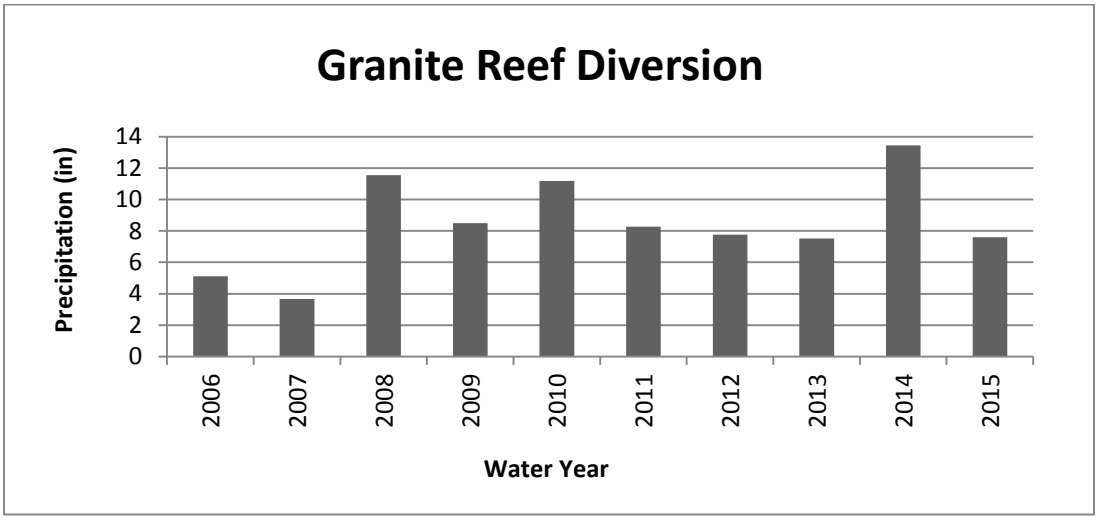
Station Name: Granite Reef Diversion

Station ID Number History:	**4565** since 7/21/05
Station Type:	Rain
Data Begins:	07/21/2005
Years Since Installation:	10.20 (as of 10/01/15)
Data Repeater:	Thompson Peak
County:	Maricopa
Latitude:	33º 30’ 43.1” (33.51197)
Longitude:	111º 41’ 01.9” (111.68386)
Elevation:	1,330 ft. msl
Location:	Bush Highway near Granite Reef Dam
Data Record:	
Incomplete Months:	None
Missing Months:	None
Remarks:	Records Good



Data Statistics for Period of Record:

Number of storms greater than 1 inch in 24 hours:	23	
Number of storms greater than 2 inches in 24 hours:	5	
Number of storms greater than 3 inches in 24 hours:	1	
		Approx. T_r
Greatest 15 minute total:	1.06 on 07/24/11	48 years
Greatest 1 hour total:	1.38 on 07/24/11	15 years
Greatest 3 hour total:	1.97 on 09/08/14	43 years
Greatest 6 hour total:	3.50 on 09/08/14	894 years
Greatest 24 hour total:	3.74 on 09/08/14	107 years
Greatest 72 hour total:	3.74 on 09/08/14	30 years

Water Year Totals: (Mean of Complete Water Years [10] = 8.46 inches)

Water Year	Total	Water Year	Total
2020		2010	11.18
2019		2009	8.50
2018		2008	11.54
2017		2007	3.66
2016		2006	5.12
2015	7.60	2005	M
2014	13.43	2004	
2013	7.52	2003	
2012	7.76	2002	
2011	8.27	2001	

M: One or more months contain partial or missing data

Design Rainfall for this Geographic Location:

Click this link for Point Precipitation Frequency Estimates (Annual Maximum Series) in Tabular and Graphical Formats from NOAA Atlas 14, Volume I, Version 5

Flood Control District of Maricopa County ALERT System

Daily Rainfall at Granite Reef Diversion (gage # 4565) for Water Year 2015

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2			.04			.51				.08		
3										.04		
4			1.02					.75				
5									.31			
6												
7											.24	
8	.39											
9												
10												
11				.04							.12	
12				.04								
13			.31	.08								.04
14												.24
15								.63				
16								.04				
17			.20									
18						.12						
19						.12						
20												
21												.04
22												
23					.04							
24												
25							.04				.16	
26				.12			.08					
27												
28												
29				.16	----							
30				1.22	----							
31		----	.31		----		----		----		.08	----
SUM	0.39	0.00	1.89	1.65	0.04	0.75	0.12	1.42	0.31	0.12	0.59	0.31
ACC	0.39	0.39	2.28	3.94	3.98	4.72	4.84	6.26	6.57	6.69	7.28	7.60
MAX	0.39	0.00	1.02	1.22	0.04	0.51	0.08	0.75	0.31	0.08	0.24	0.24
NO.	1	0	5	6	1	3	2	3	1	2	4	3

Maximum Daily Rainfall	1.22
Maximum Monthly Rainfall	1.89
Total Annual Rainfall	7.60
Number of Days with Rain	31

Flood Control District of Maricopa County ALERT System

Daily Rainfall at Granite Reef Diversion (gage # 4565) for Water Year 2014

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1						1.65						
2						.04					.08	
3											.12	
4												
5												
6												
7												
8										.16		3.74
9										.04		
10												
11												
12											.04	
13											.43	
14												
15										.43		
16												.04
17												.31
18											.04	
19											.16	
20			.91									
21		.31										
22		1.89										
23		.47										
24												
25												
26										.08		
27										.16		2.28
28												.04
29					----							
30					----							
31		----			----		----		----			----
SUM	0.00	2.68	0.91	0.00	0.00	1.69	0.00	0.00	0.00	0.87	0.87	6.42
ACC	0.00	2.68	3.58	3.58	3.58	5.28	5.28	5.28	5.28	6.14	7.01	13.46
MAX	0.00	1.89	0.91	0.00	0.00	1.65	0.00	0.00	0.00	0.43	0.43	3.78
NO.	0	3	1	0	0	2	0	0	0	5	6	5

Maximum Daily Rainfall	3.74
Maximum Monthly Rainfall	6.42
Total Annual Rainfall	13.43
Number of Days with Rain	22

Flood Control District of Maricopa County ALERT System

Daily Rainfall at Granite Reef Diversion (gage # 4565) for Water Year 2013

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3												.16
4												
5										.04		
6											.04	
7											.04	
8						.83	.08					.59
9		.04			.04							1.06
10		.12										
11	.16				.20							
12												
13			.16									
14			.31									
15			.39									
16										.04		
17											.04	
18			.04								.04	
19			.04									
20					.51					.08		
21										.16		
22												
23												
24												
25												
26				1.22								
27				.28							.20	
28				.24								
29					----							
30			.08		----						.31	
31		----			----		----		----			----
SUM	0.16	0.16	1.02	1.73	0.75	0.83	0.08	0.00	0.00	0.31	0.67	1.81
ACC	0.16	0.31	1.34	3.07	3.82	4.65	4.72	4.72	4.72	5.04	5.71	7.52
MAX	0.16	0.12	0.39	1.22	0.51	0.83	0.08	0.00	0.00	0.16	0.31	1.06
NO.	1	2	6	3	3	1	1	0	0	4	6	3

Maximum Daily Rainfall	1.22
Maximum Monthly Rainfall	1.81
Total Annual Rainfall	7.52
Number of Days with Rain	30

Flood Control District of Maricopa County ALERT System

Daily Rainfall at Granite Reef Diversion (gage # 4565) for Water Year 2012

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3			.08									
4	.20	.12										
5		.28									.04	
6	.04											
7		.20										.63
8											.04	
9												
10												.08
11										.04		.12
12			.47							.08		
13		.08	1.18									
14					.16					1.30		
15												
16												
17											.08	
18			.12			.39						
19						.04						
20												
21										.04	.20	
22										.04	.04	
23											1.18	
24												
25												
26							.16					
27												
28										.24		
29										.12		
30					----							
31		----			----		----		----			----
SUM	0.24	0.67	1.85	0.00	0.16	0.43	0.16	0.00	0.00	1.85	1.57	0.83
ACC	0.24	0.91	2.76	2.76	2.91	3.35	3.51	3.51	3.51	5.36	6.93	7.76
MAX	0.20	0.28	1.18	0.00	0.16	0.39	0.16	0.00	0.00	1.30	1.18	0.63
NO.	2	4	4	0	1	2	1	0	0	7	6	3

Maximum Daily Rainfall	1.30
Maximum Monthly Rainfall	1.85
Total Annual Rainfall	7.76
Number of Days with Rain	30

Flood Control District of Maricopa County ALERT System

Daily Rainfall at Granite Reef Diversion (gage # 4565) for Water Year 2011

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3										.04	.16	
4	.08											
5	.67											
6							.04					
7												
8												
9							.55					
10							.04					.67
11										.16		
12												
13											.04	.08
14												
15												
16			.24									
17												
18								.04			.55	
19					.55							
20					.16							
21	.31					.28						
22			.20			.04						
23			.04									
24										1.38		
25												
26											.08	
27					.55							
28												
29			.79		----							
30			.43		----					.04		
31		----			----		----		----	.08		----
SUM	1.06	0.00	1.69	0.00	1.26	0.31	0.63	0.04	0.00	1.69	0.83	0.75
ACC	1.06	1.06	2.76	2.76	4.02	4.33	4.96	5.00	5.00	6.69	7.52	8.27
MAX	0.67	0.00	0.79	0.00	0.55	0.28	0.55	0.04	0.00	1.38	0.55	0.67
NO.	3	0	5	0	3	2	3	1	0	5	4	2

Maximum Daily Rainfall	1.38
Maximum Monthly Rainfall	1.69
Total Annual Rainfall	8.27
Number of Days with Rain	28

Annual Total (mm): 210 Days Down: 0

Flood Control District of Maricopa County ALERT System

Daily Rainfall at Granite Reef Diversion (gage # 4565) for Water Year 2010

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1											----	
2											----	
3												
4												
5												
6												
7			.43		.12	.67					.12	
8						.12						
9						.08						
10										.04		
11			----									
12			----									
13			----	.08								
14												
15												
16												
17											1.02	
18				.04								
19				.94								
20					.04							
21				2.21	.20						.24	
22			.20	.51	.20						.20	.12
23			.04			.51						
24												
25												
26												
27												
28				.08	.71						.08	
29				.04	----					.67		
30					----					.12		
31		----			----		----		----	1.38		----
SUM	0.00	0.00	0.67	3.90	1.26	1.38	0.00	0.00	0.00	2.20	1.65	0.12
ACC	0.00	0.00	0.67	4.57	5.83	7.20	7.20	7.20	7.20	9.41	11.06	11.18
MAX	0.00	0.00	0.43	2.21	0.71	0.67	0.00	0.00	0.00	1.38	1.02	0.12
NO.	0	0	3	7	5	4	0	0	0	4	5	1

Maximum Daily Rainfall	2.21
Maximum Monthly Rainfall	3.90
Total Annual Rainfall	11.18
Number of Days with Rain	29

Notes:

Annual rainfall in millimeters: 284

Gage 4565 down from 12/10 14:02 (11) through 12/14 08:03 (11) due to repeater failure; no rain fell.

Gage 4565 down from 07/31 11:13 (239) through 08/03 09:23 (239) due to data collision; no rain fell.

Flood Control District of Maricopa County ALERT System
Daily Rainfall at Granite Reef (gage # 4565) for Water Year 2009

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3										.08		.47
4				.04								
5												.47
6												
7												
8					.67							
9					.55							.51
10					.04							
11							.24					
12												
13											.20	
14			.31									
15			.12									
16			.35									
17			.12		.35							
18			.24							.12		
19												
20										.04		
21								.16				
22			.24	.12				.20				
23			.12	.04						.98		
24										.04		
25			.31									
26		.43	.24									
27		.63	.04									
28												
29					----							
30					----							
31		----			----		----		----			----
SUM	0.00	1.06	2.09	0.20	1.61	0.00	0.24	0.35	0.00	1.26	0.20	1.46
ACC	0.00	1.06	3.15	3.35	5.00	5.00	5.24	5.59	5.59	6.85	7.05	8.50
MAX	0.00	0.63	0.35	0.12	0.67	0.00	0.24	0.20	0.00	0.98	0.20	0.51
NO.	0	2	10	3	4	0	1	2	0	5	1	3

Maximum Daily Rainfall	0.98
Maximum Monthly Rainfall	2.09
Total Annual Rainfall	8.50
Number of Days with Rain	31

Notes:

Annual rainfall in millimeters: 216

Total down-time: 0.00 days

Flood Control District of Maricopa County ALERT System
Daily Rainfall at Granite Reef (gage # 4565) for Water Year 2008

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1			.12									
2												
3												
4					.28							
5				.08	.04						.04	
6												
7			.55	.67							.12	
8			.51									
9			.04									
10			.39							1.73		.16
11			.04							.31		.04
12												
13										.43	.04	
14												
15					.31						----	
16											----	
17											----	
18											----	
19												
20					.08					.20		
21					.04					.04		
22					.04			.43		.04		
23								.12				
24				.04				.12				
25											.24	
26											.12	
27				1.54							.04	
28				.16							.75	
29												
30		1.54			----							
31		----			----		----		----		.12	----
SUM	0.00	1.54	1.65	2.48	0.79	0.00	0.00	0.67	0.00	2.76	1.46	0.20
ACC	0.00	1.54	3.19	5.67	6.46	6.46	6.46	7.13	7.13	9.88	11.34	11.54
MAX	0.00	1.54	0.55	1.54	0.31	0.00	0.00	0.43	0.00	1.73	0.75	0.16
NO.	0	1	6	5	6	0	0	3	0	6	8	2

Maximum Daily Rainfall	1.73
Maximum Monthly Rainfall	2.76
Total Annual Rainfall	11.54
Number of Days with Rain	37

Notes:

Annual rainfall in millimeters: 293 Total down-time: 4.96 days
Gage 4565 down from 8/14 06:57 (256) through 8/19 06:06 (256) for unknown reason; no rain fell.

Flood Control District of Maricopa County ALERT System
Daily Rainfall at Granite Reef (gage # 4565) for Water Year 2007

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1											.04	
2												
3											.04	
4												
5	.04											
6	.04											
7												
8	.16											
9												
10												
11					.04							
12							.20					
13	.04				.04		.08				.04	
14	.12										.08	
15												
16												.04
17			.04									
18												
19				.12	.16					.08		
20					.04							
21				.47			.12					
22			.12			.71						
23												
24						.12						
25										.20		
26												
27												
28			.04									
29					----							
30					----					.20		
31		----		.28	----		----		----			----
SUM	0.39	0.00	0.20	0.87	0.28	0.83	0.39	0.00	0.00	0.47	0.20	0.04
ACC	0.39	0.39	0.59	1.46	1.73	2.56	2.95	2.95	2.95	3.43	3.62	3.66
MAX	0.16	0.00	0.12	0.47	0.16	0.71	0.20	0.00	0.00	0.20	0.08	0.04
NO.	5	0	3	3	4	2	3	0	0	3	4	1

Maximum Daily Rainfall	0.71
Maximum Monthly Rainfall	0.87
Total Annual Rainfall	3.66
Number of Days with Rain	28

Notes:

Annual rainfall in millimeters: 93

Total down-time: 0.00 days

Flood Control District of Maricopa County ALERT System
Daily Rainfall at Granite Reef (gage # 4565) for Water Year 2006

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1											.12	
2												.12
3												.08
4	.04											
5												
6												
7									.04			.12
8												
9												
10												
11						1.97					.04	
12						.04					.47	
13												
14												
15												
16												
17	.04											
18	.12											
19						.20						
20						.04						
21										.04	.28	
22											.04	
23												
24											.31	
25										.31		
26										.12		
27										.35		
28												
29					----							
30					----					.24		
31		----			----		----		----			----
SUM	0.20	0.00	0.00	0.00	0.00	2.24	0.00	0.00	0.04	1.06	1.26	0.31
ACC	0.20	0.20	0.20	0.20	0.20	2.44	2.44	2.44	2.48	3.54	4.80	5.12
MAX	0.12	0.00	0.00	0.00	0.00	1.97	0.00	0.00	0.04	0.35	0.47	0.12
NO.	3	0	0	0	0	4	0	0	1	5	6	3

Maximum Daily Rainfall	1.97
Maximum Monthly Rainfall	2.24
Total Annual Rainfall	5.12
Number of Days with Rain	22

Notes:

Annual rainfall in millimeters: 130

Total down-time: 0.00 days

Flood Control District of Maricopa County ALERT System
Daily Rainfall at Granite Reef (gage # 4565) for Water Year 2005

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		.04
2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.14	
3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.12	
4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		-----
5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		-----
6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.79	
9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.04	.04
10	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
11	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
12	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.28	
13	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
17	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
18	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
19	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
20	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
21	-----	-----	-----	-----	-----	-----	-----	-----	-----	.28		
22	-----	-----	-----	-----	-----	-----	-----	-----	-----	.08		
23	-----	-----	-----	-----	-----	-----	-----	-----	-----	.04		
24	-----	-----	-----	-----	-----	-----	-----	-----	-----			
25	-----	-----	-----	-----	-----	-----	-----	-----	-----			
26	-----	-----	-----	-----	-----	-----	-----	-----	-----			
27	-----	-----	-----	-----	-----	-----	-----	-----	-----			
28	-----	-----	-----	-----	-----	-----	-----	-----	-----			
29	-----	-----	-----	-----	-----	-----	-----	-----	-----			
30	-----	-----	-----	-----	-----	-----	-----	-----	-----			
31	-----	-----	-----	-----	-----	-----	-----	-----	-----	.51		-----
SUM	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.91	2.36	0.08
ACC	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.91	3.27	3.35
MAX	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.51	1.14	0.04
NO.	-----	-----	-----	-----	-----	-----	-----	-----	-----	4	5	2

Maximum Daily Rainfall	1.14
Maximum Monthly Rainfall	2.36
Partial Annual Rainfall	3.35
Number of Days with Rain	11

Notes:

Partial annual rainfall in millimeters: 85 Total down-time: 2.25 days
Gage 4565 down from 9/03 22:07 (84) through 9/06 04:07 (84) for unknown reason; no rain fell.
Station 4565 installed on 07/21/2005.