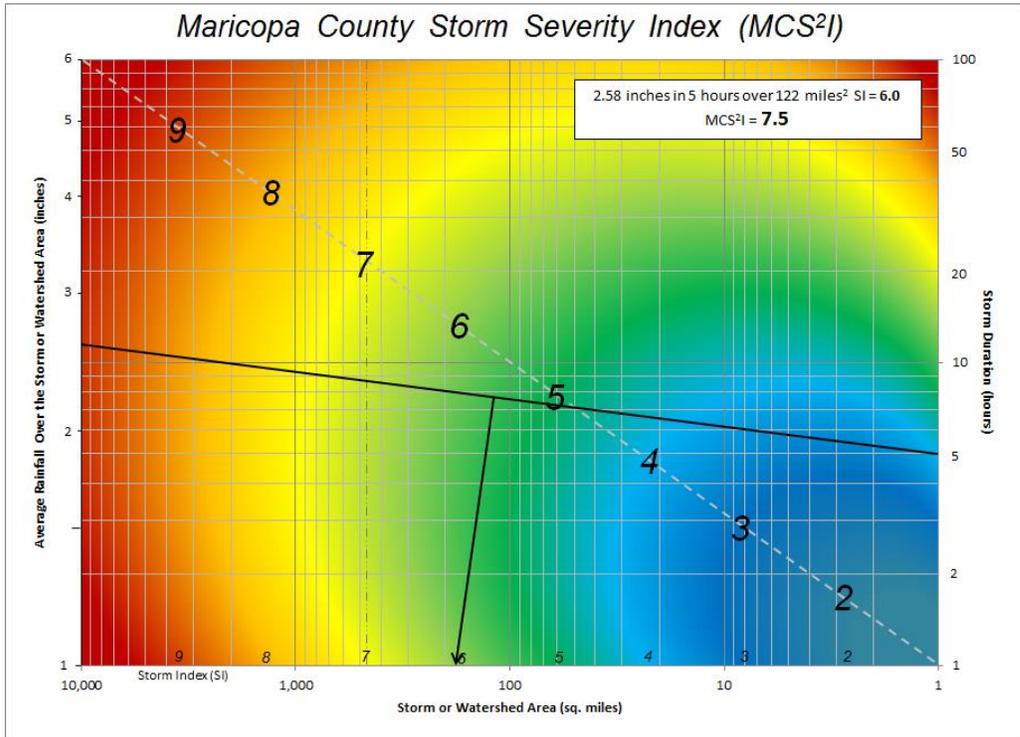


Storm over Skunk Creek Watershed August 19th, 2014
8/19/2014 5:00pm - 8/20/2014 5:00pm
Average Rainfall 3.04" - Total Volume of Water 7,945 ac-ft



Skunk Creek above Carefree Hwy.

The rain gauges in this watershed had an average duration for the heaviest rainfall of 5 hours, with an average of 0.38 inches outside that 5 hours. So the MCS²I parameters are 2.66 inches in 5 hours over 49 square miles. Its MCS²I score is 7.7



Cave Creek above Carefree Hwy.

The rain gauges in this watershed had an average duration for the heaviest rainfall of 5 hours, with an average of 0.33 inches outside that 5 hours. So the MCS²I parameters are 2.58 inches in 5 hours over 122 square miles. Its MCS²I score is 7.5

SELECTED DATA SOURCES

1. National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, MD - Precipitation Frequency Data Server for Arizona:
http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=az
2. National Weather Service, Colorado Basin River Forecast Center, Salt Lake City, UT:
<http://www.cbrfc.noaa.gov>
3. National Weather Service, Hydrometeorological Prediction Center, Camp Springs, MD:
<http://www.hpc.ncep.noaa.gov>
4. National Oceanic and Atmospheric Administration, National Environmental Satellite, Data and Information Service, Bethesda, MD: <http://www.nesdis.noaa.gov>
5. Maricopa County Department of Emergency Management, Phoenix, AZ:
http://www.maricopa.gov/emerg_mgt/default.aspx
6. National Atmospheric and Oceanic Administration, National Climatic Data Center, Asheville, NC - Radar Data Archive and Climate and Weather Toolkit:
<http://www.ncdc.noaa.gov/oa/radar/radardata.html>
7. Major flooding across portions of Maricopa County Tuesday August 19 2014: National Weather Service, Phoenix, AZ WFO:
http://www.wrh.noaa.gov/psr/pns/2014/August/Aug19_flooding.php
8. National Weather Service, Storm Prediction Center, Norman, OK:
<http://www.spc.noaa.gov/obswx/maps/>
9. National Weather Service, National Severe Storms Laboratory; Norman, OK:
<http://www.nssl.noaa.gov>
10. Flood Control District of Maricopa County, Phoenix, AZ: <http://www.fcd.maricopa.gov>
11. Summer Severe Thunderstorm Patterns in Arizona: National Weather Service, Tucson, AZ WFO: http://www.wrh.noaa.gov/twc/monsoon/monsoon_patterns.php
12. Maddox, R.A., McCollum, D., and Howard, K., 1995: Large-scale patterns associated with severe summertime thunderstorms over Central Arizona. Weather Forecasting, 763-778.
13. U.S. Army Engineer District; Gila River Basin - New River and Phoenix City Streams, Design Memorandum No.3, General Design Memorandum - Phase 1, Plan Formulation, August 1975. [FCDMC Library](#) No. A371.604
14. US Army Corps of Engineers, Los Angeles District; Gila River Basin, Phoenix, Arizona & Vicinity (including New River); Hydrology Parr 2, Design Memorandum No. 2; revised Feb. 1983
15. USGS Water Resources Arizona: <http://az.water.usgs.gov>
16. USGS Stream Stats: <http://water.usgs.gov/osw/streamstats/>
17. Flood Insurance Study for Maricopa County, Arizona and Incorporated Areas, FIS # 04013CV001B, Federal Emergency Management Agency, Revised 10/16/2013.



PARTING SHOT

*It's no fun being a
snake during an
Arizona flood!*

*Photo courtesy of Ms.
Linda Potter - taken
at Skunk Creek north
of Carefree Highway*

APPENDIX A Supplemental Rainfall Maps

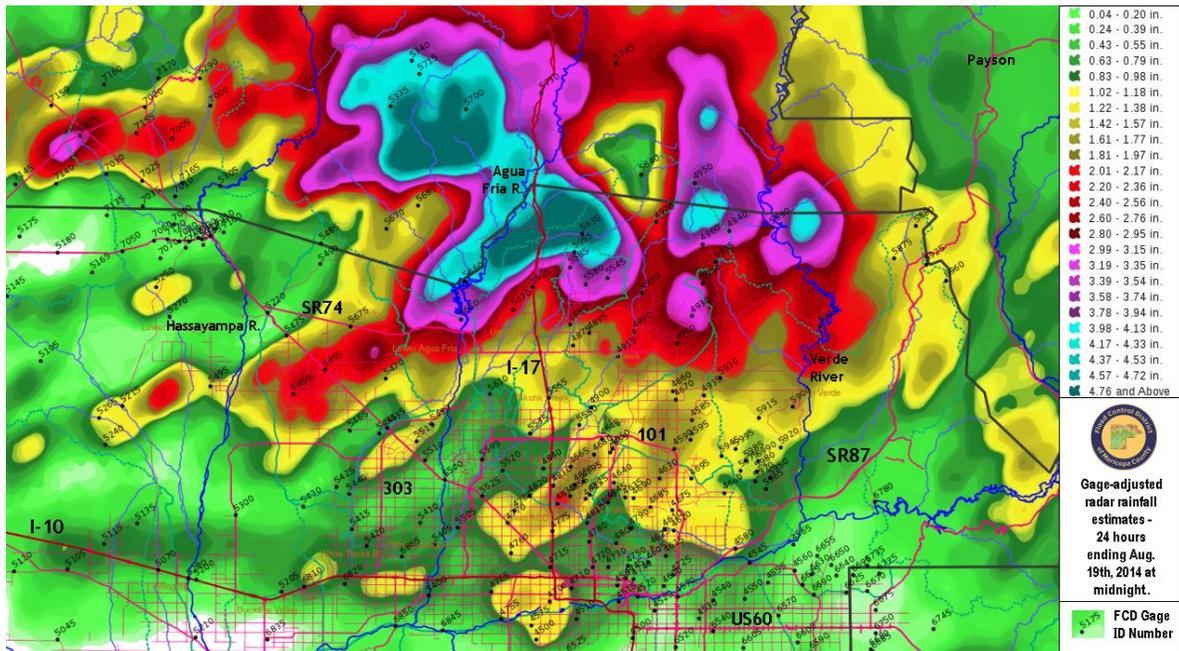


Figure a) Gage-adjusted radar rainfall estimates for 24 hours ending 08/19/2014 at midnight. The GIS shape files used to create this map were generated each hour as the storm progressed. The effect of the missing data for gage #5640 can be seen as a yellow and green “hole” just north of the Maricopa Co. border and east of I-17.

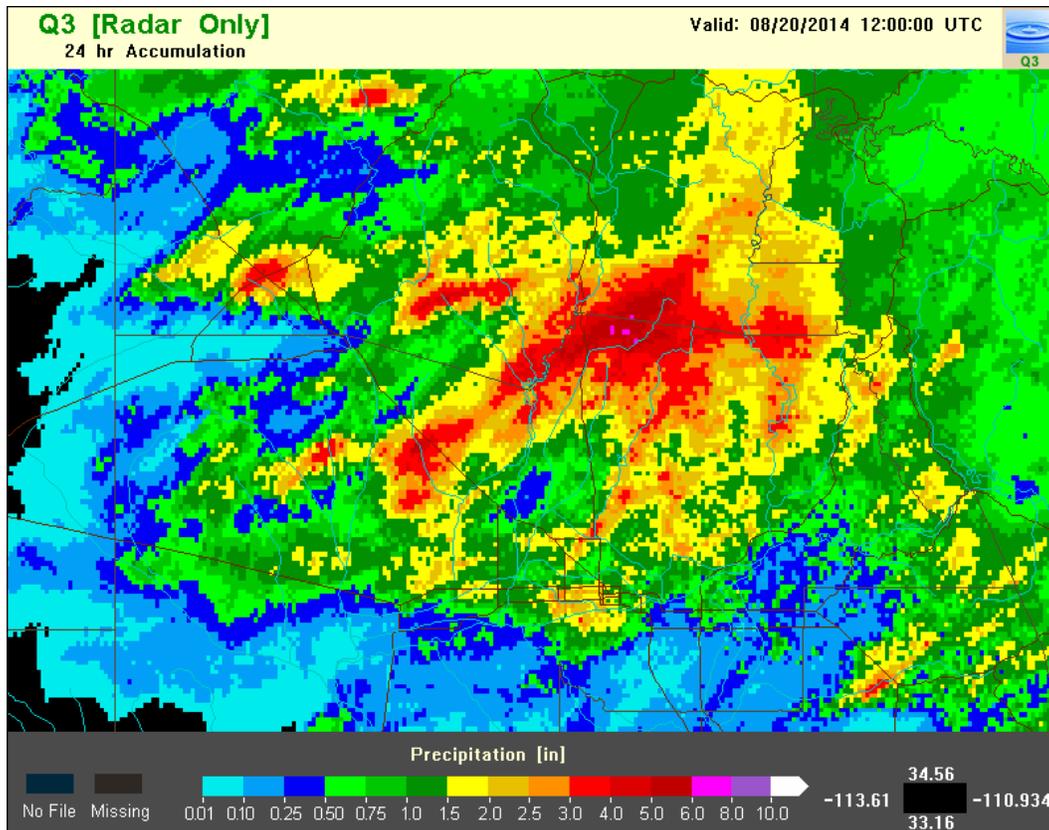
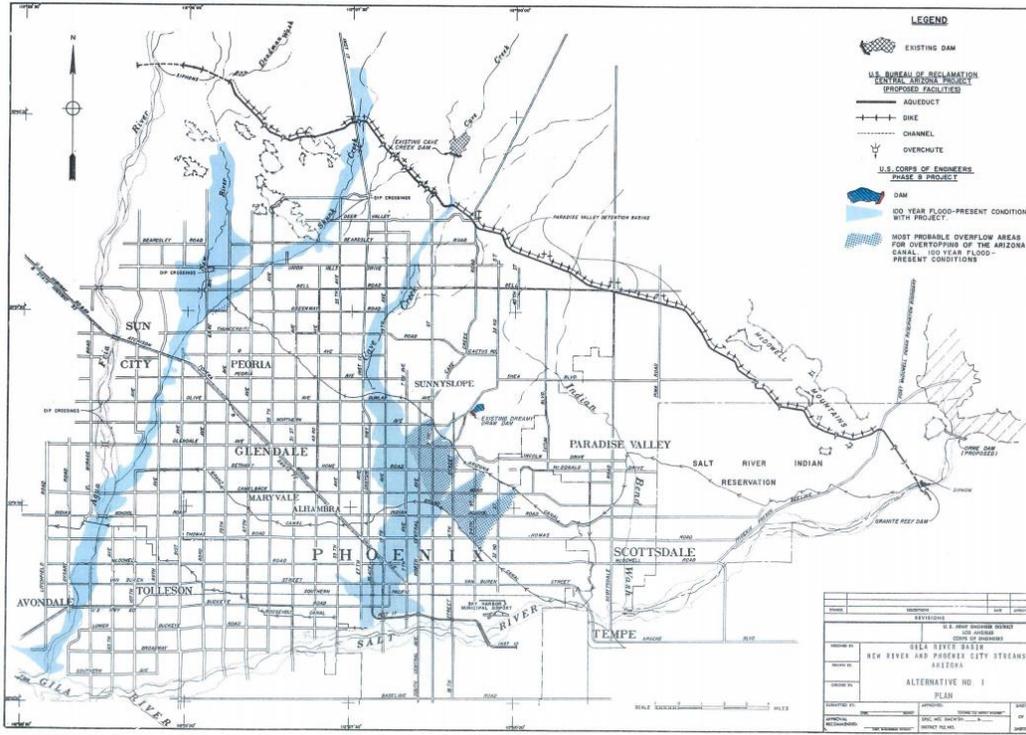


Figure b) Radar-only rainfall estimates for 24 hours ending 08/20/2014 at 5:00 AM MST. This type of map does not use gage information to adjust the estimated rainfall amount; therefore the effect of missing gage #5640 is not seen. Map courtesy of NWS NSSL.

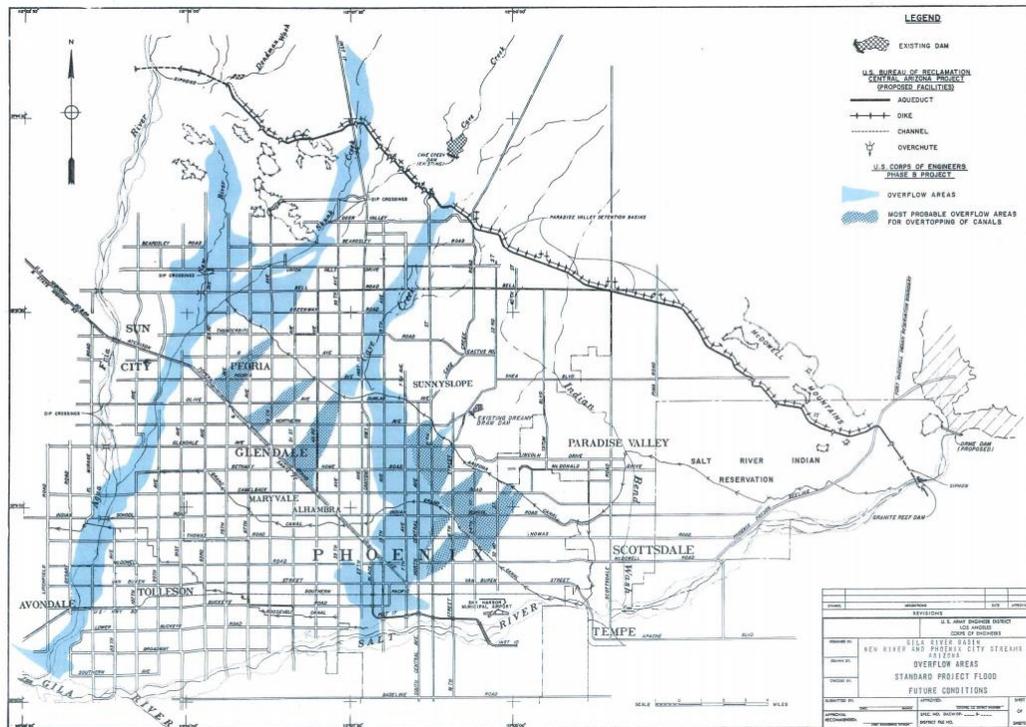
APPENDIX B

Areas Protected by USCOE Facilities



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Figures a) above and b) below: Corps of Engineers maps from the 1975 Design Report showing floodplains for the 100-year event (a) and SPF event (b) without New River, Adobe, Cave Buttes or Dreamy Draw Dams nor the Arizona Canal Diversion Channel in place. The SPF event, or Standard Project Flood, has a return period of approximately 267 years. Cave Creek Dam, now just above Cave Buttes Dam, was an existing structure and could contain runoff from the 100-year event, but not the SPF.



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APPENDIX C

FCDMC ALERT Operations Center Narrative

The ALERT Operations Center (AOC) is an extension of the Flood Control District’s “ALERT Room”. When warranted by a severe and/or long-term rainfall event, the AOC is staffed by an Incident Commander and representatives from Dam Safety, Operations & Maintenance, GIS and an Event Historian. The AOC staff’s main objective is to provide decision support to our Emergency Management and other County departments, and to manage the operation of our own flood control structures. The following narrative is the account of AOC Operations by our Event Historian.

On Tuesday, August 19th, heavy rains measuring up to three inches in the Hassayampa watershed and up to four inches in the New River, Skunk Creek and Cave Creek watersheds prompted a partial activation of the Maricopa County Department of Emergency Management’s (MCDEM) Emergency Operations Center (EOC) at 10:30am. The Flood Control’s ALERT Operations Center (AOC) was activated shortly thereafter, at 10:50am, to monitor rainfall gauges, streamflow gauges, and dam impoundment levels across the county, as well as to send out Operations and Maintenance (O&M) crews to observe field conditions in critical areas. This information was provided to the EOC to assist their management of the emergency situation.

During the six hours that the AOC was activated, it received calls from law enforcement agencies, school districts, CAP employees, members of county and state departments, and private businesses looking for information and guidance on how to best handle the storm. Due to the training and efficiency of the employees of the Flood Control District staffing the AOC, all interested parties received accurate, dependable information in a timely manner, so they could properly respond to the storm.

At the time of activation of the AOC, it was anticipated that rainfall would continue for the next three hours. The flow in Skunk Creek at I-17, which had attracted significant media attention, had maxed out at 12,000 cfs prior to AOC activation. Heavy rain was falling in the Cave Creek Watershed, so the potential for flooding issues later in the day in this area was high. In Skunk Creek at the CAP canal, it appeared as though the creek was flowing around the overchutes and along or potentially into the canal, so an O&M crew was sent out to monitor the situation. Minor flooding had been reported at the Sage Apartment complex, south of the CAP canal along the east side of I-17, so the Sherriff’s department had sent out someone to assess the extent of the flooding. At the time of activation, police were already on site at reported flooded areas to assist in barricading roads if necessary. Cave Buttes Dam was at 13’ deep (5% full), Adobe Dam was at 12’ deep (5% full), and New River Dam had no inflows, but that was expected to change.

Between 11am and noon, the AOC received a notification that Wet’n’Wild, located within the Adobe Dam impoundment area, had evacuated all employees except one security guard. A Deputy with the Sherriff’s department was sent to close down the trails along and within Skunk Creek between 75th Avenue and 83rd Avenue. The construction of the Loop 303 outfall channel near MC85 and Cotton Lane was shut down due to the rain. The Flood Control District sent two employees to the EOC in order to more efficiently pass information between the two agencies.

There was a briefing at 12:20. Adobe Dam was at 11.6’ deep (5% full), Cave Buttes Dam was at 11.5’ deep (5% full), and New River Dam had begun receiving flows, and was now at 6.3’ deep (<1%). South Central Phoenix was expecting to receive heavy rainfall, and Indian Bend Wash was anticipated to receive substantial flow. There were three O&M crews in the vicinity of Skunk Creek and Adobe Dam. They had cleared out the side inlets to Skunk Creek at the Sage Apartment Complex, and had cleared out a drain downstream of I-17 on Skunk Creek. An additional team had arrived at Cave Buttes Dam and was monitoring the situation there.

In the early afternoon, a streamflow gauge on Cave Creek just downstream of Carefree Highway reported a flow in the creek of 26,000 cfs (as of this writing, we are working on field verification by survey, which may show the peak to have been less than 20,000cfs). For reference, the 100-year peak flow in the creek is 33,800 cfs. A member of the Scottsdale Police Department contacted the Flood Control District to determine the impacts of large amounts of water entering Indian Bend Wash. Flood Control District staff instructed the police office on how to access the Flood Control District’s website to view data from

streamflow gauges across the county. An O&M team had arrived at the western CAP canal chute and determined that there were no issues there.

Another briefing was held at 1:20pm. The storm was moving northwest, towards the Wickenburg area. A crew at Cave Buttes dam reported a depth of 13.5', and more water was expected. The crew at Adobe dam reported a depth of 13.5'. New River dam was at a depth of 12'. Dreamy Draw dam was letting out a small amount of water into the Arizona Canal Diversion Channel (ACDC) near 16th Street. New River Elementary School, located on the east side of I-17 just north of West New River Road, was put on standby for evacuation. Employees in the AOC determined that the peak flow in New River had already passed the school, and had been at 15,000 cfs, which is approximately half of the 100-year flow. The school building is not in the floodplain, so it should not have been affected by the water, other than to monitor for bank erosion.

Concerned about the potential impacts to the Agua Fria River, a flood control employee contacted the CAP command center to find out if there were any planned releases into the river from Lake Pleasant. There were none, and CAP had an additional 40' of storage in Lake Pleasant. At approximately 2:30, the AOC received reports of water seeping at the abutment of Cave Buttes Dam, so FCD staff was sent to determine the severity of the leak. At approximately 2:45, the AOC received a message from a member of the Parks Department requesting information on the status of Adobe Dam. A member of the Flood Control District replied telling her that the dam was 5.2% full with more water expected. She was told that the expected time to empty would be approximately 20 hours, but FCD Staff recommended that she call in the morning for an update.

At approximately 3pm, another storm began developing over Lake Pleasant, with three smaller storms behind it. These were anticipated to be much smaller than the earlier storms, and to last until 6pm. O&M crews had determined that the leak at Cave Buttes Dam was actually just flow off debris on the dry side of the dam, and was nothing to be concerned about. At New River Elementary, an O&M crew was sent to investigate a report of erosion along the bank of the river. A deputy monitoring the situation at New River Elementary reported a 6-8" rise in the water level over the past hour, however neither the rainfall gauges in the area nor the streamflow gauges in the area reported any data to substantiate this report. The AOC received a call from Deer Valley School District Disaster Relief, asking if they should close the school tomorrow. The question was sent to the EOC so they could advise the School District. At 4:30, the EOC contacted Deer Valley SD and advised them to have an inspector examine the riverbank and determine if the school should be closed the following day.

At 3:30, the water level in Cave Buttes dam reached the principal outlet. New River dam was at 27' deep, 10% full.

At approximately 4pm, another briefing was held. A storm over the New River and Cave Creek watersheds was expected to drop between ½" and 1" of rain on these areas over the following hour. Another storm, stretching from Wickenburg to the Upper Centennial Watershed, was not expected to create as much rainfall. All O&M crews had been recalled from the field, but the head of the our Flood Warning Branch recommended keeping the AOC and EOC staffed until this group of storms passed.

Later in the afternoon, the AOC received reports about the Adobe Dam outflow flooding downstream roads. This was to be expected, and should last for the following 24 hours.

The Department of Emergency Management deactivated the EOC at 4:40. At 5pm, the AOC received a call from CAP asking for information on the flooding on I-17 in the vicinity of the CAP canal. FCD Staff called him back and informed him of what was observed earlier in the day. CAP requested that they be involved in any meetings with ADOT and the City of Phoenix regarding the event in this area.

The AOC was deactivated at 5:28pm.

APPENDIX D

24-hour rainfall totals
in 1-hour increments
for all FCDMC ALERT rain gages

FCD of Maricopa County ALERT System - G001: Rain Gages 0770-4510

Gage No.	770	775	780	785	795	4500	4505	4510
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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	0.04
2200	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	0.08	0.08	0.24
2000	0.00	0.00	0.00	0.04	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.75	0.16	0.55
1200	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
1100	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
0900	0.00	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	0.00
0700	0.00	0.00	0.00	0.00	0.00	0.28	0.08	0.35
0600	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.00	0.00	0.04	0.00	1.18	0.39	1.18

FCD of Maricopa County ALERT System - G002: Rain Gages 4515-4555

Gage No.	4515	4520	4525	4530	4540	4545	4550	4555
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.24	0.12	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
1900	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
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.12	0.00	0.00	0.00	0.08	0.31	0.31	0.39
1300	0.04	0.28	0.00	0.04	0.55	0.04	0.04	0.00
1200	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
1000	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	0.04	0.00	0.00	0.00
0800	0.00	0.08	0.00	0.00	0.00	0.16	0.04	0.04
0700	0.08	0.08	0.00	0.16	0.24	0.04	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.47	0.55	0.00	0.20	1.02	0.55	0.39	0.43

FCD of Maricopa County ALERT System - G003: Rain Gages 4560-4595

Gage No.	4560	4565	4570	4575	4580	4585	4590	4595
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.47	0.00	0.20	0.08	0.24
2000	0.04	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.04	0.08	0.00	0.00	0.35	0.04	0.00	0.04
1300	0.00	0.00	0.04	0.16	0.47	0.51	1.10	0.87
1200	0.00	0.00	0.04	0.20	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
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.04	0.08	0.00	0.00	0.08	0.04	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.08	0.12	0.08	0.12
0700	0.00	0.00	0.00	0.16	0.00	0.35	0.51	0.24
0600	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.12	0.16	0.08	1.02	0.98	1.30	1.81	1.50

FCD of Maricopa County ALERT System - G004: Rain Gages 4600-4635

Gage No.	4600	4605	4610	4615	4620	4625	4630	4635
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.08
2100	0.00	0.08	0.43	0.00	0.39	0.12	0.00	0.00
2000	0.04	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
1600	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
1400	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
1300	0.24	0.12	1.14	0.24	0.87	0.35	1.57	0.63
1200	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
1000	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
0800	0.04	0.04	0.04	0.12	0.12	0.04	0.04	0.04
0700	0.04	0.00	0.00	0.00	0.00	0.00	0.16	0.39
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.35	0.24	1.65	0.35	1.46	0.55	1.77	1.14

FCD of Maricopa County ALERT System - G005: Rain Gages 4640-4675

Gage No.	4640	4645	4650	4655	4660	4665	4670	4675
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.08	0.04	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.08
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
1900	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	0.04
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00
1300	0.71	0.12	0.47	0.39	0.39	0.16	0.39	1.10
1200	0.04	0.47	0.39	0.43	0.00	0.08	0.12	0.00
1100	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
0900	0.00	0.04	0.00	0.04	0.08	0.00	0.00	0.00
0800	0.08	0.08	0.08	0.08	0.16	0.20	0.28	0.08
0700	0.28	1.34	0.47	0.43	0.00	0.16	0.63	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	1.10	2.09	1.42	1.46	0.75	0.59	1.46	1.34

FCD of Maricopa County ALERT System - G006: Rain Gages 4680-4720

Gage No.	4680	4685	4690	4695	4700	4710	4715	4720
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.31	0.16	0.04	0.04
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.16	0.00	0.04	0.00	0.00	0.00	0.00
1300	0.04	0.12	0.71	0.91	0.43	0.35	0.16	0.24
1200	0.00	0.00	0.00	0.00	0.24	0.04	0.16	0.04
1100	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
0900	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
0800	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.04
0700	0.00	0.04	0.28	0.08	0.43	0.20	0.31	0.24
0600	0.00	0.00	0.04	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.04	0.79	1.10	1.06	1.42	0.75	0.67	0.59

FCD of Maricopa County ALERT System - G007: Rain Gages 4725-4765

Gage No.	4725	4730	4740	4745	4750	4755	4760	4765
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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	0.04	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.04
2100	0.00	0.24	0.16	0.16	0.12	0.24	0.00	0.08
2000	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.39
1900	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
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
1400	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
1300	0.24	0.35	0.08	0.12	0.20	0.00	0.00	0.39
1200	0.00	0.00	0.00	0.00	0.00	0.39	0.63	0.12
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
1000	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.08	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0700	0.00	0.16	0.04	0.04	0.04	0.16	0.39	0.12
0600	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.35	0.79	0.35	0.35	0.47	0.91	1.18	1.18

FCD of Maricopa County ALERT System - G008: Rain Gages 4770-4805

Gage No.	4770	4775	4780	4785	4790	4795	4800	4805
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.00
2000	0.39	0.24	0.00	0.00	0.00	0.04	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.04	0.04	0.08	0.04	0.79	0.31	0.16	0.39
1200	0.00	0.47	0.12	0.00	0.00	0.91	0.00	0.00
1100	0.00	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	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.12	0.08	0.04	0.04	0.04
0700	0.67	0.55	0.28	0.16	0.12	0.87	0.31	0.31
0600	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.22	1.30	0.47	0.43	1.02	2.25	0.59	0.75

FCD of Maricopa County ALERT System - G009: Rain Gages 4810-4845

Gage No.	4810	4815	4820	4825	4830	4835	4840	4845
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.08	0.28	0.00	0.16	0.00	0.08	0.00	0.00
2000	0.04	0.00	0.24	0.00	0.04	0.31	0.04	0.00
1900	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.04
1800	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.04	0.20	0.00	0.31	0.04	0.39	0.00	0.31
1200	0.04	0.31	0.00	0.35	0.00	0.83	0.00	0.00
1100	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
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.04	0.04	0.00	0.04	0.00	0.00	0.00	0.04
0700	0.20	0.47	0.83	0.51	0.51	0.59	0.63	0.28
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.12	0.00
TOTALS:	0.43	1.30	1.06	1.38	0.71	2.20	0.79	0.67

FCD of Maricopa County ALERT System - G010: Rain Gages 4850-4900

Gage No.	4850	4855	4860	4875	4885	4890	4895	4900
StatType	dif							
DataType	precip							
Units	in							
08/27/2014 17:28:55								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
2100	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.08	0.24	0.00	0.00	0.00	0.04	0.00	0.00
1900	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.16
1800	0.00	0.00	0.00	0.12	0.20	0.04	0.08	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
1500	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
1300	0.20	0.24	0.31	0.08	0.04	0.00	0.00	0.04
1200	1.18	0.87	0.00	0.00	0.20	0.08	0.00	0.04
1100	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
1000	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
0800	0.00	0.04	0.24	0.24	0.43	0.67	0.55	0.12
0700	0.67	0.67	0.71	0.71	0.71	0.28	0.71	0.20
0600	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	2.17	2.32	1.26	1.14	1.57	1.54	1.46	0.55

FCD of Maricopa County ALERT System - G011: Rain Gages 4910-4960

Gage No.	4910	4915	4920	4930	4935	4940	4950	4960
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
2100	0.00	0.00	0.04	0.00	0.28	0.00	0.08	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.16	0.04	0.00	0.12	0.12	0.08	0.28	0.04
1700	0.00	0.00	0.00	0.08	0.00	0.20	0.00	0.08
1600	0.00	0.00	0.12	0.08	0.00	0.00	0.04	0.20
1500	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
1300	0.08	0.00	0.00	0.04	0.28	0.00	0.00	0.00
1200	1.02	0.55	0.12	2.36	0.04	0.55	0.12	0.59
1100	0.00	0.31	0.94	0.00	0.00	0.79	1.26	0.47
1000	0.00	0.00	0.00	0.00	0.00	0.31	1.02	0.28
0900	0.04	0.00	0.04	0.04	0.00	0.08	0.24	0.08
0800	0.67	0.43	1.26	0.98	0.59	0.35	0.83	1.10
0700	0.35	0.35	0.43	0.00	0.28	0.00	0.00	0.08
0600	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	2.32	1.69	2.95	3.70	1.65	2.36	4.06	2.91

FCD of Maricopa County ALERT System - G012: Rain Gages 4970-5055

Gage No.	4970	5000	5010	5030	5040	5045	5050	5055
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
2300	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
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.16	0.00	0.00	0.00	0.12	0.00	0.00	0.16
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.12	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
1400	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
1200	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.24
1100	2.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	1.73	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	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	4.80	0.04	0.00	0.00	0.12	0.00	0.00	0.79

FCD of Maricopa County ALERT System - G013: Rain Gages 5060-5095

Gage No.	5060	5065	5070	5075	5080	5085	5090	5095
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	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
1200	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
1000	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
0800	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
0600	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
0400	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
0200	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
TOTALS:	0.00	0.00	0.24	0.00	0.04	0.00	0.00	0.00

FCD of Maricopa County ALERT System - G014: Rain Gages 5100-5135

Gage No.	5100	5105	5110	5115	5120	5125	5130	5135
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.08
2000	0.00	0.00	0.00	0.08	0.12	0.00	0.00	0.04
1900	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.12
1800	0.00	0.51	0.20	0.28	0.31	0.16	0.00	0.08
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1600	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
1400	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
1200	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
1000	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.20
0800	0.00	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	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.00	0.55	0.20	0.67	0.47	0.24	0.00	0.71

FCD of Maricopa County ALERT System - G015: Rain Gages 5140-5175

Gage No.	5140	5145	5150	5155	5160	5165	5170	5175
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.16	0.00	0.00	0.00	0.24	0.00	0.00
1500	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
1300	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
1100	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	0.04	0.00	0.00	0.00
0900	0.00	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	0.00
0700	0.00	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	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.16	0.00	0.00	0.04	0.24	0.00	0.00

FCD of Maricopa County ALERT System - G016: Rain Gages 5180-5215

Gage No.	5180	5185	5190	5195	5200	5205	5210	5215
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	_____	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	_____	0.00	0.00	0.12	0.08	0.00	0.00
2000	0.00	_____	0.00	0.00	0.08	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
1500	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
1300	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
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.24
0900	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00
0800	0.00	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	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.00	0.00	0.00	0.28	0.20	0.39	0.00	1.18

FCD of Maricopa County ALERT System - G017: Rain Gages 5220-5265

Gage No.	5220	5225	5230	5240	5245	5250	5260	5265
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.08
1600	0.00	0.00	0.00	0.24	0.00	0.31	0.00	0.59
1500	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
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.43	0.08	0.04	0.00	0.04	0.08	0.04	0.00
0900	0.00	0.04	0.04	0.00	0.04	0.87	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.04	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.47	0.16	0.16	0.39	0.12	1.26	0.04	0.67

FCD of Maricopa County ALERT System - G018: Rain Gages 5270-5335

Gage No.	5270	5275	5280	5290	5300	5305	5320	5335
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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	0.04	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00
2000	0.00	0.00	0.16	0.00	0.04	0.00	0.00	0.04
1900	0.00	0.00	0.08	0.00	0.16	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.20	0.00	0.00	0.12	0.12
1600	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.31	0.00	0.08	0.00	0.24	0.35	0.00
1400	0.00	0.94	0.00	0.16	0.00	0.00	0.00	0.00
1300	0.00	1.10	0.00	0.00	0.00	0.00	0.00	0.04
1200	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.63
1000	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.51
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
0600	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.35
0500	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
0400	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.67
0300	0.00	0.00	0.00	0.59	0.00	0.00	0.16	0.04
0200	0.00	0.08	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	0.00
TOTALS:	0.00	2.76	0.28	1.10	0.24	0.24	2.36	3.39

FCD of Maricopa County ALERT System - G019: Rain Gages 5340-5415

Gage No.	5340	5350	5365	5380	5400	5405	5410	5415
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.12
2100	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00
2000	0.08	0.00	0.00	0.04	0.31	0.51	0.47	0.16
1900	0.00	0.16	0.04	0.00	0.00	0.00	0.00	0.24
1800	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.08	0.12	0.20	0.04	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1300	0.04	0.00	0.04	0.12	0.00	0.00	0.00	0.00
1200	0.24	0.08	0.00	0.08	0.00	0.00	0.00	0.00
1100	0.16	0.04	0.31	0.20	0.00	0.00	0.00	0.00
1000	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	1.30	0.00	0.00	0.08	0.00	0.00	0.00	0.00
0800	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0700	0.63	0.00	0.00	0.00	0.00	0.04	0.12	0.00
0600	0.67	0.04	0.00	0.28	0.16	0.28	0.08	0.04
0500	0.12	0.00	0.63	0.31	0.00	0.00	0.00	0.00
0400	1.54	1.30	0.87	0.43	0.00	0.00	0.00	0.00
0300	0.00	0.12	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	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	5.43	1.85	2.13	1.61	0.67	0.83	0.67	0.55

FCD of Maricopa County ALERT System - G020: Rain Gages 5420-5454

Gage No.	5420	5425	5430	5435	5440	5445	5450	5454
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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	0.04	0.00	0.00	0.00
2200	0.04	0.00	0.08	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
2000	0.47	0.04	0.04	0.00	0.00	0.00	0.00	0.00
1900	0.59	0.12	0.24	0.12	0.04	0.12	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.16
1600	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
1400	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
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.04
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.39
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
0800	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0700	0.00	0.51	0.00	0.31	0.12	0.20	0.00	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	1.10	0.67	0.35	0.47	0.20	0.35	1.65	1.14

FCD of Maricopa County ALERT System - G021: Rain Gages 5455-5495

Gage No.	5455	5465	5470	5475	5480	5485	5490	5495
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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	0.04	0.00	0.04	0.00
1800	0.00	0.08	0.08	0.00	0.12	0.00	0.00	0.00
1700	0.16	0.12	0.00	0.00	0.00	0.08	0.12	0.08
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
1500	0.00	0.00	0.04	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
1300	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.47	0.04	0.20	0.04	0.00	0.00	0.00	0.00
1100	1.02	0.00	0.31	0.08	0.00	0.00	0.04	0.75
1000	0.43	0.00	0.28	0.28	0.00	0.12	0.31	0.00
0900	0.00	0.00	0.08	0.12	0.00	0.00	0.00	0.08
0800	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
0700	0.08	0.04	0.24	0.00	1.22	0.00	0.00	0.00
0600	0.35	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	2.52	0.31	1.22	0.51	1.38	0.28	0.51	0.94

FCD of Maricopa County ALERT System - G022: Rain Gages 5500-5545

Gage No.	5500	5505	5510	5515	5520	5525	5535	5545
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	0.00	0.00	0.00	0.04	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
2200	0.00	0.04	0.04	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
2000	0.08	0.43	0.08	0.12	0.04	0.24	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
1800	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.12
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
1500	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	0.04
1300	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	0.08
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0900	0.00	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	0.20	1.54
0700	0.12	0.47	0.35	1.42	1.06	0.51	1.34	0.79
0600	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.20	0.94	0.47	1.61	1.18	0.75	1.57	3.19

FCD of Maricopa County ALERT System - G023: Rain Gages 5550-5625

Gage No.	5550	5555	5565	5580	5585	5595	5610	5625
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.04	0.00	0.04	0.00	0.00	0.08	0.08
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.24	0.00	0.31	0.47	0.00	0.00	0.00
1500	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
1300	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1200	0.08	0.04	0.04	0.16	0.00	0.00	0.16	0.00
1100	0.00	0.67	0.00	0.47	0.63	0.00	0.00	0.67
1000	0.04	0.43	0.00	0.04	0.16	0.00	0.00	0.12
0900	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.08	0.91	0.20	1.50	0.83	0.00	0.08	0.59
0700	0.35	0.94	1.10	1.38	1.38	0.00	0.39	0.55
0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.16	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.59	3.39	1.42	4.06	3.50	0.00	0.71	2.01

FCD of Maricopa County ALERT System - G024: Rain Gages 5630-5685

Gage No.	5630	5635	5640	5650	5660	5670	5675	5685
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
08/19/14								
2400	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	0.04	0.00	0.00
2200	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
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1800	0.08	0.24	0.16	0.39	0.20	0.00	0.00	0.04
1700	0.00	0.00	0.04	0.00	0.00	0.00	0.43	0.00
1600	0.00	0.16	0.12	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	0.08
1400	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.04	0.00	0.00	0.04	0.00	0.00	0.00
1200	0.00	0.00	0.08	0.16	0.00	0.04	0.12	0.04
1100	0.35	1.02	2.48	0.43	0.47	0.00	0.16	0.00
1000	0.08	0.94	0.47	0.24	0.71	0.08	0.59	0.31
0900	0.00	0.28	0.08	0.39	0.79	0.39	0.08	0.16
0800	0.43	0.94	1.81	0.47	0.51	0.00	0.12	0.08
0700	0.67	1.50	0.00	1.22	0.59	0.12	0.00	0.39
0600	0.04	0.00	0.00	0.00	0.28	0.00	0.00	0.00
0500	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	0.04	0.79	0.00	0.16
0300	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00
0200	0.00	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	0.00
TOTALS:	1.73	5.12	5.28(est)	3.31	3.62	1.57	1.50	1.26

FCD of Maricopa County ALERT System - G025: Rain Gages 5700-5805

Gage No.	5700	5715	5730	5745	5760	5775	5790	5805
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	0.04	0.04	0.04	0.04	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
1800	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.04	0.08	0.00	0.04	0.00	0.00	0.00
1600	0.00	0.00	0.12	0.08	0.00	0.00	0.00	0.00
1500	0.04	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	0.08
1300	0.00	0.04	0.04	0.08	0.04	0.39	0.12	0.08
1200	0.04	0.43	0.24	0.12	0.47	0.24	0.16	0.16
1100	0.28	0.20	0.20	0.08	0.12	0.28	0.24	0.16
1000	0.12	0.12	0.16	0.08	0.12	0.16	0.47	0.20
0900	0.55	0.71	0.43	0.55	0.39	0.20	0.28	0.00
0800	0.51	0.79	0.51	0.63	0.16	0.20	0.28	0.04
0700	0.28	0.63	0.39	0.63	0.12	0.43	0.08	0.16
0600	0.24	0.12	0.16	0.04	0.12	0.08	0.16	0.00
0500	1.30	0.16	0.51	0.31	0.31	0.31	0.04	0.04
0400	1.02	0.98	0.04	0.00	0.00	0.00	0.00	0.00
0300	0.04	0.04	0.24	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	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	4.45	4.33	3.15	2.64	1.89	2.28	1.81	0.91

FCD of Maricopa County ALERT System - G026: Rain Gages 5820-5920

Gage No.	5820	5875	5880	5890	5900	5910	5915	5920
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.12	0.00	0.16	0.08
2100	0.00	0.00	0.00	0.04	0.00	0.00	0.08	0.00
2000	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.16	0.08	0.00	0.00
1800	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1700	0.00	0.04	0.20	0.08	0.00	0.00	0.00	0.00
1600	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
1400	0.12	0.00	0.00	0.04	0.00	0.00	0.04	0.00
1300	0.12	0.04	0.00	0.00	0.00	0.16	0.12	0.08
1200	0.04	0.12	0.16	0.43	0.00	0.00	0.00	0.00
1100	0.04	0.00	0.16	1.02	0.00	0.00	0.00	0.00
1000	0.04	0.20	0.31	0.31	0.00	0.00	0.00	0.00
0900	0.00	0.94	0.75	0.28	0.24	0.67	0.08	0.28
0800	0.00	0.20	0.04	0.55	0.98	1.46	0.83	0.63
0700	0.12	0.00	0.08	0.08	0.00	0.00	0.00	0.00
0600	0.12	0.08	0.04	0.00	0.00	0.00	0.00	0.00
0500	0.16	0.00	0.04	0.04	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.75	1.61	1.81	2.91	1.50	2.36	1.30	1.06

FCD of Maricopa County ALERT System - G027: Rain Gages 5925-5965

Gage No.	5925	5930	5940	5945	5950	5955	5960	5965
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.16
2100	0.00	0.12	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
1900	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.12	0.00	0.00	0.16	0.00	0.04
1600	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.04	0.00	0.08	0.04	0.00	0.00	0.12
1300	0.04	0.12	0.08	0.31	0.28	0.04	0.04	0.12
1200	0.04	0.28	1.14	0.00	0.00	0.91	0.04	0.00
1100	0.00	0.00	0.28	0.00	0.00	0.28	0.00	0.00
1000	0.24	0.00	0.04	0.00	0.00	0.20	0.20	0.00
0900	0.94	0.04	0.08	0.00	0.16	0.08	0.51	0.16
0800	0.04	1.06	1.42	0.47	0.24	1.26	0.00	0.24
0700	0.04	0.08	0.00	0.16	0.00	0.00	0.12	0.00
0600	0.20	0.00	0.00	0.00	0.00	0.00	0.43	0.00
0500	0.08	0.00	0.00	0.00	0.00	0.00	0.08	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	1.61	1.97	3.19	1.02	0.79	2.99	1.42	0.83

FCD of Maricopa County ALERT System - G028: Rain Gages 5970-6510

Gage No.	5970	5975	5980	5985	5990	5995	6500	6510
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
2100	0.00	0.04	0.00	0.00	0.04	0.00	0.00	0.00
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.12	0.08	0.08	0.04	0.04	0.04	0.04	0.00
1300	0.43	0.35	0.28	0.51	0.20	0.47	0.00	0.12
1200	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
1000	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.20	0.08	0.24	0.08	0.24	0.04	0.00	0.00
0800	0.47	0.24	0.63	0.43	0.59	0.43	0.00	0.00
0700	0.04	0.04	0.04	0.00	0.00	0.00	0.04	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
0500	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	0.04	0.00	0.00
0300	0.00	0.00	0.04	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	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.26	0.87	1.30	1.10	1.10	1.06	0.12	0.12

FCD of Maricopa County ALERT System - G029: Rain Gages 6520-6570

Gage No.	6520	6525	6530	6535	6540	6550	6560	6570
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
2100	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
1900	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
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.04	0.00	0.00	0.00	0.04	0.00	0.04	0.16
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
1200	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
1000	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
0800	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
0700	0.08	0.00	0.04	0.08	0.04	0.04	0.00	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.12	0.00	0.04	0.08	0.12	0.04	0.16	0.16

FCD of Maricopa County ALERT System - G030: Rain Gages 6575-6610

Gage No.	6575	6580	6585	6590	6595	6600	6605	6610
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.16	0.00	0.00	0.04	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
1200	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
1000	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
0800	0.00	0.08	0.00	0.04	0.00	0.04	0.00	0.04
0700	0.00	0.12	0.16	0.08	0.16	0.08	0.04	0.00
0600	0.00	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	0.00
0400	0.00	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	0.00
0200	0.00	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	0.00
TOTALS:	0.16	0.20	0.16	0.16	0.16	0.12	0.04	0.04

FCD of Maricopa County ALERT System - G031: Rain Gages 6615-6655

Gage No.	6615	6620	6625	6630	6635	6640	6650	6655
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.00	0.00	0.00	0.04	0.04	0.12	0.04	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
1200	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
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.04	0.00	0.08	0.00	0.04	0.04
0700	0.00	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	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.08	0.04	0.08	0.12	0.12	0.08	0.08

FCD of Maricopa County ALERT System - G032: Rain Gages 6670-6705

Gage No.	6670	6675	6680	6685	6690	6695	6700	6705
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.04	0.04	0.08	0.08	0.12	0.08	0.04	0.16
1300	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
1100	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
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.04	0.04	0.08	0.04
0700	0.00	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	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.04	0.04	0.08	0.08	0.16	0.12	0.12	0.20

FCD of Maricopa County ALERT System - G033: Rain Gages 6710-6745

Gage No.	6710	6715	6720	6725	6730	6735	6740	6745
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.00	0.00	0.04	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
1400	0.00	0.00	0.00	0.04	0.94	0.00	0.00	0.04
1300	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.12	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
1000	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	0.08	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00
0700	0.00	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	0.00
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.04	0.00	0.20	0.04	0.94	0.35	0.00	0.04

FCD of Maricopa County ALERT System - G034: Rain Gages 6750-6840

Gage No.	6750	6755	6780	6810	6820	6830	6835	6840
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.08	0.20	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.04
1900	0.00	0.00	0.00	0.94	0.31	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	0.08	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
1200	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
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
0800	0.00	0.04	0.16	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.08
0500	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
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.08	0.12	0.20	1.02	0.63	0.08	0.00	0.12

FCD of Maricopa County ALERT System - G035: Rain Gages 6845-6910

Gage No.	6845	6850	6865	6880	6890	6900	6905	6910
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.12	0.04	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.16	0.00	0.35	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.12	0.04	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
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	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
1200	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
1000	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
0800	0.00	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	0.00
0600	0.00	0.24	0.43	0.20	0.00	0.00	0.00	0.00
0500	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	0.04
0300	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	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.28	0.28	0.91	0.24	0.00	0.00	0.00	0.04

FCD of Maricopa County ALERT System - G036: Rain Gages 6920-6980

Gage No.	6920	6930	6940	6950	6955	6960	6965	6980
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	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
1400	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
1200	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
1000	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
0800	0.00	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	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.04	0.28	0.00
0500	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.00	0.08	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	0.00
0200	0.00	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	0.00
TOTALS:	0.00	0.16	0.00	0.00	0.00	0.04	0.28	0.00

FCD of Maricopa County ALERT System - G037: Rain Gages 7000-7040

Gage No.	7000	7005	7010	7020	7025	7030	7035	7040
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.16	0.00	0.00	0.08	0.00	0.00	0.00	0.00
1600	0.04	0.12	0.00	0.24	0.12	0.16	0.00	0.00
1500	0.28	0.43	0.00	0.24	0.00	0.04	0.00	0.00
1400	0.35	1.06	0.00	0.55	0.00	0.04	0.00	0.04
1300	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
1100	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
0900	0.00	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	0.00
0700	0.00	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	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.08	0.00	0.04	0.00	0.00	0.00	0.00	0.00
0300	0.51	0.28	0.08	0.43	0.43	0.00	0.16	0.00
0200	0.04	0.12	0.16	0.04	0.04	0.08	0.04	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.46	2.01	0.28	1.57	0.59	0.31	0.20	0.04

FCD of Maricopa County ALERT System - G038: Rain Gages 7050-7120

Gage No.	7050	7060	7070	7080	7090	7100	7110	7120
StatType	dif							
DataType	precip							
Units	in							
08/19/14								
2400	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
2200	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
2000	0.00	0.00	0.04	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
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600	0.08	0.00	0.08	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
1400	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	0.04	0.00	0.00
1200	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
1000	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.00
0900	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0800	0.00	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	0.12	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.08	0.04	0.00
0500	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
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.08	0.08	0.04	0.00	0.00	0.00	0.00	0.08
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.16	0.08	0.16	0.04	0.04	0.28	0.08	0.08

FCD of Maricopa County ALERT System - G039: Rain Gages 7130-7150

Gage No.	7130	7135	7140	7145	7150
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
08/19/14					
2400	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1700	0.00	0.00	0.00	0.00	0.04
1600	0.00	0.00	0.00	0.00	0.55
1500	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.12	0.00	0.08
1200	0.00	0.00	0.00	0.00	0.04
1100	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00
0900	0.04	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00	0.00
0600	0.04	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.16
0200	0.00	0.00	0.00	0.28	0.00
0100	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.08	0.00	0.12	0.28	0.87

FCD of Maricopa County ALERT System - G040: Rain Gages 7155-7170

Gage No.	7155	7160	7165	7170
StatType	dif	dif	dif	dif
DataType	precip	precip	precip	precip
Units	in	in	in	in
08/19/14				
2400	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.12
1700	0.00	0.20	0.00	0.12
1600	0.28	0.20	0.08	0.12
1500	0.31	0.00	0.04	0.00
1400	0.91	0.12	0.16	0.16
1300	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00
0300	0.28	0.04	0.04	0.51
0200	0.00	0.08	0.24	0.00
0100	0.00	0.00	0.00	0.00
TOTALS:	1.77	0.63	0.55	1.02