

**CONTRA COSTA COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
255 GLACIER DRIVE, MARTINEZ, CALIFORNIA**

Date: October 21, 2009

October 13, 2009 Storm Report

Summary of Approximate Return Periods for October 13, 2009 Storm						
Recording Stations	MSP	Rainfall Depth for 12-hour Duration	Storm Depth as % of MSP	Approx. Max Return Period	Duration	Station Description
ADH 37	23.50 in.	3.55 in.	15%	19-Yr	12-Hr	ADH - ARROYO DEL HAMBRE FERNDALE ROAD MARTINEZ
BAP 45	12.20 in.	3.63 in.	30%	999-Yr	12-Hr	BAP - BYRON AIRPORT
BCO 86	12.00 in.	3.69 in.	31%	999-Yr	12-Hr	BCO - CC COUNTY CORPORATION YARD BRENTWOOD
BIF 44	11.00 in.	3.42 in.	31%	999-Yr	12-Hr	BIF - BETHEL ISLAND FIRE
BIX 14	11.10 in.	2.41 in.	22%	47-Yr	12-Hr	BIX - EBMUD PUMP STATION BIXLER
BLD 32	33.50 in.	5.00 in.	15%	23-Yr	12-Hr	BLD - EBRPD BALD PEAK TILDEN PARK
CCP 43	17.50 in.	2.43 in.	14%	9-Yr	12-Hr	CCP - CONCORD PAVILION
CRK 35	20.00 in.	3.07 in.	15%	18-Yr	12-Hr	CRK - CUMMINGS PEAK MICROWAVE STATION CROCKETT
DBF 20	21.70 in.	3.58 in.	16%	27-Yr	12-Hr	DBF - DUBLIN FIRE STATION DUBLIN
DBL 22	27.50 in.	4.69 in.	17%	40-Yr	12-Hr	DBL - MT DIABLO MICROWAVE STATION
DVB 31	22.00 in.	4.39 in.	20%	88-Yr	12-Hr	DVB - DANVILLE LIBRARY
FCD 11	17.40 in.	3.41 in.	20%	52-Yr	12-Hr	FCD - CCC FLOOD CONTROL DISTRICT MARTINEZ
HLD 10	20.50 in.	4.04 in.	20%	74-Yr	12-Hr	HLD - HIGHLAND PEAK
ISD 39	12.00 in.	3.32 in.	28%	490-Yr	12-Hr	ISD - IRONHOUSE SANITARY DISTRICT
KRG 38	21.00 in.	2.65 in.	13%	7-Yr	12-Hr	KGR - KREGOR PEAK MICROWAVE STATION CLAYTON
MCF 16	19.22 in.	5.33 in.	28%	999-Yr	12-Hr	MCF - MARSH CREEK FIRE STA CLAYTON
MCR 25	13.50 in.	2.63 in.	19%	37-Yr	12-Hr	MCR - MARSH CREEK RESERVOIR
MDP 13	21.36 in.	4.40 in.	21%	109-Yr	12-Hr	MT - DIABLO PARK ROCK CITY
MED 19	12.60 in.	3.47 in.	28%	577-Yr	12-Hr	MED - LOS MEDANOS CHEVRON PUMP PLANT
ORF 18	29.21 in.	4.25 in.	15%	19-Yr	12-Hr	ORF - ORINDA FIRE STATION ORINDA
RIC 21	21.81 in.	3.73 in.	17%	33-Yr	12-Hr	RIC - RICHMOND CITY HALL
RKY 34	28.50 in.	4.31 in.	15%	22-Yr	12-Hr	RKY - ROCKY RIDGE MICROWAVE STATION
ROF 15	18.30 in.	3.12 in.	17%	26-Yr	12-Hr	ROF - RODEO FIRE STATION RODEO
RSS 29	23.00 in.	6.02 in.	26%	999-Yr	12-Hr	RSS - ROSSMOOR 800 ROCKVIEW DR WALNUT CREEK
SMC 12	28.15 in.	5.10 in.	18%	58-Yr	12-Hr	SMC - SAINT MARY'S COLLEGE MORAGA
YGF 33	17.00 in.	3.72 in.	22%	123-Yr	12-Hr	YGF - FIRE TRAINING CNTR TREAT BLVD WC/CON

The "Approximate Maximum Return Period" is calculated on the following sheets. The return period is approximated by linear interpolation between values on the "Duration and Return Period Total Storm Rainfall Depths and Recurrence Interval Exceeded" table. The first decimal place is shown to decipher between those storms that just missed qualifying for the standard return periods of 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-years.

**CONTRA COSTA COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
255 GLACIER DRIVE, MARTINEZ, CALIFORNIA**

Date: October 21, 2009

October 13, 2009 Storm Report

Summary of Approximate Return Periods for October 13, 2009 Storm												
Recording Stations	Depth	Rtn Prd.	Depth	Rtn Prd.	Depth	Rtn Prd.	Depth	Rtn Prd.	Depth	Rtn Prd.	Depth	Rtn Prd.
	3-Hr		6-Hr		12-Hr		24-Hr		48-Hr		96-Hr	
ADH 37	1.46	6.2-Yr	2.05	6.4-Yr	3.55	19.0-Yr	3.81	6.3-Yr	3.85	3.1-Yr	3.85	< 2-Yr
BAP 45	1.43	49.8-Yr	2.22	163.8-Yr	3.63	1000.0-Yr	3.89	121.1-Yr	3.89	22.0-Yr	3.89	7.2-Yr
BCO 86	1.32	37.6-Yr	2.32	300.8-Yr	3.69	1000.0-Yr	3.90	144.7-Yr	3.96	24.7-Yr	3.96	8.0-Yr
BIF 44	1.26	38.2-Yr	2.08	164.0-Yr	3.42	1000.0-Yr	3.58	110.9-Yr	3.68	24.2-Yr	3.68	8.0-Yr
BIX 14	0.81	4.5-Yr	1.34	9.4-Yr	2.41	47.0-Yr	2.56	15.7-Yr	2.56	4.9-Yr	2.56	3.0-Yr
BLD 32	1.78	4.7-Yr	3.15	12.1-Yr	5.00	23.1-Yr	5.38	7.2-Yr	5.40	3.3-Yr	5.42	< 2-Yr
CCP 43	0.78	2.0-Yr	1.37	3.8-Yr	2.43	8.8-Yr	2.62	4.3-Yr	2.67	2.3-Yr	2.67	< 2-Yr
CRK 35	1.41	8.7-Yr	1.96	8.7-Yr	3.07	17.6-Yr	3.36	6.5-Yr	3.36	3.2-Yr	3.36	< 2-Yr
DBF 20	1.44	7.6-Yr	2.29	14.5-Yr	3.58	26.8-Yr	3.61	6.6-Yr	3.69	3.4-Yr	3.69	< 2-Yr
DBL 22	1.48	4.4-Yr	2.71	13.0-Yr	4.69	40.4-Yr	5.63	20.3-Yr	5.95	6.9-Yr	6.04	3.5-Yr
DVB 31	1.67	15.8-Yr	2.73	34.2-Yr	4.39	88.5-Yr	4.77	22.8-Yr	4.85	6.7-Yr	4.85	3.3-Yr
FCD 11	1.37	12.6-Yr	2.09	21.1-Yr	3.41	51.7-Yr	3.51	12.8-Yr	3.54	4.6-Yr	3.54	2.6-Yr
HLD 10	1.36	7.1-Yr	2.13	12.0-Yr	4.04	73.6-Yr	4.33	19.4-Yr	4.40	5.8-Yr	4.45	3.2-Yr
ISD 39	1.22	24.9-Yr	2.09	96.3-Yr	3.32	489.7-Yr	3.47	55.3-Yr	3.48	14.0-Yr	3.48	5.0-Yr
KRG 38	0.90	2.1-Yr	1.48	3.4-Yr	2.65	7.2-Yr	2.86	3.8-Yr	2.95	< 2-Yr	2.95	< 2-Yr
MCF 16	1.81	39.7-Yr	3.32	417.5-Yr	5.33	1000.0-Yr	5.85	197.1-Yr	5.91	26.2-Yr	5.91	7.9-Yr
MCR 25	0.94	4.8-Yr	1.68	17.3-Yr	2.63	37.1-Yr	2.81	11.1-Yr	2.86	4.6-Yr	2.86	2.6-Yr
MDP 13	1.59	13.2-Yr	2.65	32.9-Yr	4.40	108.8-Yr	4.91	30.4-Yr	4.96	7.9-Yr	4.96	3.7-Yr
MED 19	1.30	30.2-Yr	2.35	240.1-Yr	3.47	577.2-Yr	3.60	55.2-Yr	3.67	15.1-Yr	3.67	5.2-Yr
ORF 18	1.53	4.3-Yr	2.56	7.8-Yr	4.25	18.9-Yr	4.40	5.2-Yr	4.48	2.8-Yr	4.48	< 2-Yr
RIC 21	1.49	8.5-Yr	2.60	26.3-Yr	3.73	33.4-Yr	3.80	7.9-Yr	3.80	3.6-Yr	3.81	< 2-Yr
RKY 34	1.53	4.5-Yr	2.68	9.9-Yr	4.31	22.1-Yr	4.55	6.6-Yr	4.66	3.3-Yr	4.73	< 2-Yr
ROF 15	1.37	9.8-Yr	1.87	9.3-Yr	3.12	26.4-Yr	3.20	7.2-Yr	3.20	3.4-Yr	3.21	< 2-Yr
RSS 29	2.58	260.6-Yr	4.02	782.6-Yr	6.02	1000.0-Yr	6.14	79.1-Yr	6.21	16.5-Yr	6.21	5.3-Yr
SMC 12	1.75	7.6-Yr	3.17	25.4-Yr	5.10	58.3-Yr	5.19	11.5-Yr	5.31	4.5-Yr	5.31	2.3-Yr
YGF 33	1.28	9.2-Yr	2.20	30.0-Yr	3.72	123.2-Yr	3.90	24.0-Yr	3.94	7.0-Yr	3.94	3.5-Yr

*Hourly gauge

** This gauge needs to be checked for accuracy. Actual depth far exceeded expected values for shorter durations.

The "Approximate Maximum Return Period" is calculated on the following sheets. The return period is approximated by linear interpolation between values on the "Duration and Return Period Total Storm Rainfall Depths and Recurrence Interval Exceeded" table. The first decimal place is shown to decipher between those storms that just missed qualifying for the standard return periods of 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-years.

Station: **ADH - ARROYO DEL HAMBRE FERNDAL ROAD MARTINEZ**

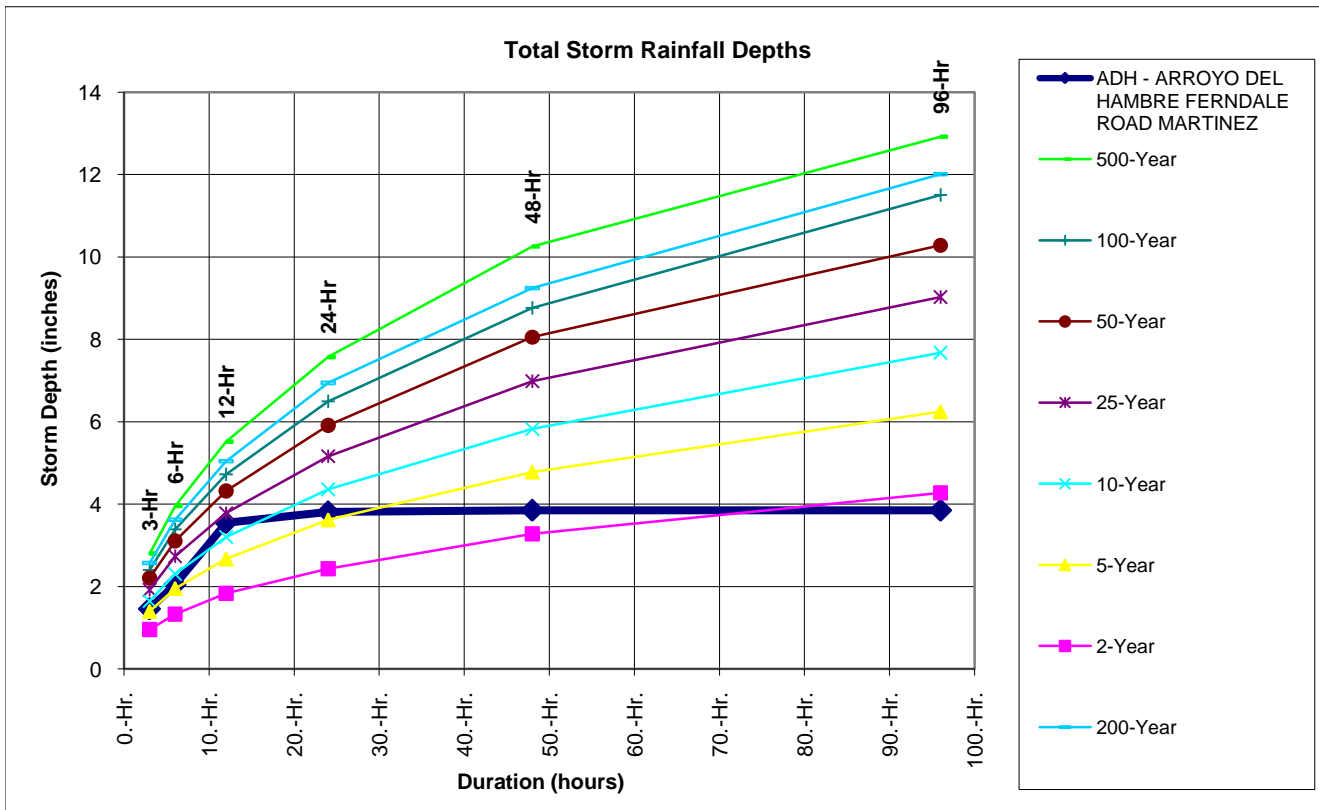
Mean Seasonal Rainfall: 23.50 inches
 Elevation: 800.00 feet

INSTALLED 1983

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.46	10/13/09	3:36 PM	6.2 -years
6-Hr	2.05	10/13/09	4:00 PM	6.4 -years
12-Hr	3.55	10/13/09	5:00 PM	19.0 -years
24-Hr	3.81	10/14/09	3:00 AM	6.3 -years
48-Hr	3.85	10/14/09	8:00 AM	3.1 -years
96-Hr	3.85	10/14/09	8:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.960	1.399	1.647	1.921	2.209	2.406	2.575	2.802	2.969
6-Hr	1.329	1.955	2.306	2.737	3.109	3.392	3.625	3.955	4.190
12-Hr	1.834	2.673	3.201	3.782	4.321	4.723	5.044	5.515	5.845
24-Hr	2.433	3.620	4.358	5.163	5.916	6.495	6.943	7.572	7.965
48-Hr	3.279	4.783	5.825	6.987	8.054	8.764	9.244	10.257	10.777
96-Hr	4.273	6.249	7.678	9.026	10.283	11.503	12.010	12.919	13.620

Depth met or exceeded.



Station: **BAP - BYRON AIRPORT**

Mean Seasonal Rainfall: 12.20 inches
 Elevation: 39.37 feet

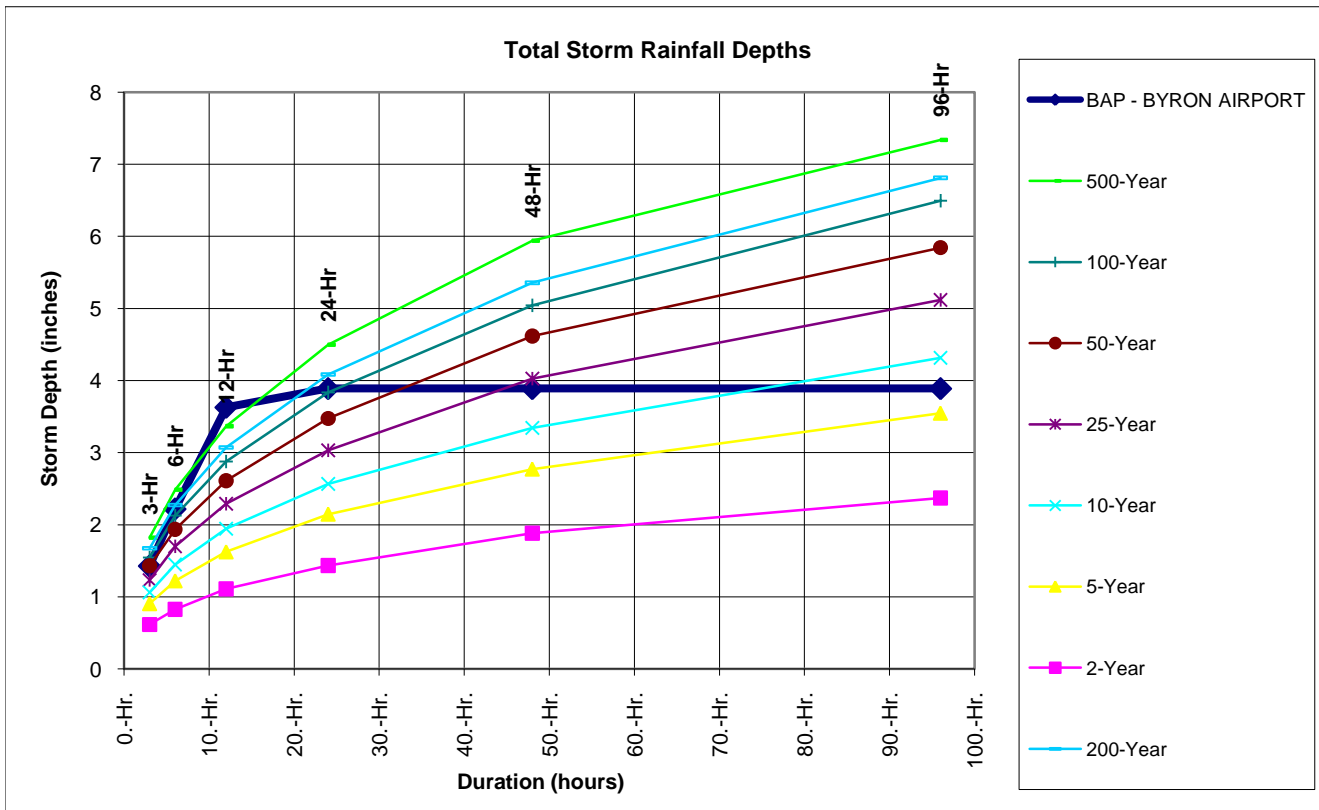
INSTALLED 2008

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.43	10/13/09	12:16 PM	49.8 -years
6-Hr	2.22	10/13/09	2:00 PM	163.8 -years
12-Hr	3.63	10/13/09	6:00 PM	1000.0 -years
24-Hr	3.89	10/13/09	10:00 PM	121.1 -years
48-Hr	3.89	10/13/09	10:00 PM	22.0 -years
96-Hr	3.89	10/13/09	10:00 PM	7.2 -years

Over 1000-yr Storm

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.617	0.906	1.064	1.234	1.431	1.547	1.675	1.821	1.907
6-Hr	0.828	1.223	1.447	1.702	1.938	2.126	2.273	2.486	2.608
12-Hr	1.111	1.624	1.945	2.290	2.613	2.879	3.074	3.368	3.531
24-Hr	1.434	2.147	2.568	3.034	3.475	3.837	4.086	4.498	4.688
48-Hr	1.882	2.772	3.343	4.026	4.619	5.044	5.357	5.940	6.234
96-Hr	2.370	3.546	4.315	5.120	5.844	6.495	6.812	7.337	7.744

Depth met or exceeded.



Station: **BCO - CC COUNTY CORPORATION YARD BRENTWOOD**

Mean Seasonal Rainfall: 12.00 inches
 Elevation: 95.00 feet

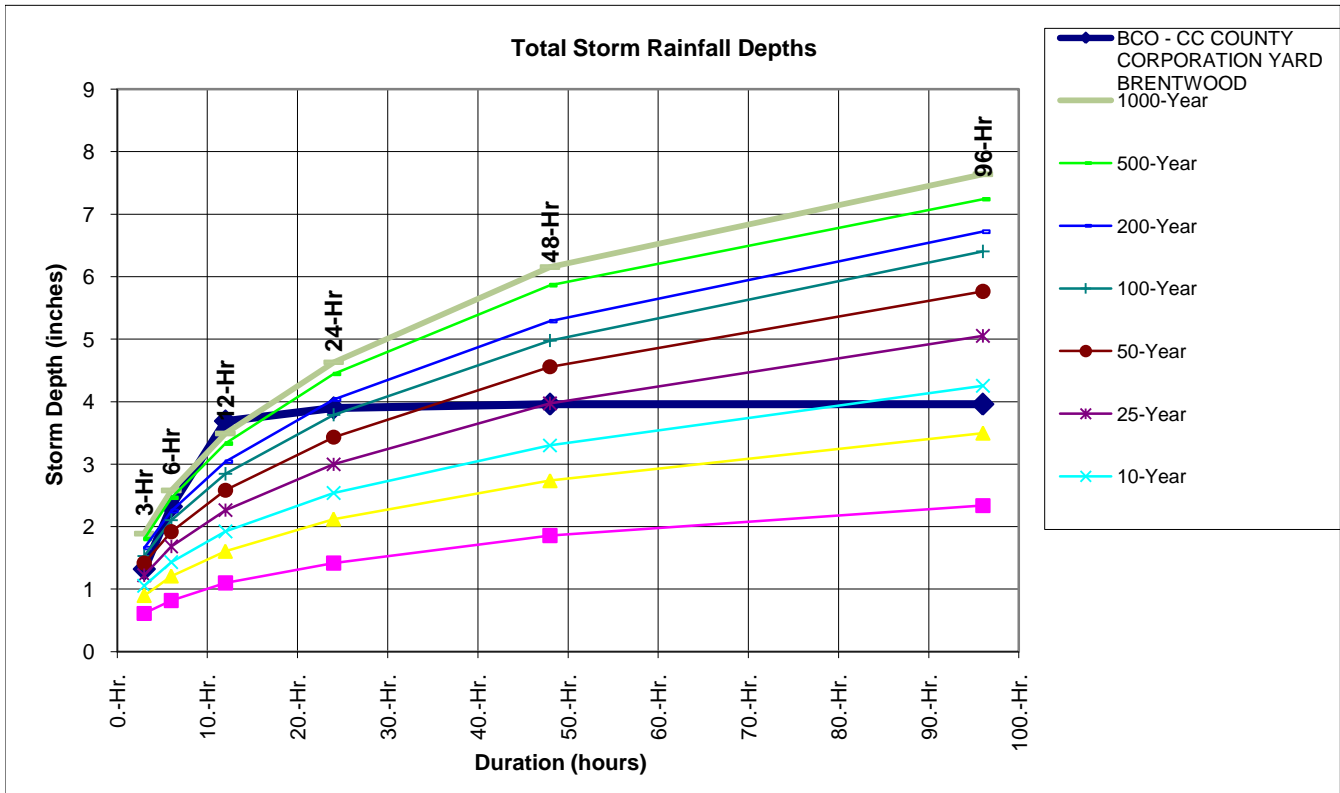
INSTALLED 1957

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.32	10/13/09	11:27 AM	37.6 -years
6-Hr	2.32	10/13/09	1:00 PM	300.8 -years
12-Hr	3.69	10/13/09	6:00 PM	1000.0 -years
24-Hr	3.90	10/13/09	10:00 PM	144.7 -years
48-Hr	3.96	10/14/09	9:00 AM	24.7 -years
96-Hr	3.96	10/14/09	9:00 AM	8.0 -years

Over 1000-yr Storm

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.611	0.897	1.053	1.222	1.418	1.532	1.659	1.804	1.888
6-Hr	0.819	1.210	1.432	1.683	1.917	2.104	2.249	2.460	2.580
12-Hr	1.098	1.606	1.922	2.264	2.582	2.846	3.039	3.330	3.490
24-Hr	1.417	2.121	2.537	2.997	3.432	3.790	4.036	4.444	4.630
48-Hr	1.857	2.736	3.299	3.974	4.558	4.978	5.288	5.864	6.154
96-Hr	2.337	3.498	4.255	5.051	5.766	6.406	6.720	7.238	7.640

Depth met or exceeded.



Station: **BIF - BETHEL ISLAND FIRE**
 Mean Seasonal Rainfall: 11.00 inches
 Elevation: 26.00 feet

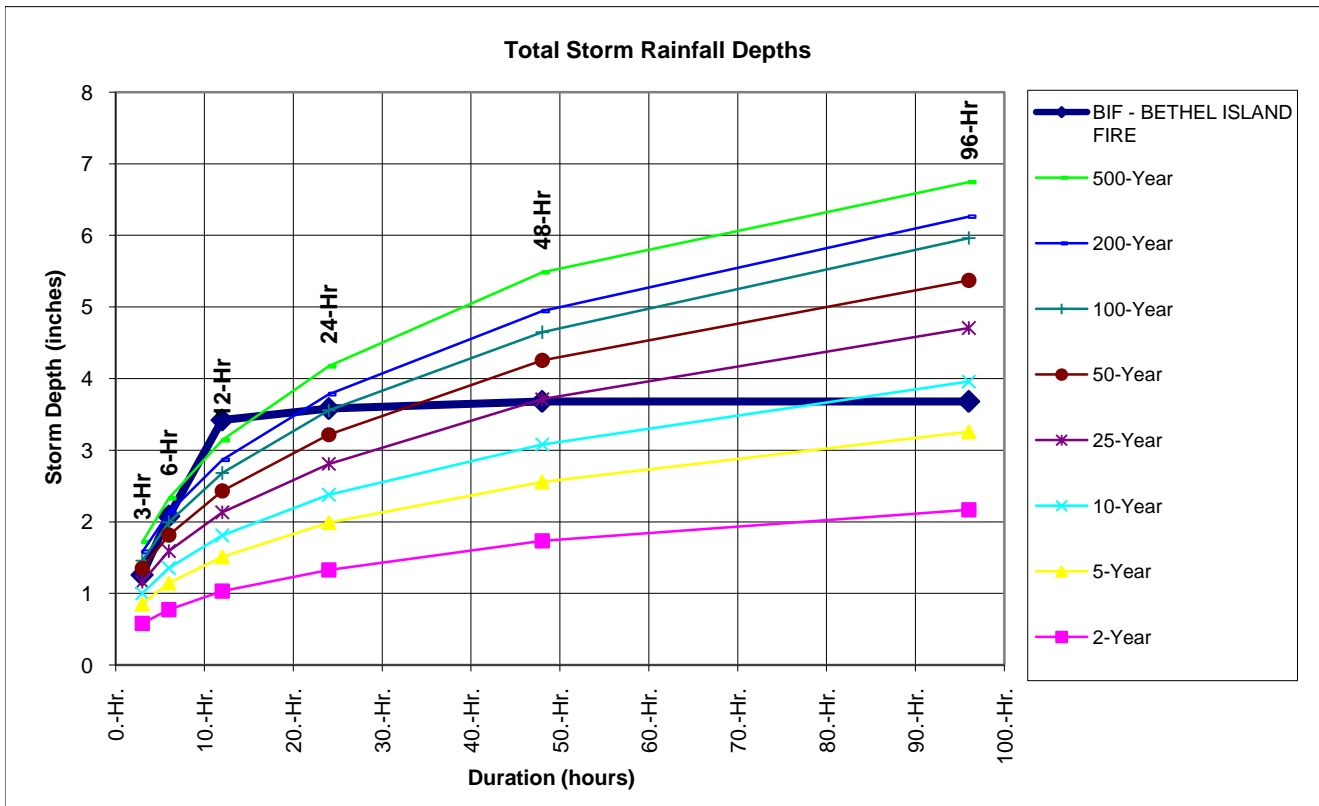
INSTALLED 2008

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.26	10/13/09	11:31 AM	38.2 -years
6-Hr	2.08	10/13/09	2:00 PM	164.0 -years
12-Hr	3.42	10/13/09	6:00 PM	1000.0 -years
24-Hr	3.58	10/13/09	10:00 PM	110.9 -years
48-Hr	3.68	10/14/09	10:00 AM	24.2 -years
96-Hr	3.68	10/14/09	10:00 AM	8.0 -years

Over 1000-yr Storm

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.580	0.854	1.002	1.161	1.349	1.456	1.580	1.717	1.794
6-Hr	0.774	1.145	1.356	1.592	1.814	1.992	2.130	2.330	2.440
12-Hr	1.034	1.513	1.811	2.132	2.431	2.683	2.864	3.140	3.285
24-Hr	1.328	1.990	2.378	2.808	3.216	3.555	3.783	4.172	4.340
48-Hr	1.734	2.558	3.080	3.712	4.254	4.649	4.944	5.482	5.752
96-Hr	2.168	3.259	3.958	4.706	5.373	5.963	6.260	6.744	7.120

Depth met or exceeded.



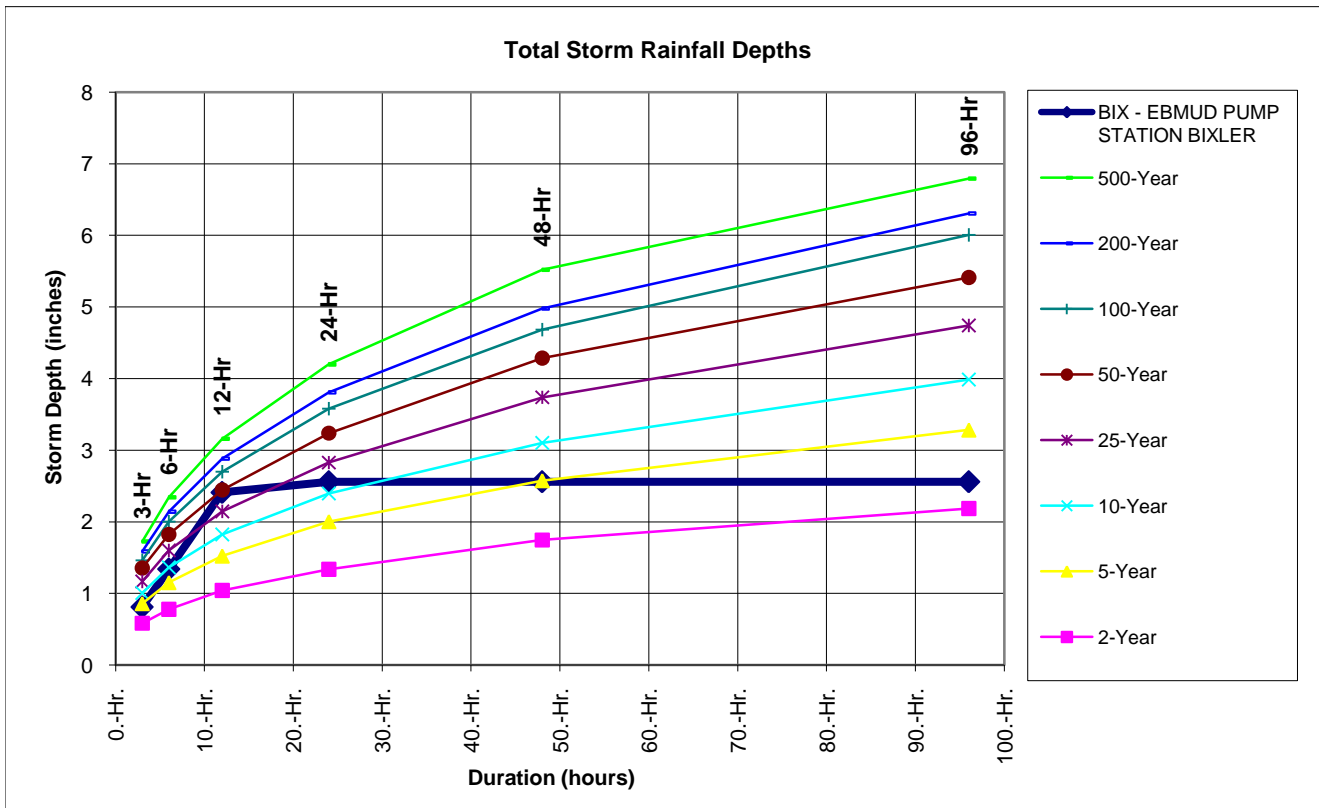
Station: **BIX - EBMUD PUMP STATION BIXLER**
 Mean Seasonal Rainfall: 11.10 inches
 Elevation: 14.00 feet

INSTALLED 1972

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	0.81	10/13/09	5:40 PM	4.5 -years
6-Hr	1.34	10/13/09	1:00 PM	9.4 -years
12-Hr	2.41	10/13/09	6:00 PM	47.0 -years
24-Hr	2.56	10/14/09	3:00 AM	15.7 -years
48-Hr	2.56	10/14/09	3:00 AM	4.9 -years
96-Hr	2.56	10/14/09	3:00 AM	3.0 -years

Total Storm Rainfall Depths and Return Period										
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year	
3-Hr	0.583	0.858	1.007	1.167	1.356	1.464	1.588	1.725	1.803	
6-Hr	0.779	1.151	1.364	1.601	1.824	2.003	2.142	2.343	2.454	
12-Hr	1.040	1.522	1.822	2.145	2.446	2.700	2.882	3.159	3.305	
24-Hr	1.337	2.003	2.394	2.827	3.238	3.579	3.808	4.199	4.369	
48-Hr	1.746	2.576	3.102	3.738	4.284	4.682	4.978	5.520	5.792	
96-Hr	2.185	3.283	3.987	4.740	5.412	6.008	6.306	6.793	7.172	

Depth met or exceeded.



Station: **BLD - EBRPD BALD PEAK TILDEN PARK**

Mean Seasonal Rainfall: 33.50 inches

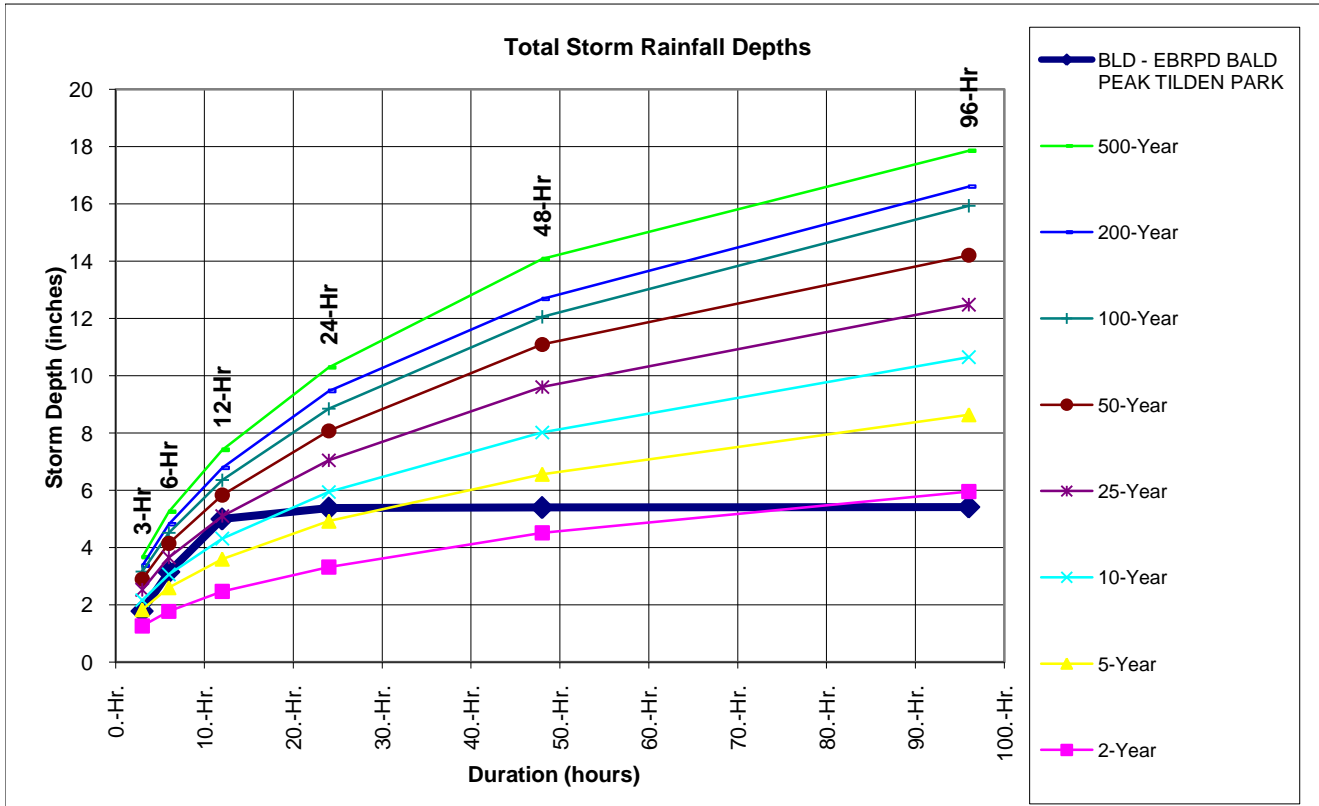
INSTALLED 1979

Elevation: 1,905.00 feet

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.78	10/19/09	4:00 PM	4.7 -years
6-Hr	3.15	10/13/09	2:00 PM	12.1 -years
12-Hr	5.00	10/13/09	5:00 PM	23.1 -years
24-Hr	5.38	10/14/09	2:00 AM	7.2 -years
48-Hr	5.40	10/14/09	8:00 AM	3.3 -years
96-Hr	5.42	10/14/09	8:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	1.264	1.835	2.163	2.529	2.897	3.166	3.371	3.670	3.909
6-Hr	1.773	2.603	3.066	3.653	4.145	4.512	4.821	5.255	5.590
12-Hr	2.474	3.601	4.313	5.102	5.833	6.355	6.788	7.415	7.893
24-Hr	3.317	4.924	5.942	7.047	8.076	8.847	9.471	10.292	10.865
48-Hr	4.515	6.563	8.021	9.607	11.094	12.056	12.684	14.077	14.797
96-Hr	5.957	8.641	10.654	12.482	14.211	15.935	16.610	17.859	18.820

Depth met or exceeded.



Station: **CCP - CONCORD PAVILION**

Mean Seasonal Rainfall: 17.50 inches

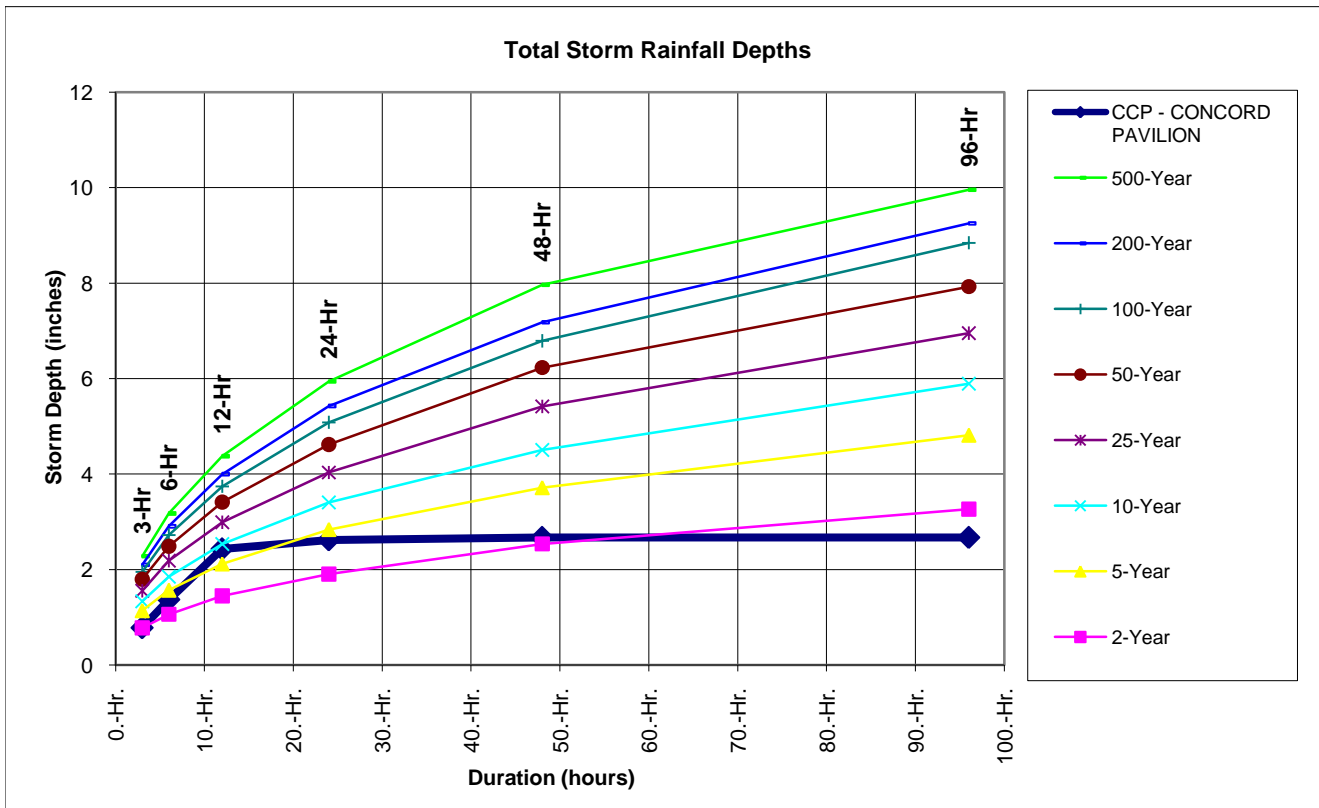
INSTALLED NOV 15 2007

Elevation: 558.00 feet

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	0.78	10/13/09	3:52 PM	2.0 -years
6-Hr	1.37	10/13/09	2:00 PM	3.8 -years
12-Hr	2.43	10/13/09	5:00 PM	8.8 -years
24-Hr	2.62	10/14/09	3:00 AM	4.3 -years
48-Hr	2.67	10/14/09	9:00 AM	2.3 -years
96-Hr	2.67	10/14/09	9:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period										
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year	
3-Hr	0.778	1.137	1.337	1.556	1.796	1.950	2.097	2.281	2.405	
6-Hr	1.063	1.566	1.850	2.187	2.487	2.720	2.907	3.175	3.350	
12-Hr	1.450	2.116	2.534	2.990	3.414	3.744	3.998	4.375	4.616	
24-Hr	1.903	2.838	3.408	4.033	4.620	5.084	5.426	5.940	6.225	
48-Hr	2.537	3.715	4.507	5.415	6.230	6.789	7.180	7.965	8.365	
96-Hr	3.263	4.814	5.892	6.952	7.926	8.844	9.250	9.955	10.500	

Depth met or exceeded.

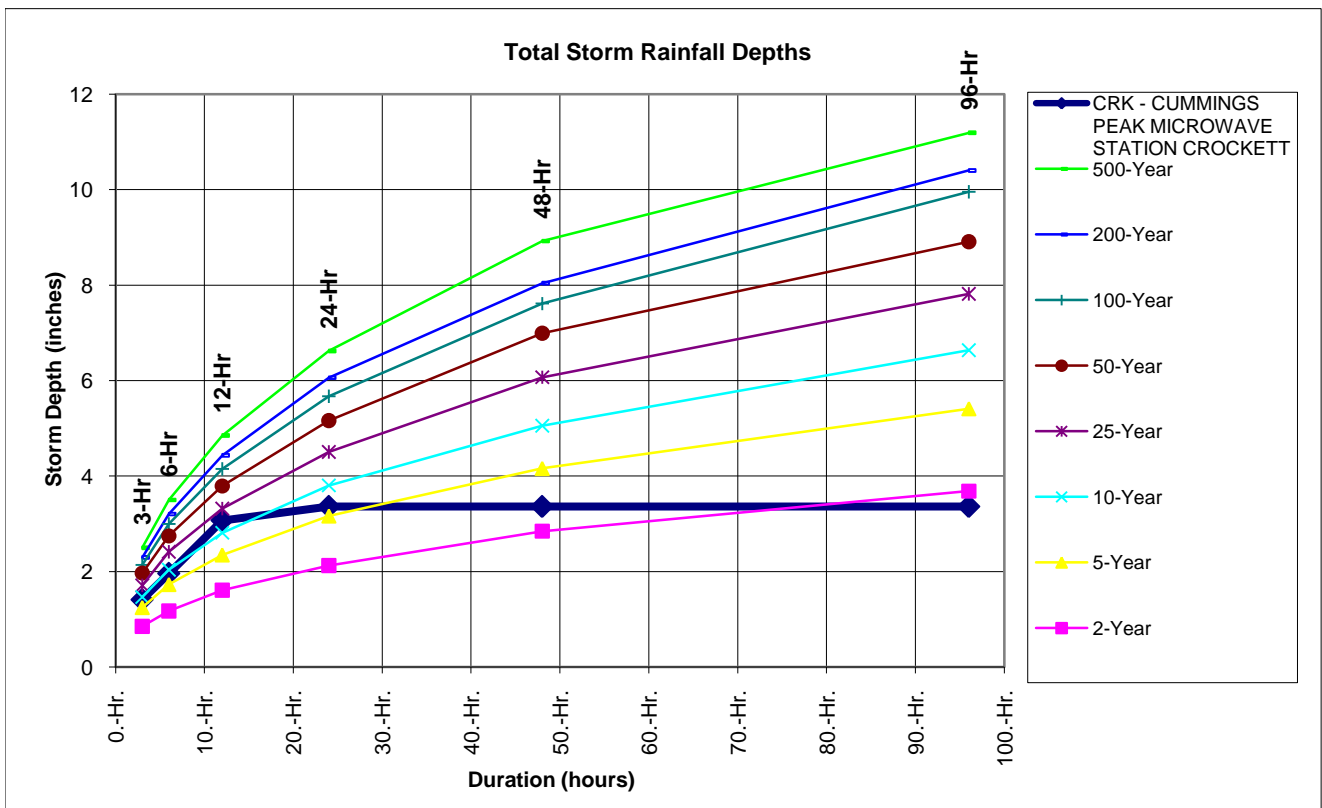


Station: **CRK - CUMMINGS PEAK MICROWAVE STATION CROCKETT**
 Mean Seasonal Rainfall: 20.00 inches
 Elevation: 895.00 feet
 INSTALLED 1982

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.41	10/13/09	3:46 PM	8.7 -years
6-Hr	1.96	10/13/09	3:00 PM	8.7 -years
12-Hr	3.07	10/13/09	5:00 PM	17.6 -years
24-Hr	3.36	10/14/09	3:00 AM	6.5 -years
48-Hr	3.36	10/14/09	3:00 AM	3.2 -years
96-Hr	3.36	10/14/09	3:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period										
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year	
3-Hr	0.854	1.246	1.466	1.708	1.968	2.140	2.296	2.498	2.640	
6-Hr	1.174	1.728	2.040	2.416	2.746	3.000	3.206	3.500	3.700	
12-Hr	1.610	2.348	2.812	3.320	3.792	4.152	4.434	4.850	5.128	
24-Hr	2.124	3.164	3.804	4.504	5.160	5.672	6.058	6.620	6.950	
48-Hr	2.846	4.160	5.056	6.070	6.990	7.612	8.040	8.920	9.370	
96-Hr	3.684	5.412	6.636	7.816	8.908	9.952	10.400	11.190	11.800	

 Depth met or exceeded.



Station: **DBF - DUBLIN FIRE STATION DUBLIN**

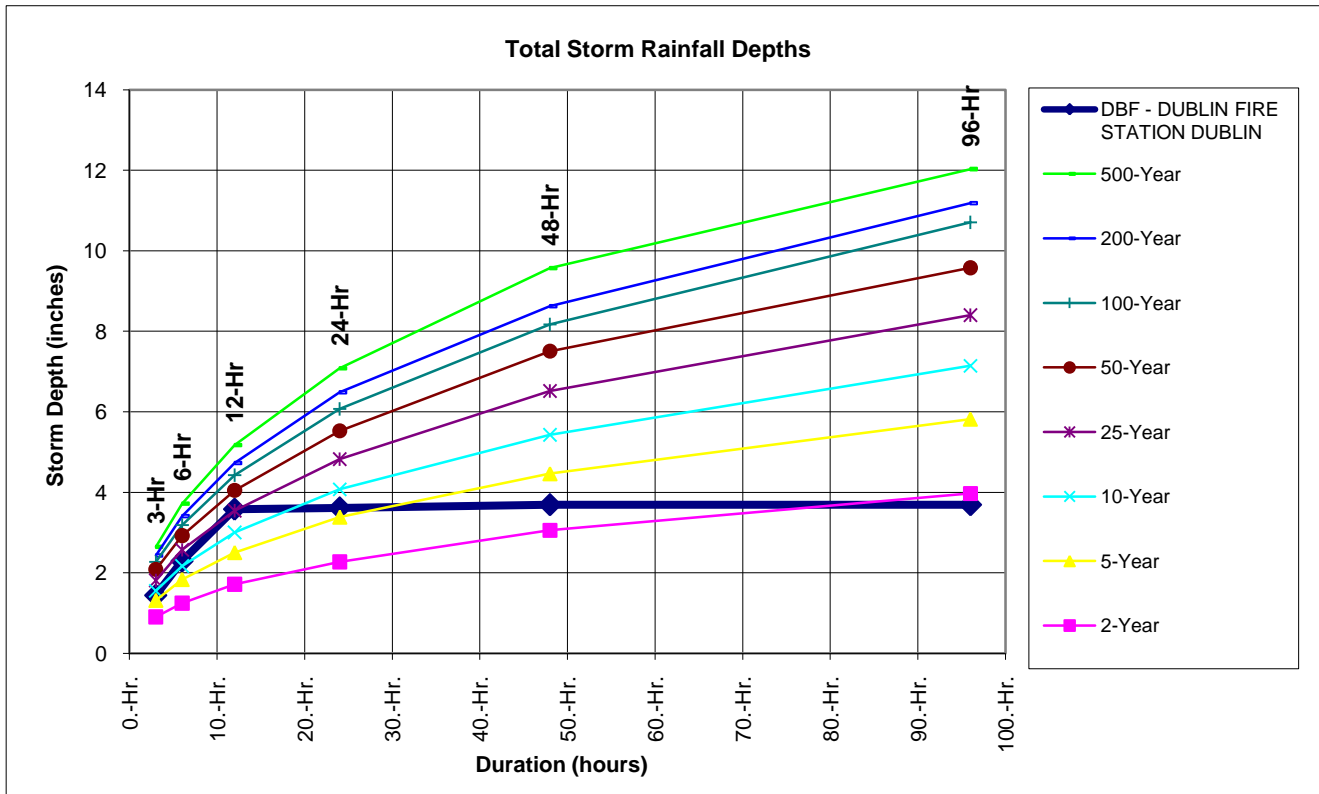
Mean Seasonal Rainfall: 21.70 inches
 Elevation: 355.00 feet

INSTALLED 1973

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.44	10/13/09	5:14 PM	7.6 -years
6-Hr	2.29	10/13/09	5:00 PM	14.5 -years
12-Hr	3.58	10/13/09	6:00 PM	26.8 -years
24-Hr	3.61	10/13/09	6:00 PM	6.6 -years
48-Hr	3.69	10/14/09	10:00 AM	3.4 -years
96-Hr	3.69	10/14/09	10:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period										
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year	
3-Hr	0.906	1.320	1.554	1.811	2.085	2.269	2.431	2.646	2.800	
6-Hr	1.249	1.838	2.169	2.572	2.922	3.190	3.409	3.721	3.938	
12-Hr	1.719	2.506	3.001	3.544	4.049	4.429	4.730	5.173	5.476	
24-Hr	2.274	3.386	4.073	4.824	5.527	6.072	6.488	7.082	7.443	
48-Hr	3.056	4.463	5.429	6.515	7.507	8.172	8.625	9.569	10.053	
96-Hr	3.970	5.819	7.142	8.404	9.576	10.705	11.182	12.030	12.684	

Depth met or exceeded.



Station: **DBL - MT DIABLO MICROWAVE STATION**

Mean Seasonal Rainfall: 27.50 inches

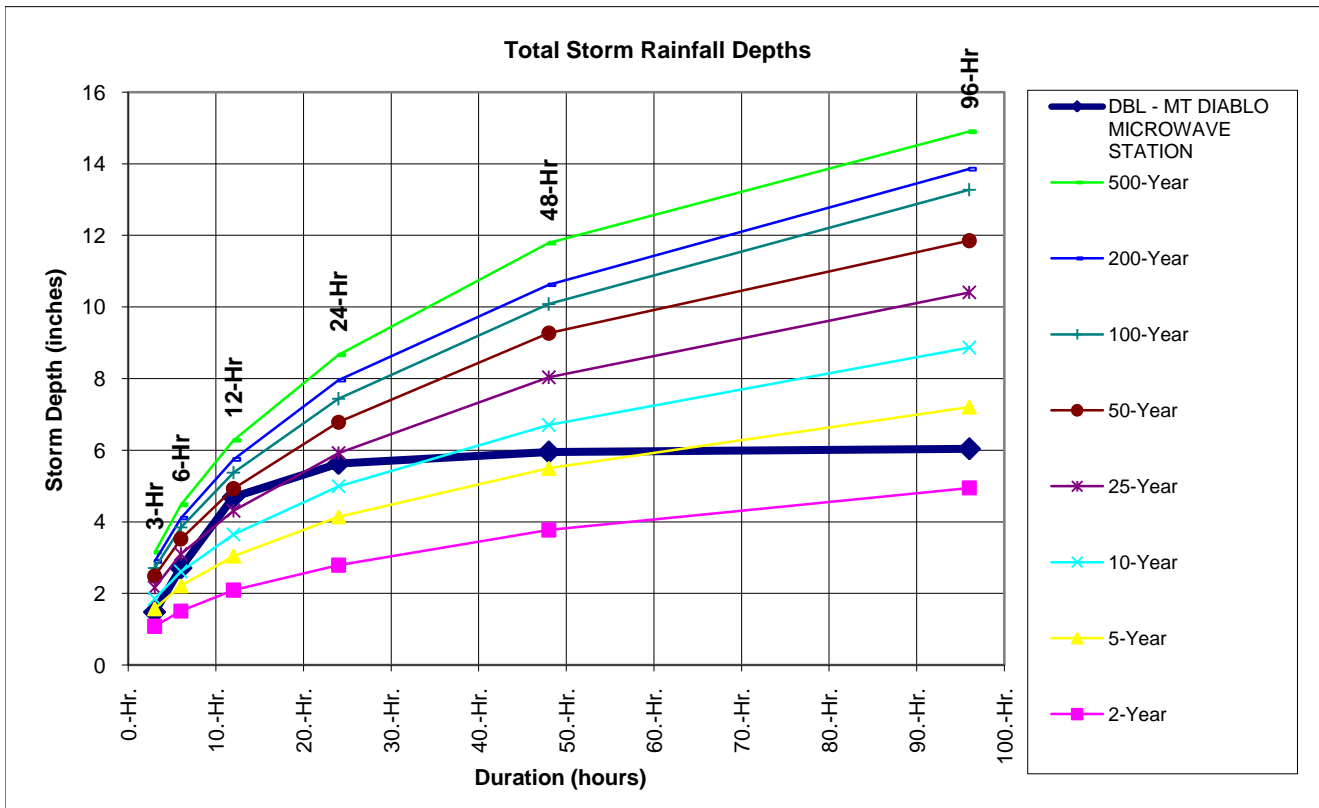
INSTALLED 1974

Elevation: 3,690.00 feet

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.48	10/13/09	11:03 AM	4.4 -years
6-Hr	2.71	10/13/09	1:00 PM	13.0 -years
12-Hr	4.69	10/13/09	6:00 PM	40.4 -years
24-Hr	5.63	10/14/09	4:00 AM	20.3 -years
48-Hr	5.95	10/14/09	11:00 AM	6.9 -years
96-Hr	6.04	10/15/09	11:00 AM	3.5 -years

Total Storm Rainfall Depths and Return Period										
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year	
3-Hr	1.082	1.573	1.853	2.164	2.484	2.710	2.893	3.149	3.345	
6-Hr	1.507	2.214	2.610	3.103	3.523	3.840	4.103	4.475	4.750	
12-Hr	2.090	3.044	3.646	4.310	4.926	5.376	5.742	6.275	6.664	
24-Hr	2.787	4.142	4.992	5.917	6.780	7.436	7.954	8.660	9.125	
48-Hr	3.773	5.495	6.703	8.035	9.270	10.081	10.620	11.785	12.385	
96-Hr	4.947	7.206	8.868	10.408	11.854	13.276	13.850	14.895	15.700	

Depth met or exceeded.



Station: **DVB - DANVILLE LIBRARY**

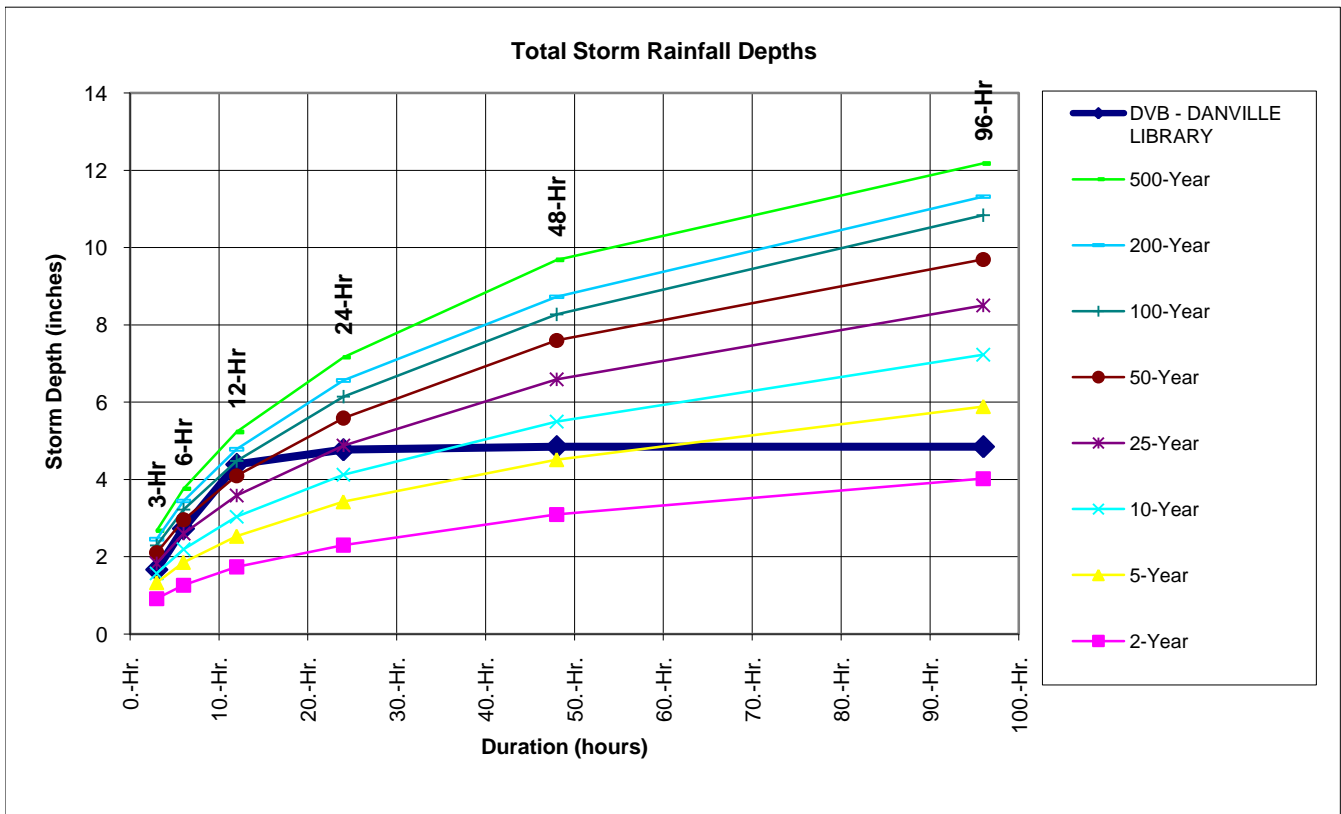
Mean Seasonal Rainfall: 22.00 inches
 Elevation: 420.00 feet

INSTALLED Aug 14, 2006

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.67	10/13/09	5:19 PM	15.8 -years
6-Hr	2.73	10/13/09	5:00 PM	34.2 -years
12-Hr	4.39	10/13/09	6:00 PM	88.5 -years
24-Hr	4.77	10/14/09	3:00 AM	22.8 -years
48-Hr	4.85	10/14/09	8:00 AM	6.7 -years
96-Hr	4.85	10/14/09	8:00 AM	3.3 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.915	1.333	1.569	1.830	2.106	2.292	2.455	2.672	2.828
6-Hr	1.263	1.858	2.192	2.599	2.953	3.224	3.445	3.760	3.980
12-Hr	1.738	2.534	3.034	3.584	4.094	4.478	4.783	5.230	5.538
24-Hr	2.301	3.425	4.121	4.881	5.592	6.142	6.564	7.164	7.530
48-Hr	3.093	4.516	5.495	6.594	7.598	8.270	8.728	9.684	10.174
96-Hr	4.021	5.890	7.231	8.507	9.694	10.838	11.320	12.178	12.840

Depth met or exceeded.



Station: **FCD - CCC FLOOD CONTROL DISTRICT MARTINEZ**

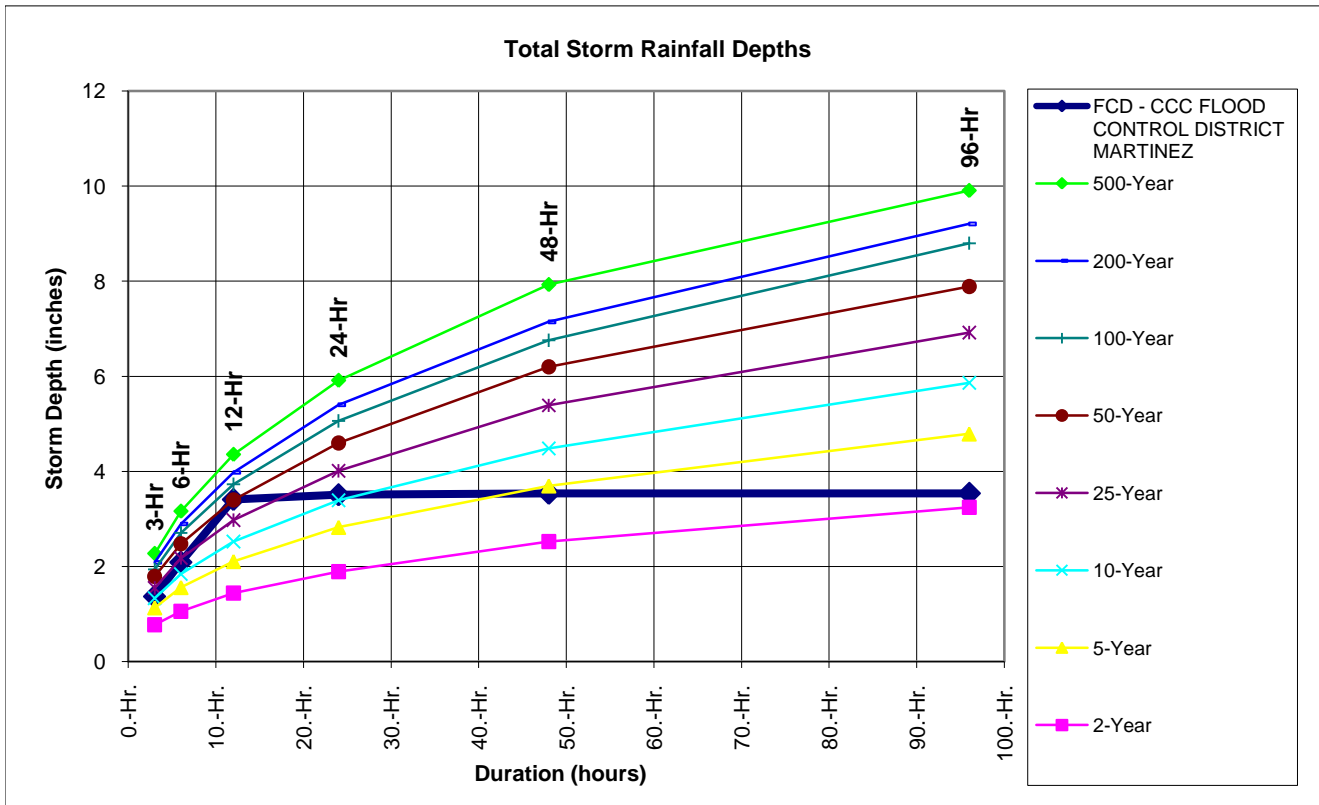
Mean Seasonal Rainfall: 17.40 inches
 Elevation: 160.00 feet

INSTALLED 1970

Station	Storm	Period Ending		Approximate Return Period	
		Dur.	Depth		Date
	3-Hr	1.37	10/13/09	3:56 PM	12.6 -years
	6-Hr	2.09	10/13/09	4:00 PM	21.1 -years
	12-Hr	3.41	10/13/09	5:00 PM	51.7 -years
	24-Hr	3.51	10/14/09	4:00 AM	12.8 -years
	48-Hr	3.54	10/14/09	8:00 AM	4.6 -years
	96-Hr	3.54	10/14/09	8:00 AM	2.6 -years

Total Storm Rainfall Depths and Return Period										
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year	
3-Hr	0.775	1.133	1.332	1.550	1.789	1.942	2.089	2.272	2.396	
6-Hr	1.059	1.560	1.842	2.178	2.477	2.709	2.895	3.162	3.336	
12-Hr	1.444	2.107	2.523	2.977	3.399	3.728	3.981	4.356	4.596	
24-Hr	1.894	2.825	3.392	4.014	4.598	5.060	5.401	5.913	6.196	
48-Hr	2.525	3.697	4.485	5.389	6.200	6.756	7.146	7.927	8.325	
96-Hr	3.246	4.790	5.862	6.917	7.887	8.800	9.204	9.906	10.448	

Depth met or exceeded.



Station: **HLD - HIGHLAND PEAK**

Mean Seasonal Rainfall: 20.50 inches

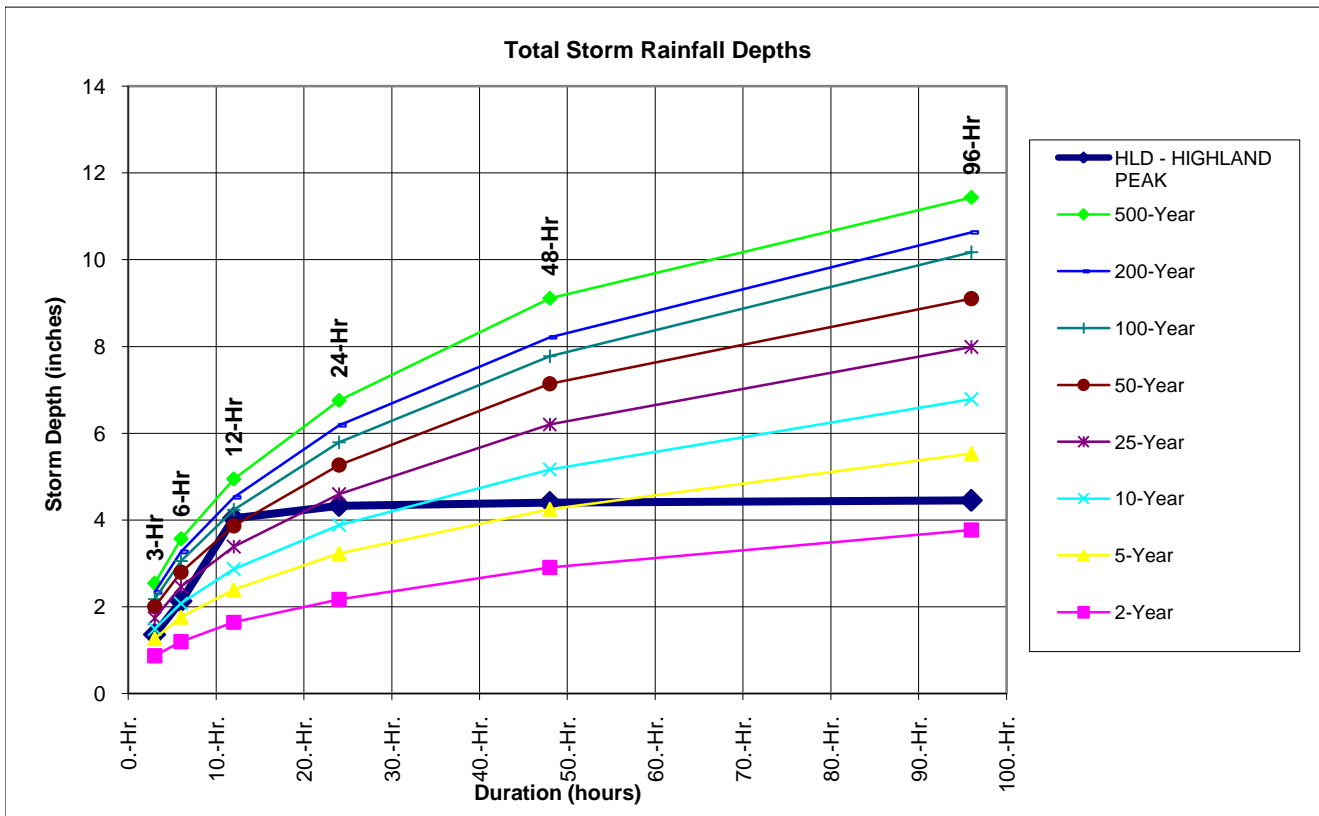
INSTALLED 2004

Elevation: 2,520.00 feet

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.36	10/13/09	5:21 PM	7.1 -years
6-Hr	2.13	10/13/09	1:00 PM	12.0 -years
12-Hr	4.04	10/13/09	6:00 PM	73.6 -years
24-Hr	4.33	10/14/09	1:00 AM	19.4 -years
48-Hr	4.40	10/14/09	9:00 AM	5.8 -years
96-Hr	4.45	10/16/09	4:00 AM	3.2 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.869	1.268	1.492	1.738	2.002	2.178	2.336	2.541	2.687
6-Hr	1.196	1.760	2.078	2.462	2.798	3.056	3.266	3.565	3.770
12-Hr	1.642	2.394	2.868	3.386	3.868	4.234	4.521	4.945	5.230
24-Hr	2.168	3.229	3.883	4.598	5.268	5.790	6.184	6.756	7.095
48-Hr	2.908	4.249	5.166	6.201	7.142	7.777	8.212	9.111	9.571
96-Hr	3.768	5.532	6.785	7.989	9.104	10.174	10.630	11.437	12.060

Depth met or exceeded.



Station: **ISD - IRONHOUSE SANITARY DISTRICT**

Mean Seasonal Rainfall: 12.00 inches

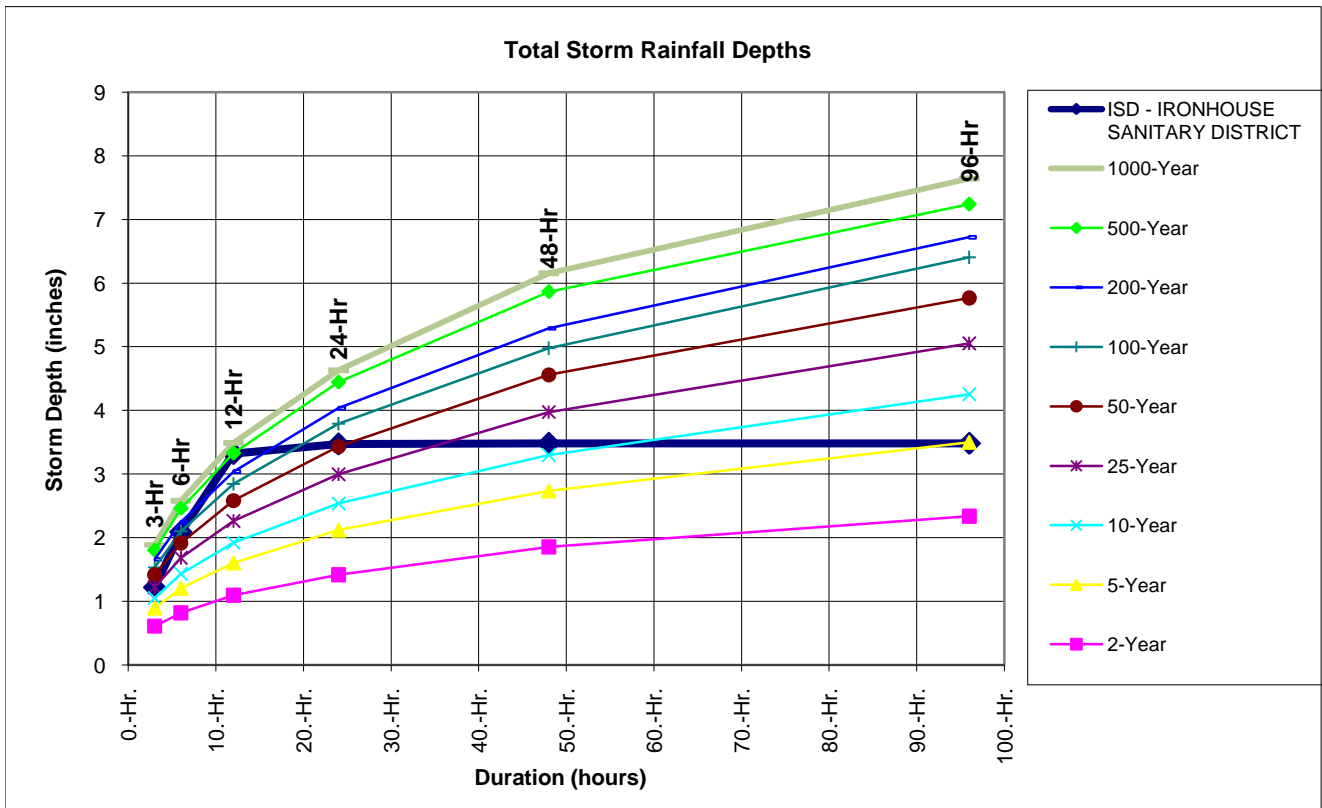
INSTALLED 11, 2006

Elevation: 7.00 feet

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.22	10/13/09	11:26 AM	24.9 -years
6-Hr	2.09	10/13/09	2:00 PM	96.3 -years
12-Hr	3.32	10/13/09	6:00 PM	489.7 -years
24-Hr	3.47	10/13/09	12:00 AM	55.3 -years
48-Hr	3.48	10/14/09	9:00 AM	14.0 -years
96-Hr	3.48	10/14/09	9:00 AM	5.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.611	0.897	1.053	1.222	1.418	1.532	1.659	1.804	1.888
6-Hr	0.819	1.210	1.432	1.683	1.917	2.104	2.249	2.460	2.580
12-Hr	1.098	1.606	1.922	2.264	2.582	2.846	3.039	3.330	3.490
24-Hr	1.417	2.121	2.537	2.997	3.432	3.790	4.036	4.444	4.630
48-Hr	1.857	2.736	3.299	3.974	4.558	4.978	5.288	5.864	6.154
96-Hr	2.337	3.498	4.255	5.051	5.766	6.406	6.720	7.238	7.640

Depth met or exceeded.



Station: **KGR - KREGOR PEAK MICROWAVE STATION CLAYTON**

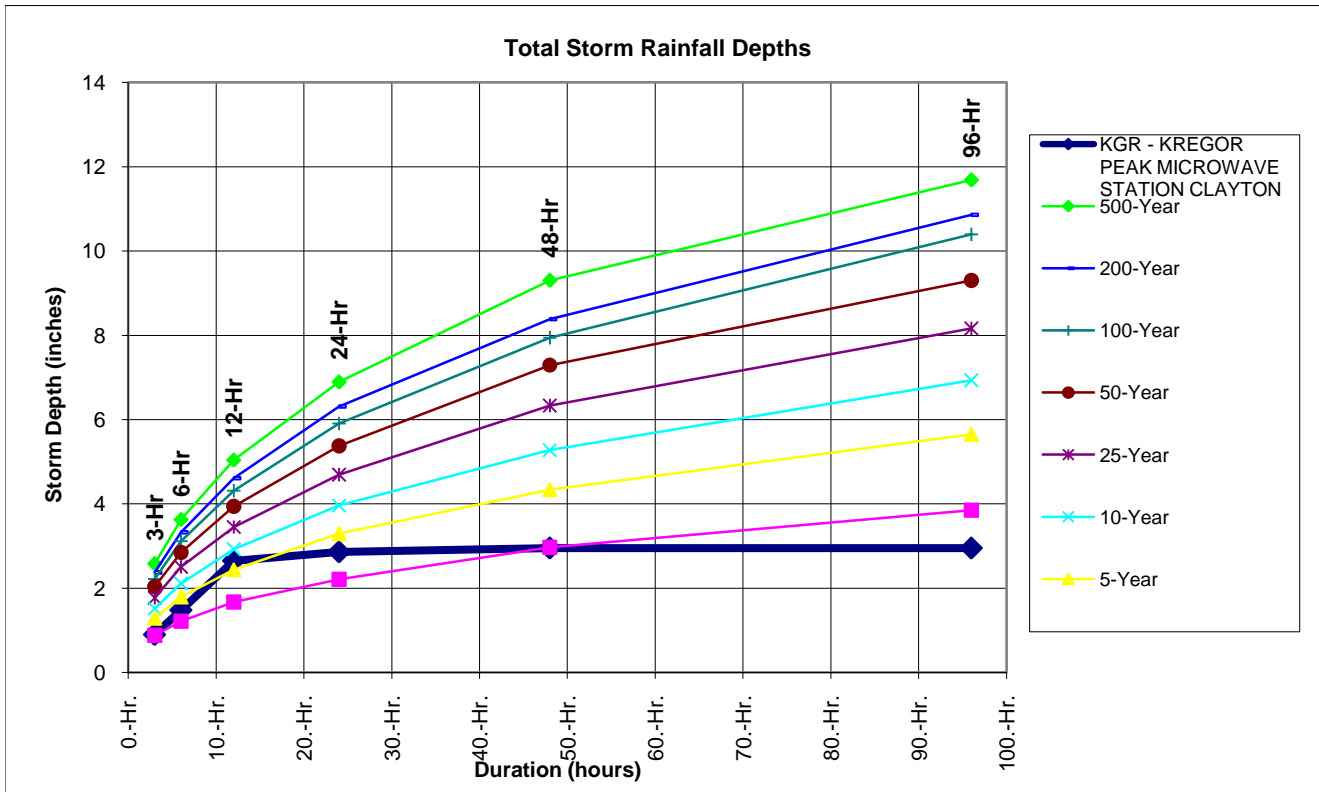
Mean Seasonal Rainfall: 21.00 inches
 Elevation: 1,894.00 feet

INSTALLED 1983

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	0.90	10/13/09	3:32 PM	2.1 -years
6-Hr	1.48	10/13/09	1:00 PM	3.4 -years
12-Hr	2.65	10/13/09	5:00 PM	7.2 -years
24-Hr	2.86	10/14/09	4:00 AM	3.8 -years
48-Hr	2.95	10/15/09	1:00 AM	0.0 -years
96-Hr	2.95	10/15/09	1:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.884	1.290	1.518	1.769	2.037	2.216	2.376	2.585	2.734
6-Hr	1.218	1.793	2.116	2.508	2.850	3.112	3.326	3.630	3.840
12-Hr	1.674	2.441	2.923	3.452	3.943	4.315	4.608	5.040	5.333
24-Hr	2.212	3.294	3.962	4.692	5.376	5.907	6.311	6.892	7.240
48-Hr	2.970	4.338	5.276	6.332	7.294	7.941	8.384	9.302	9.772
96-Hr	3.852	5.651	6.934	8.162	9.301	10.395	10.860	11.684	12.320

Depth met or exceeded.



Station: **MCF - MARSH CREEK FIRE STA CLAYTON**

Mean Seasonal Rainfall: 19.22 inches
 Elevation: 740.00 feet

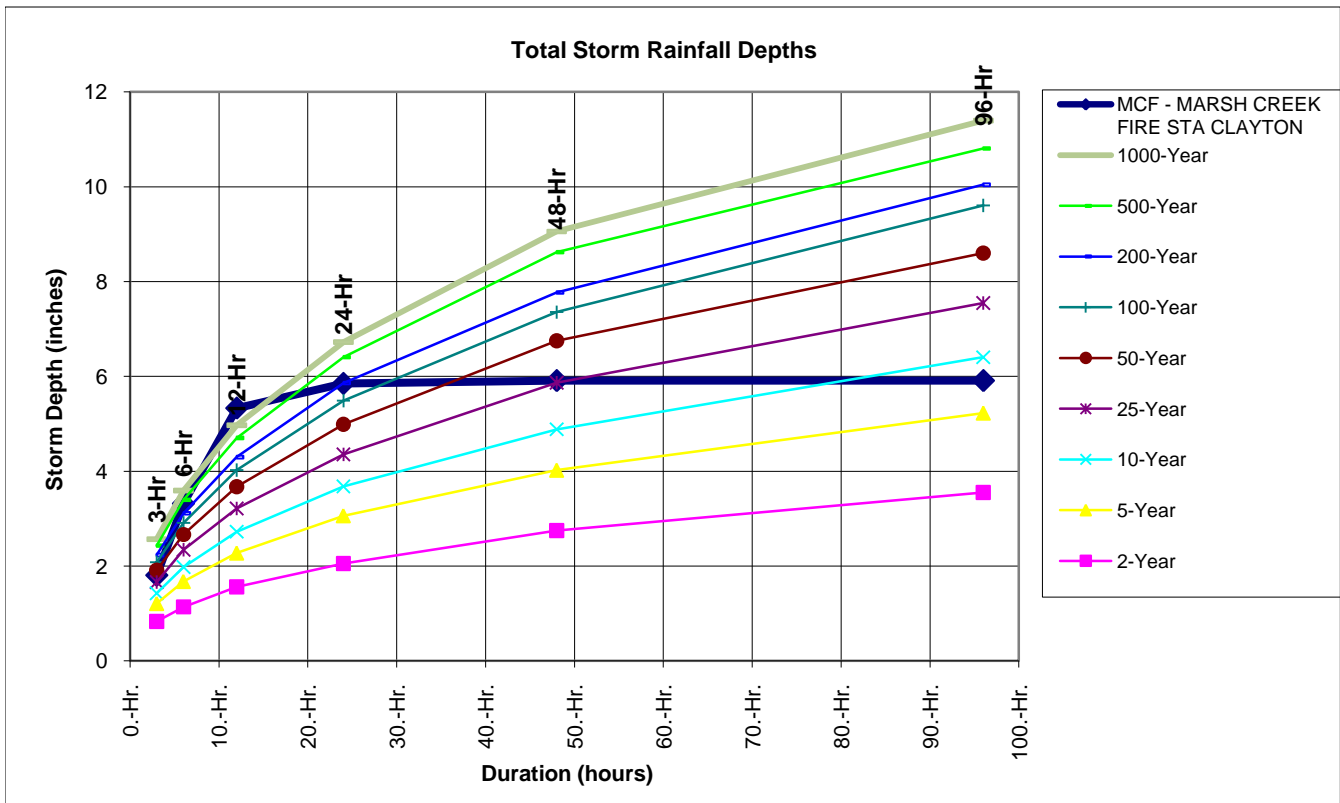
INSTALLED 1951

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.81	10/13/09	1:27 PM	39.7 -years
6-Hr	3.32	10/13/09	2:00 PM	417.5 -years
12-Hr	5.33	10/13/09	5:00 PM	1000.0 -years
24-Hr	5.85	10/14/09	3:00 AM	197.1 -years
48-Hr	5.91	10/14/09	9:00 AM	26.2 -years
96-Hr	5.91	10/14/09	9:00 AM	7.9 -years

Over 1000-yr Storm

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.830	1.212	1.426	1.661	1.914	2.081	2.234	2.430	2.567
6-Hr	1.139	1.677	1.981	2.345	2.665	2.913	3.113	3.399	3.591
12-Hr	1.560	2.276	2.725	3.217	3.674	4.025	4.298	4.702	4.968
24-Hr	2.055	3.062	3.680	4.357	4.992	5.489	5.861	6.408	6.724
48-Hr	2.750	4.021	4.885	5.866	6.753	7.355	7.772	8.622	9.056
96-Hr	3.553	5.225	6.404	7.546	8.602	9.606	10.041	10.805	11.394

Depth met or exceeded.



Station: **MCR - MARSH CREEK RESERVOIR**

Mean Seasonal Rainfall: 13.50 inches

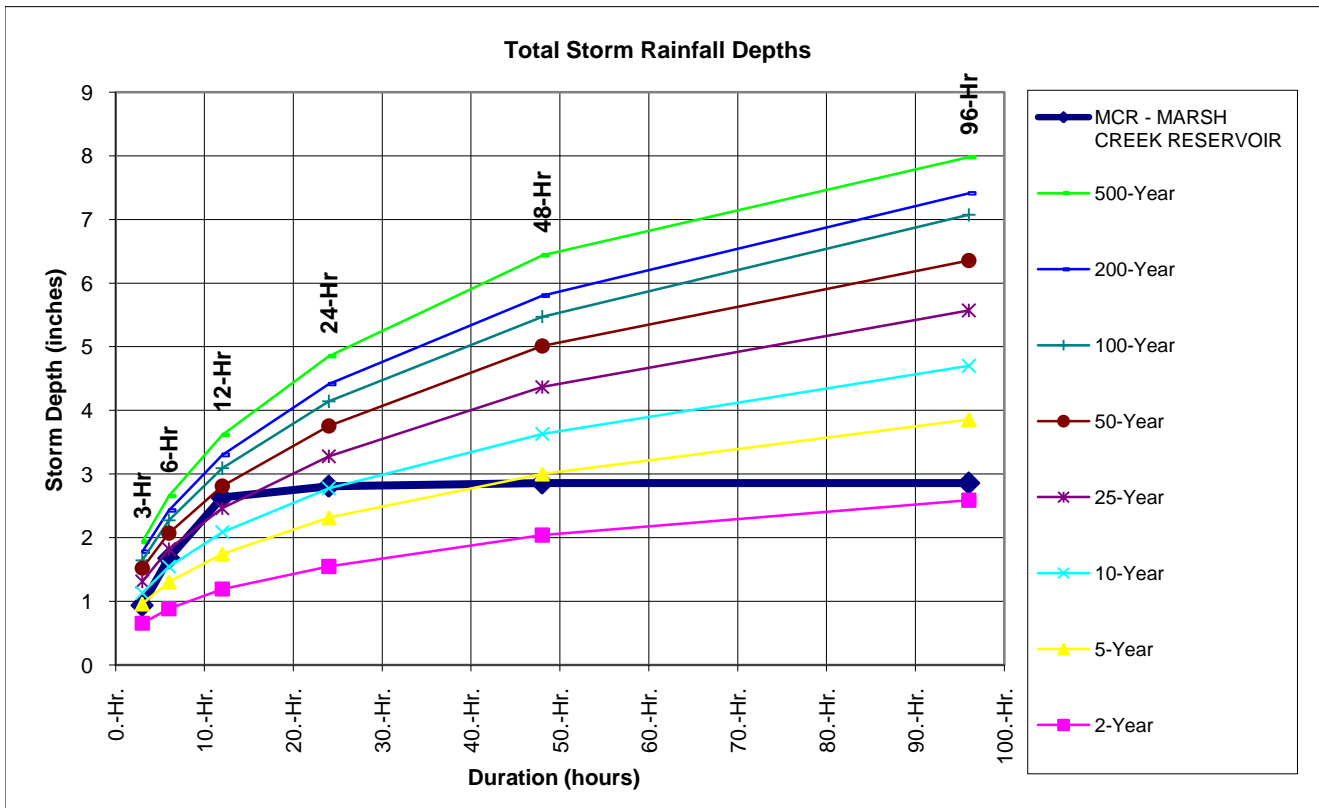
INSTALLED APR 13 2004

Elevation: 200.00 feet

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	0.94	10/13/09	11:01 AM	4.8 -years
6-Hr	1.68	1/2/06	1:00 PM	17.3 -years
12-Hr	2.63	10/13/09	6:00 PM	37.1 -years
24-Hr	2.81	10/13/09	10:00 PM	11.1 -years
48-Hr	2.86	10/14/09	9:00 AM	4.6 -years
96-Hr	2.86	10/14/09	9:00 AM	2.6 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.656	0.963	1.131	1.313	1.521	1.646	1.779	1.934	2.029
6-Hr	0.885	1.307	1.546	1.821	2.073	2.272	2.429	2.655	2.790
12-Hr	1.194	1.745	2.089	2.462	2.809	3.091	3.300	3.615	3.797
24-Hr	1.549	2.316	2.774	3.279	3.756	4.143	4.415	4.852	5.065
48-Hr	2.043	3.003	3.629	4.367	5.014	5.472	5.804	6.437	6.757
96-Hr	2.589	3.857	4.702	5.570	6.355	7.071	7.410	7.979	8.420

Depth met or exceeded.



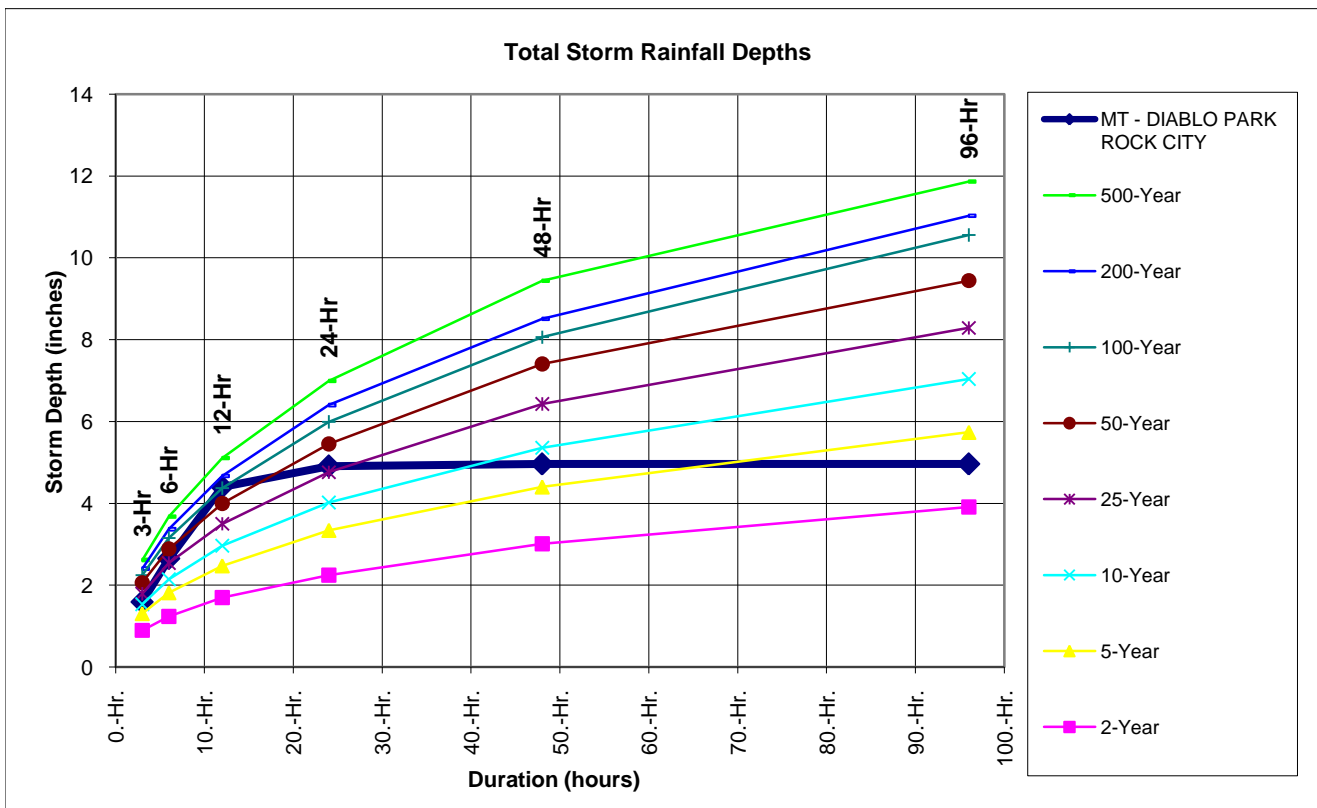
Station: **MT - DIABLO PARK ROCK CITY**
 Mean Seasonal Rainfall: 21.36 inches
 Elevation: 1,600.00 feet

INSTALLED 1937

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.59	10/13/09	5:17 PM	13.2 -years
6-Hr	2.65	10/13/09	5:00 PM	32.9 -years
12-Hr	4.40	10/13/09	5:00 PM	108.8 -years
24-Hr	4.91	10/14/09	4:00 AM	30.4 -years
48-Hr	4.96	10/14/09	9:00 AM	7.9 -years
96-Hr	4.96	10/14/09	9:00 AM	3.7 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.895	1.305	1.536	1.791	2.062	2.243	2.404	2.616	2.768
6-Hr	1.234	1.816	2.143	2.541	2.887	3.152	3.369	3.677	3.890
12-Hr	1.697	2.474	2.963	3.500	3.998	4.374	4.671	5.108	5.407
24-Hr	2.244	3.341	4.019	4.760	5.454	5.992	6.402	6.990	7.344
48-Hr	3.014	4.402	5.355	6.426	7.403	8.060	8.508	9.440	9.917
96-Hr	3.913	5.737	7.041	8.286	9.442	10.555	11.026	11.862	12.507

Depth met or exceeded.



Station: **ORF - ORINDA FIRE STATION ORINDA**

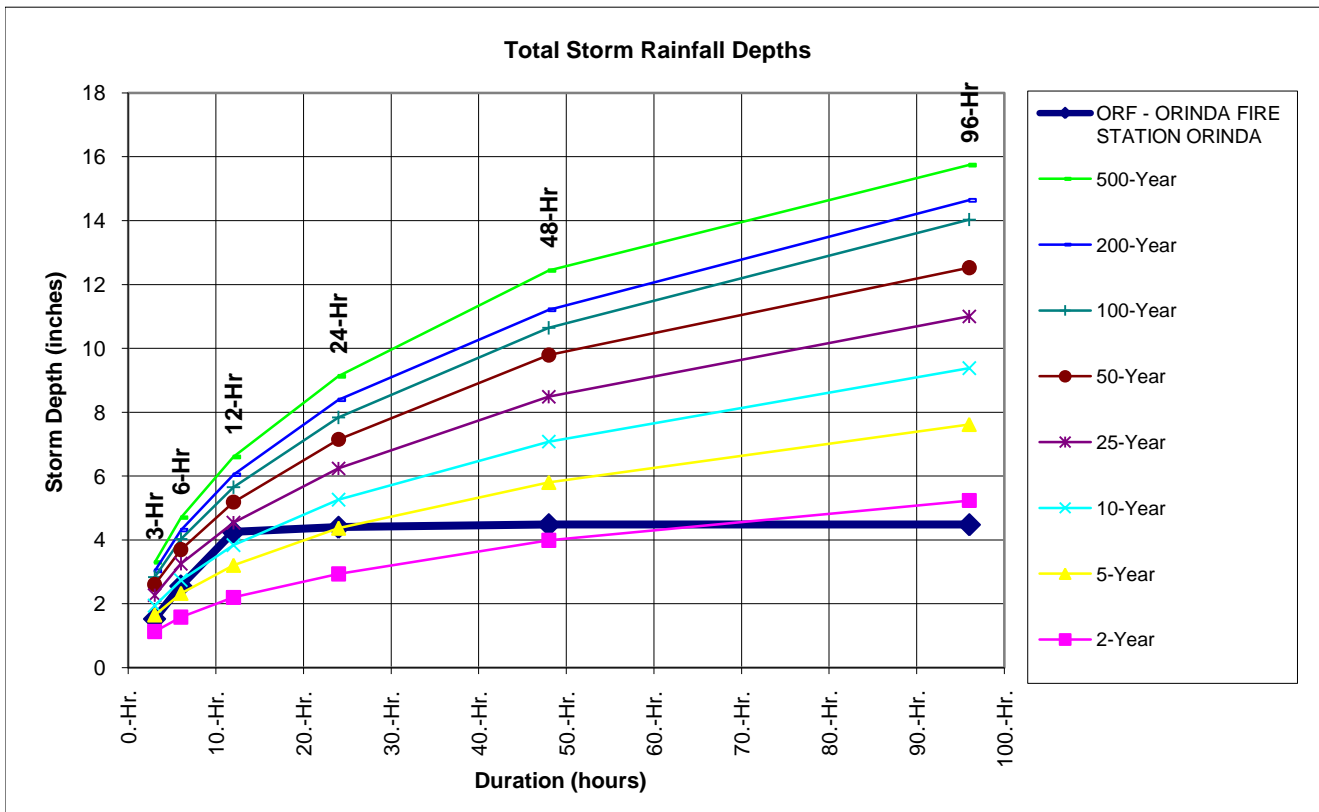
Mean Seasonal Rainfall: 29.21 inches
 Elevation: 700.00 feet

INSTALLED 1952

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.53	10/13/09	3:52 PM	4.3 -years
6-Hr	2.56	10/13/09	4:00 PM	7.8 -years
12-Hr	4.25	10/13/09	4:00 PM	18.9 -years
24-Hr	4.40	10/14/09	3:00 AM	5.2 -years
48-Hr	4.48	10/14/09	8:00 AM	2.8 -years
96-Hr	4.48	10/14/09	8:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	1.134	1.648	1.941	2.268	2.602	2.840	3.029	3.297	3.506
6-Hr	1.583	2.325	2.740	3.260	3.700	4.032	4.308	4.697	4.989
12-Hr	2.199	3.203	3.836	4.536	5.185	5.655	6.040	6.600	7.014
24-Hr	2.938	4.365	5.263	6.239	7.149	7.838	8.386	9.125	9.621
48-Hr	3.984	5.799	7.079	8.483	9.790	10.644	11.208	12.438	13.072
96-Hr	5.235	7.615	9.377	10.999	12.526	14.034	14.637	15.740	16.589

Depth met or exceeded.



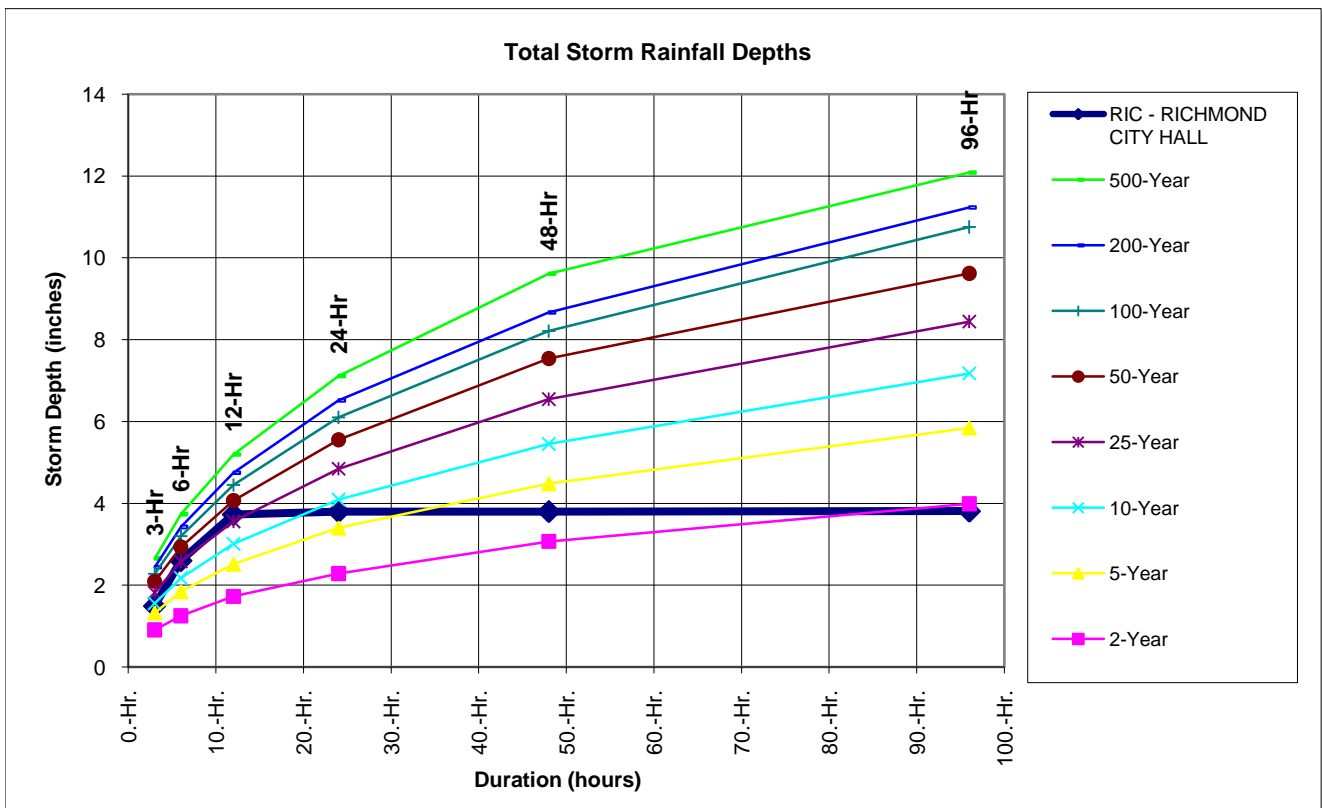
Station: **RIC - RICHMOND CITY HALL**
 Mean Seasonal Rainfall: 21.81 inches
 Elevation: 55.00 feet

INSTALLED 1974 REINSTALLED 2004

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
	3-Hr	1.49	10/13/09 9:45 AM	8.5 -years
	6-Hr	2.60	10/13/09 2:00 PM	26.3 -years
	12-Hr	3.73	10/13/09 4:00 PM	33.4 -years
	24-Hr	3.80	10/13/09 5:00 PM	7.9 -years
	48-Hr	3.80	10/13/09 5:00 PM	3.6 -years
	96-Hr	3.81	10/16/09 8:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.909	1.325	1.559	1.818	2.093	2.278	2.440	2.655	2.810
6-Hr	1.254	1.845	2.178	2.582	2.934	3.203	3.422	3.735	3.953
12-Hr	1.726	2.516	3.013	3.559	4.066	4.447	4.750	5.194	5.499
24-Hr	2.284	3.400	4.091	4.845	5.551	6.098	6.516	7.112	7.475
48-Hr	3.070	4.482	5.453	6.544	7.540	8.208	8.663	9.611	10.098
96-Hr	3.989	5.845	7.175	8.442	9.619	10.754	11.233	12.084	12.741

Depth met or exceeded.



Station: **RKY - ROCKY RIDGE MICROWAVE STATION**

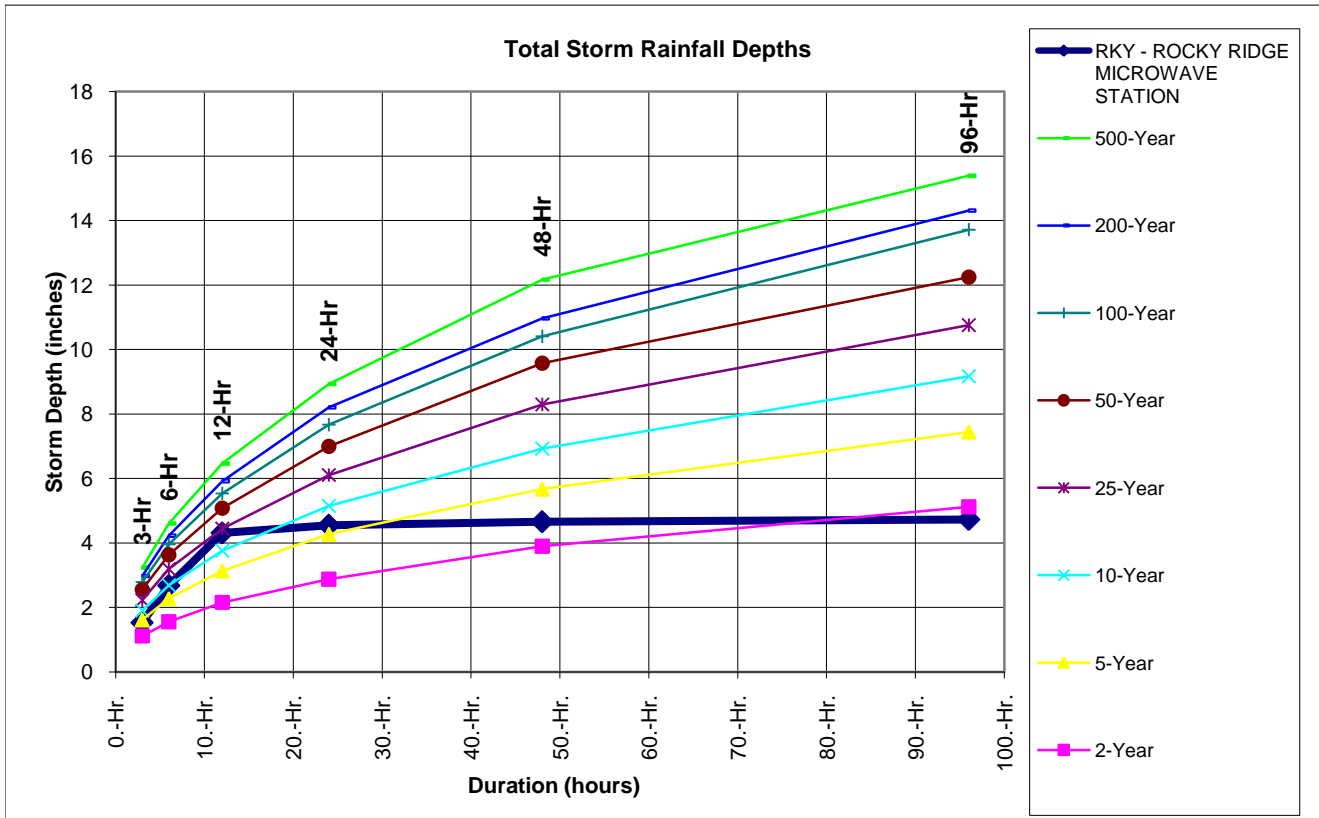
Mean Seasonal Rainfall: 28.50 inches
 Elevation: 2,020.00 feet

INSTALLED 1979

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.53	10/13/09	3:43 PM	4.5 -years
6-Hr	2.68	10/13/09	3:00 PM	9.9 -years
12-Hr	4.31	10/13/09	5:00 PM	22.1 -years
24-Hr	4.55	10/14/09	4:00 AM	6.6 -years
48-Hr	4.66	10/14/09	11:00 AM	3.3 -years
96-Hr	4.73	10/14/09	11:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	1.112	1.617	1.905	2.225	2.553	2.786	2.973	3.236	3.439
6-Hr	1.551	2.279	2.686	3.195	3.627	3.952	4.223	4.605	4.890
12-Hr	2.154	3.137	3.757	4.442	5.077	5.539	5.916	6.465	6.869
24-Hr	2.875	4.272	5.150	6.105	6.996	7.671	8.207	8.932	9.415
48-Hr	3.897	5.673	6.923	8.297	9.574	10.410	10.964	12.167	12.787
96-Hr	5.115	7.445	9.166	10.754	12.247	13.719	14.310	15.389	16.220

Depth met or exceeded.



Station: **ROF - RODEO FIRE STATION RODEO**

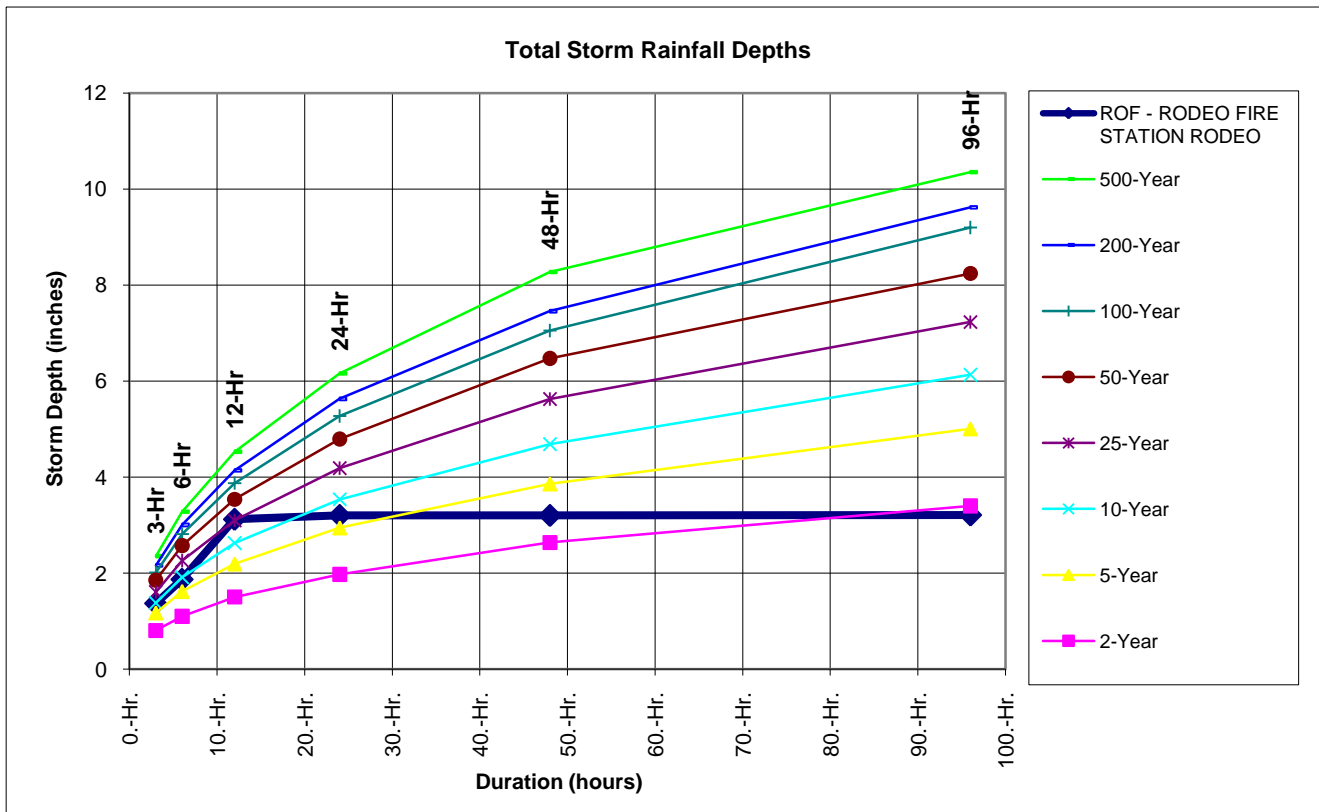
Mean Seasonal Rainfall: 18.30 inches
 Elevation: 30.00 feet

INSTALLED 1972

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.37	10/13/09	3:23 PM	9.8 -years
6-Hr	1.87	10/13/09	3:00 PM	9.3 -years
12-Hr	3.12	10/13/09	4:00 PM	26.4 -years
24-Hr	3.20	10/13/09	5:00 PM	7.2 -years
48-Hr	3.20	10/13/09	5:00 PM	3.4 -years
96-Hr	3.21	10/16/09	9:00 AM	0.0 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.802	1.172	1.378	1.605	1.851	2.011	2.161	2.350	2.480
6-Hr	1.099	1.618	1.911	2.260	2.570	2.810	3.003	3.279	3.462
12-Hr	1.501	2.190	2.623	3.096	3.535	3.875	4.138	4.527	4.780
24-Hr	1.974	2.942	3.535	4.184	4.793	5.272	5.628	6.158	6.457
48-Hr	2.636	3.857	4.683	5.625	6.473	7.052	7.455	8.271	8.687
96-Hr	3.398	5.005	6.130	7.228	8.240	9.199	9.618	10.350	10.916

Depth met or exceeded.



Station: **RSS - ROSSMOOR 800 ROCKVIEW DR WALNUT CREEK**

Mean Seasonal Rainfall: 23.00 inches
 Elevation: 496.00 feet

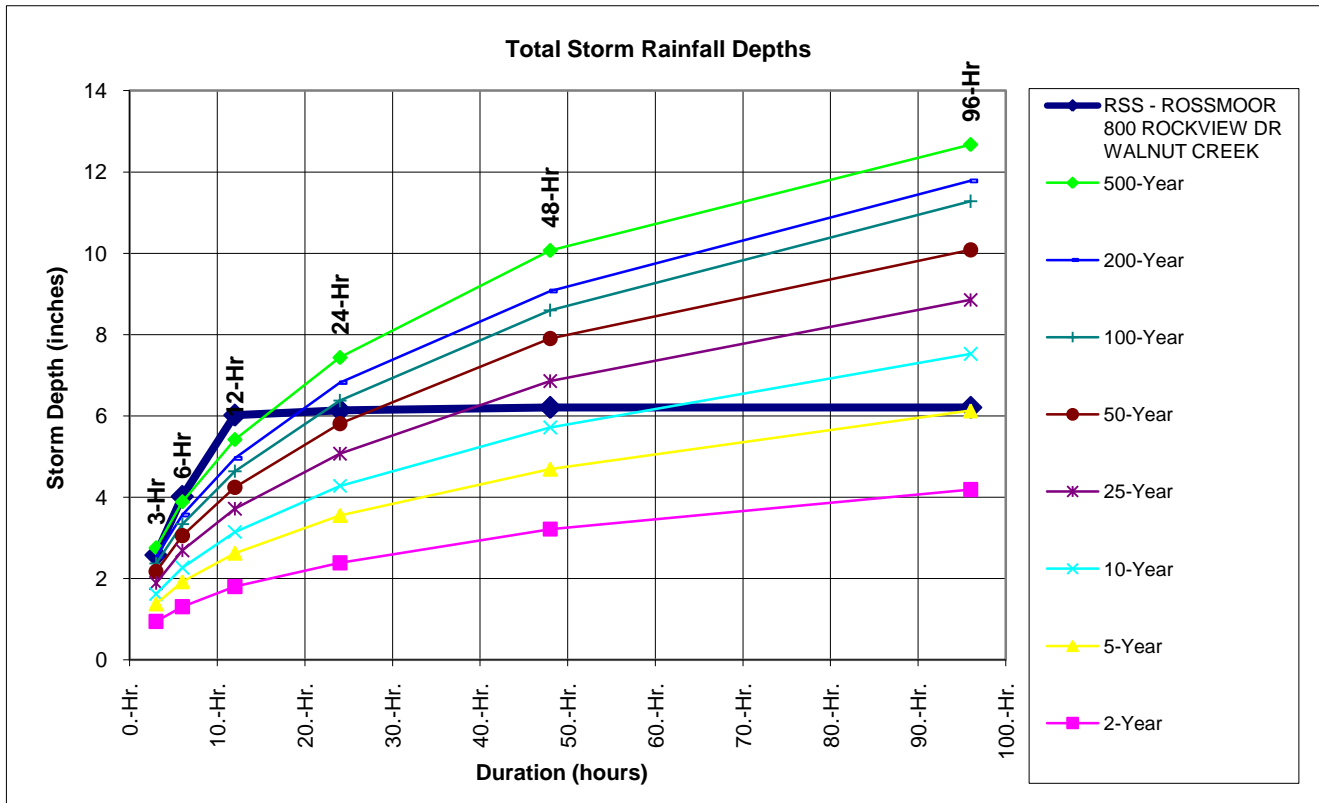
INSTALLED 2006

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	2.58	10/13/09	3:56 PM	260.6 -years
6-Hr	4.02	10/13/09	4:00 PM	782.6 -years
12-Hr	6.02	10/13/09	5:00 PM	1000.0 -years
24-Hr	6.14	10/14/09	3:00 AM	79.1 -years
48-Hr	6.21	10/14/09	9:00 AM	16.5 -years
96-Hr	6.21	10/14/09	9:00 AM	5.3 -years

Over 1000-yr Storm

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.945	1.377	1.621	1.890	2.174	2.368	2.535	2.758	2.922
6-Hr	1.307	1.922	2.268	2.691	3.057	3.336	3.565	3.890	4.120
12-Hr	1.802	2.626	3.146	3.716	4.246	4.642	4.957	5.420	5.742
24-Hr	2.389	3.555	4.279	5.069	5.808	6.378	6.816	7.436	7.820
48-Hr	3.217	4.694	5.715	6.856	7.902	8.600	9.072	10.066	10.576
96-Hr	4.189	6.130	7.529	8.853	10.086	11.282	11.780	12.672	13.360

Depth met or exceeded.



Station: **SMC - SAINT MARY'S COLLEGE MORAGA**

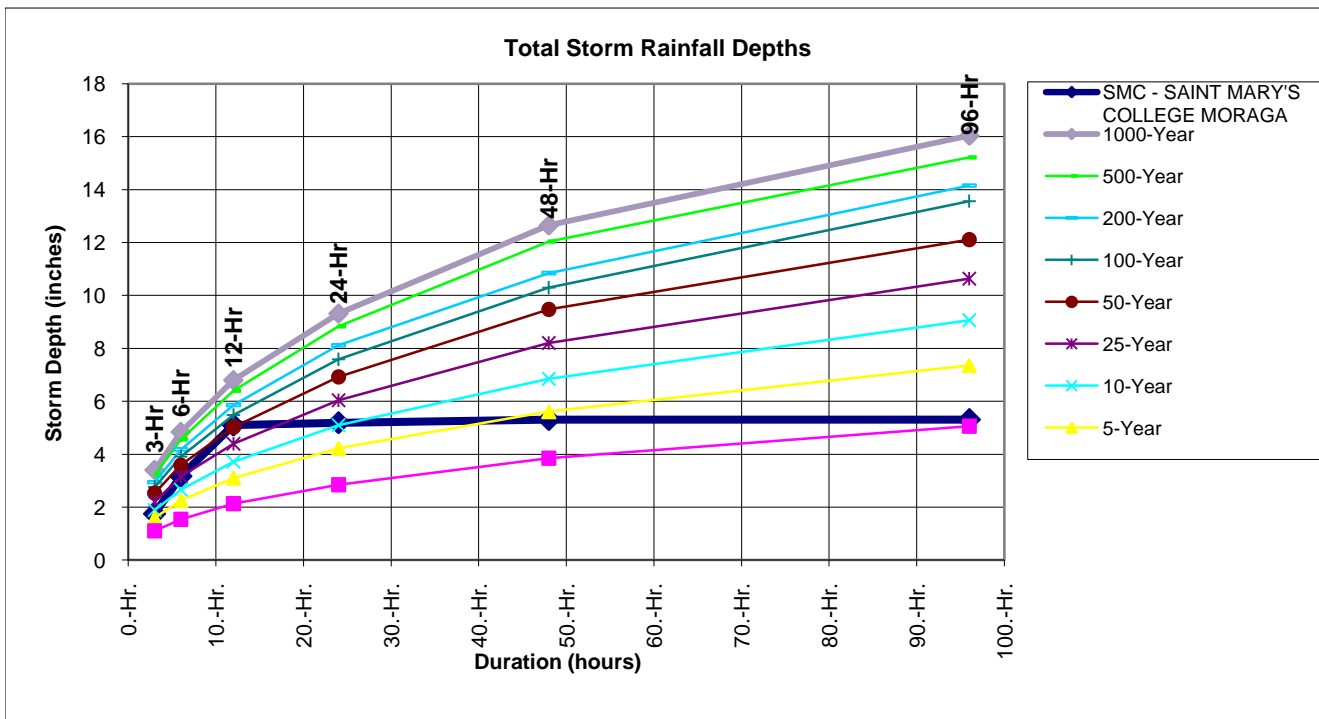
Mean Seasonal Rainfall: 28.15 inches
 Elevation: 620.00 feet

INSTALLED 1943

Station	Storm	Period Ending		Approximate Return Period
		Date	Time	
3-Hr	1.75	10/13/09	3:52 PM	7.6 -years
6-Hr	3.17	10/13/09	4:00 PM	25.4 -years
12-Hr	5.10	10/13/09	5:00 PM	58.3 -years
24-Hr	5.19	10/13/09	5:00 PM	11.5 -years
48-Hr	5.31	10/14/09	8:00 AM	4.5 -years
96-Hr	5.31	10/14/09	8:00 AM	2.3 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	1.102	1.601	1.887	2.204	2.529	2.759	2.945	3.205	3.406
6-Hr	1.536	2.256	2.659	3.163	3.590	3.913	4.181	4.560	4.841
12-Hr	2.132	3.104	3.718	4.396	5.024	5.482	5.855	6.399	6.797
24-Hr	2.844	4.227	5.095	6.039	6.920	7.589	8.118	8.837	9.314
48-Hr	3.853	5.611	6.846	8.205	9.468	10.295	10.844	12.033	12.646
96-Hr	5.056	7.361	9.061	10.633	12.109	13.564	14.149	15.216	16.038

Depth met or exceeded.



Station: **YGF - FIRE TRAINING CNTR TREAT BLVD WC/CON**

Mean Seasonal Rainfall: 17.00 inches
 Elevation: 25.00 feet

INSTALLED 1979

Station Storm		Period Ending		Approximate Return Period
Dur.	Depth	Date	Time	
3-Hr	1.28	10/13/09	3:53 PM	9.2 -years
6-Hr	2.20	10/13/09	5:00 PM	30.0 -years
12-Hr	3.72	10/13/09	5:00 PM	123.2 -years
24-Hr	3.90	10/14/09	2:00 AM	24.0 -years
48-Hr	3.94	10/14/09	9:00 AM	7.0 -years
96-Hr	3.94	10/14/09	9:00 AM	3.5 -years

Total Storm Rainfall Depths and Return Period									
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year	1000-Year
3-Hr	0.763	1.115	1.311	1.526	1.762	1.912	2.057	2.238	2.358
6-Hr	1.041	1.534	1.812	2.141	2.435	2.664	2.847	3.110	3.280
12-Hr	1.418	2.070	2.478	2.924	3.338	3.662	3.911	4.280	4.514
24-Hr	1.859	2.773	3.329	3.939	4.512	4.966	5.300	5.804	6.080
48-Hr	2.475	3.626	4.397	5.284	6.078	6.624	7.008	7.774	8.164
96-Hr	3.179	4.694	5.743	6.779	7.730	8.622	9.020	9.708	10.240

 Depth met or exceeded.

